Regd. No. R.N. 43092/85

Uniting Small Scale Battery Industry on Firm Footing since 1985

BATTERY DIRECTORY & YEAR BOOK

Uniting Small Scale Battery Industry 40 years of Publication 1985 - 2025

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FORTNIGHTLY ISSUE
1-15 August 2025
(Vol.40, No.15 Published on 20.08.2025)

बैटरी डायरेक्टरी एंड ईयर बुक

Contents

LEAD-ACID BATTERY HELP LINE...

Why You Need Only LA-POWER Technologies?

'LA-POWER' Technologies provides not just only consultancy, it works as a complete project. So it is lengthy & consumes time to formulate effective solution that you have never seen before. It has a high class operational working system. Before it you know consultancy that a consultant visit out your factory & provides some tips & you have to do all arrangement & practical in his absence. So how you can satisfy?

The Lead-Acid Battery profession is totally different from others. Generally, to manufacture a product is a common work & to sale is difficult, but the Lead-acid battery profession is just inverse proportional to others. Here, to manufacture a best battery is really a challenging task & very few peoples are known better.

We are product & market player & play comprehensive role in lead-acid battery solution. So we are able to provide TQM practices.

It is a systematic magic that provides complete & reliable solution without much spending on men, machineries, money & materials. So, the saving in these resources is definitely first step of your profit and to reduce your battery claim up to aprox. nil is another major profit, which will boost your firm's goodwill along with extra income and off course your firm will be converted from a ordinary goodwill to a quality maker firm.

Yes! It is unbelievable, but 100% truth. Lot of business men are already benefited & enjoying battery profession as a complete professional. And off course you may be next one. It is extract of our more than two decades of vast R & D as "Battery & Indian Atmosphere". You may expect any thing & we promise you, we will fulfill your dreams.

Work Profile: Technical Consultancy in Lead-Acid Battery

Area of Consultancy

- Flooded (Conventional) Battery:
  Antimonial/Selenium-Lead Ultra Low Maintenance 12V/2.5 to 12V/200 AH
- Valve Regulated Lead-Acid Battery (VRLA):
  Calcium-Lead Based 100% Maintenance Free 1 AH to 1000 AH Battery

Type of Battery:

- Automobiles Batteries (Flooded & VRLA)
- Inverter/UPS Batteries (Flooded & VRLA)
- Tubular Batteries(Flooded)
- Solar Batteries (VRLA)
- Electrical Vehicle Batteries (Flooded & VRLA)
- Telecom/Railways Batteries (VRLA)
- Defence Batteries (Flooded)
- Industrial Batteries (Flooded & VRLA)

LA-POWER Differentials:

- Reduces your battery claim up to approximate Nil
- Saving your resources in men, machineries, material & money
- World class product
- One time solution & not need to continue the consultancy

Wonderful Features (Flooded Battery):

- Save lead means save money
- Maintenance free for approximate one year
- High voltages for quick auto cut
- Very fast charging, better during heavy power cut
- Strong deep discharge recovery
- Strong normal & cold cranking power (HRD)
- Very low fuming for safe breathing
- High efficiency, so saving in electric bill
- High retention of charge
- Longest uninterrupted service life cycle
- Slow rate of power falling during life cycle
- Light weight technology & attractive product

Fast Grow-up Advantages (VRLA Battery)

VRLA battery means next generation battery & here, we have one & half decades of vast R & D experience. So a golden opportunity knocks to make your firm as a premier organization:

- Unlimited market opportunity as new product
- Secure from customer handling due to 100% maintenance free
- Excellent profitable opportunity
- Leadership of industry
- High status & dignity

May I Help You?

If you are facing these following troubles, Yes! We Sure Help You!

- Resources:
  a. High quality raw material/components with compatible price
  b. Automatic, reliable & durable modern plant/machines & equipments
  c. Skilled/semi-skilled man power for any section & level
- Plantation:
  a. Plantation/up-gradation of battery complete manufacturing unit
  b. Physical, Chemical & Electrochem state-of-art Laboratory set-up
  c. Plantation of pollution plant
- Training:
  a. Complete know-how to mangt for qualitative production/controlling
  b. Each section complete training for a lay-man to managers
  c. Chemist training as step-by-step, A to Z section testing
  d. Machineries/equipments handling, calibration & trouble shootings etc
- Documentation:
  a. All types of Quality & Quantity formats for each section
  b. Documentation for ISO certification
  c. Charts/boards/indicators etc for best management system

ISO Certification

The concept of ISO certification provides two types of benefit as internal & external:

a. 100% Assistance in ISO certification
b. ISO 9001: 2015, for Quality Management System
c. ISO 14001: 2015, for Environment Management System

LA-POWER Secrets (In-Written Documents)

The secrets can change your professional way, it's extract of one & half decades of vast R & D:

a. Project report
b. Process control procedures
c. Laboratory testing & specifications
d. Format, indicators samples & Trouble shootings

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PM Shri Narendra Modi made several major announcements on 79th Independence Day

Promised to cut GST in October

Greeting the nation on its **79th Independence Day**, **Prime Minister Shri Narendra Modi** turned the Red Fort into a launching pad for the next chapter of India's rise.

Prime Minister Narendra Modi on Friday said that "The Goods and Services Tax (GST) will be reformed and taxes reduced by the time Diwali is celebrated in October this year. This Diwali, I am going to make it a double Diwali for you. In the last eight years, we have done major reforms in the Goods and Services Tax. We are bringing the next generation GST reforms which will reduce the tax burden across the country."

On the occasion of his 12th Independence Day address, he made several bold announcements that signalled a nation ready to not just step into the future, but leap into it. From building India's first semiconductor chip to manufacturing jet engines, from a tenfold nuclear power expansion to a Rs 1 lakh crore employment boost for the youth, his message was clear: India will define its own destiny, set its own terms and achieve its goal of becoming a developed nation by 2047.

Semiconductors: From lost decades to mission mode

Recalling how attempts to set up semiconductor factories 50-60 years ago were “bummed out of the water” while other countries prospered by producing semiconductors, PM Modi announced that India is now in mission mode. The country will launch its first Made in India chip by the end of this year.

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Knowledge without devotion to God produces hatred.
—Bhagwan Sh. Sathya Sai Baba

BATTERY DIRECTORY & YEAR BOOK

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FROM MODIJI'S SPEECH ON 79TH INDEPENDENCE DAY

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NEWS

TENDERS FOR BATTERY INDUSTRY

TRIBUTE

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SAI SHARNAGATI

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paytm Account	**A/c CHANDRA MOHAN - UPI ID: 9971150801@ptyes Union Bank**			

Late Shri Ranjit Sain Tuli
10 October 1949 - 11 August 2025

Sh. Ranjit Sain Tuli Passed Away

Sh. Ranjit Sain Tuli, **Managing Director of Sparco Batteries Pvt. Ltd.**, Delhi passed away on 11th August at around 3:15 PM. He was 76 years old. He was born on 10th October 1949 in Delhi. **He was the eldest son of late Sh. Balbir Sain Tuli.** He was unwell for quite some time.

He was one of the eleven founding members of the **Federation of Indian Small Scale Battery Associations** formed in 2008 and held the post of **Senior Vice President of the Federation** for a long time. Due to ill health, he was the patron of the Federation for the last few years.

He had a major contribution in the development and growth of Sparco Battery Corporation established by his father **late Sh. Balbir Sain Tuli** in 1957 in Motiyakhan, Delhi. He not only spread the fame of Sparco Battery Corporation far and wide but also played an important role in giving a reliable and respected place to the batteries and battery spare parts manufactured by small scale battery industries in the country. After the demise of his father, in the year 1999, he established Sparco Batteries Pvt. Ltd. The Ultima battery manufactured by him is famous far and wide today. **Shri Ranjit Sain Tuli ji has two sons, Shri Arvind Sain Tuli and Shri Amit Sain Tuli.**

On the demise of Shri Ranjit Sain Tuli, famous battery entrepreneurs/ businessmen of the country have sent condolence messages, some of which are presented here as a tribute to him -

Harashpal Singh Sawhney, President, Federation of Indian Small Scale Battery Associations, Delhi - The demise of Shri Ranjit Sain Tuli of Sparco/ Ultima Batteries is an irreparable loss for us. He was a respected member of FISSBA and a true pillar of the Indian MSME battery industry. Sh. Ranjit Sain Tuli played a pioneering role in establishing the battery industry in India and ensuring that the voice of MSMEs in the battery sector in India is heard with respect and prominence. His dedication, vision and commitment are an inspiration to all of us. On behalf of Federation of Indian Small Scale Battery Associations (FISSBA),

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Federation wrote a letter to the Finance Minister

Regn. No. S/68348/2010

Federation of Indian Small Scale Battery Associations
Registered Office : C9-T2, Block C, Dilshad Garden, Delhi-110095
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President **Harshpal S. Sawhney** (M) 9810030510
Hon. Gen. Secretary **Naresh Tomar** (M) 8057593000
Treasurer **Arvind Mohan** (M) 9910268067

Appeal for Reduction of GST on Lead-Acid Batteries to 5%

To: Smt. Nirmala Sitharaman
Hon'ble Minister of Finance & Chairperson, GST Council
Ministry of Finance, Government of India,
New Delhi –110001

Subject: Urgent Request to Reduce GST on Lead-Acid Batteries from 28% to 5% in the Interest of Infrastructure, MSMEs, and Environmental Sustainability

Respected Madam,

We write on behalf of India's lead-acid battery industry and allied stakeholders to **appeal for a rationalization of the GST rate on lead-acid batteries**. Currently, standalone lead-acid batteries attract **28% GST**, which stands in stark contrast to the **18% GST on lithium-ion batteries** (mostly imported). This **taxation imbalance** places an undue burden on a critical domestic industry while favoring imported alternatives. Notably, the GST Council in July 2018 reduced lithium-ion battery GST from 28% to 18%, yet **lead-acid batteries remain at the highest slab (28%)**, except when sold integrated in solar power systems where an effective 5% rate applies. We believe **extending a 5% GST rate to all lead-acid batteries** (similar to other essential energy products) will rectify this disparity and strongly serve the national interest.

Role of Lead-Acid Batteries in India's Infrastructure

Lead-acid batteries form the **backbone of India's energy storage needs**, with a wide range of critical applications across sectors:

- **Automotive Sector (Starter Batteries):** Every conventional vehicle –from two-wheelers to cars, trucks, and buses –uses a lead-acid battery for starting, lighting, and ignition. India's automotive industry, one of the world's largest, relies on these batteries for reliable daily operation. As a result, automotive batteries constitute a major portion of lead-acid battery demand, which has grown in tandem with vehicle sales ehp.niehs.nih.gov.
- **Electric Rickshaws (E-rickshaws):** Lead-acid batteries power an estimated **2+ million e-rickshaws** on Indian roads, providing affordable last-mile transportation and livelihood to thousands of drivers. These batteries enable clean mobility for the masses, and their low cost makes e-rickshaws economically viable.
- **Home Inverters & Rural Electrification:** Millions of households and small businesses depend on lead-acid battery-based **inverters and UPS systems** for backup electricity during power outages. In areas with

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Federation of Indian Small Scale Battery Associations meeting concluded

Government should promote Lead Batteries instead of Lithium

The meeting of **Federation of Indian Small Scale Associations** was held on 29th July in Agra. Many important points were discussed in the meeting.

Appeal again for 5% GST

The General Secretary of the Federation, **Sh. Naresh Tomar**, while informing everyone, said that the Federation has again appealed to the Finance Minister for 5% GST and possibilities of meeting Nitin Gadkari ji are also being explored to encourage Lead Batteries in place of Lithium from the government. Some time back, there was talk of meeting Nitin Gadkari ji, when the Pahalgam attack happened, then the leaders got so busy that the time of the next meeting could not be finalized. We also have to ask Gadkari ji that many benefits like FAME-2 subsidy, PLI are also being given only to advanced chemistry cell batteries, why not to lead batteries? The government's neglect of the small lead battery industry is destroying this industry. Somewhere we are becoming dependent on China. China will increase the rates whenever it wants and will affect the country's energy industry. 70% of the resources related to lithium batteries are with China and only 30% are in the rest of the world.

Sh. Ajay Gupta expressed his views and said that China also has the technology of mining. If China has everything, then it can strangle our market at any time. Like, now they have stopped antimony. They have increased the prices. Now magnets are needed for EV, but magnets are not coming right now.

Existence of Lead Batteries

Till two years ago, we were assuming that lead batteries will last for 10 years, but now it seems that nothing is there anymore. Now the matter is serious, something should be done for the lead battery industry.

Shri Naresh Tomar said that the good manufacturers who have the system and resources will have to upgrade themselves. Arvind Mohan said that not upgrade but say that a new additional facility will have to be setup.

Federation officials getting a group photo taken at the Taj

Lithium Battery Assembling points are being set up for Rs. 15 lakhs

The battery industry is running on high warranty. A good battery can be made if the technology is good. Big companies have all the systems, all the things, still they control 2% warranty. Lithium factories are being set up in two rooms. Videos are available on YouTube as well, everyone is saying that see how easy it is to set up an assembling point. Battery factories are being set up for Rs. 15 lakhs. Assembling points are being set up.

Whose responsibility is it in case of blast?

Many entrepreneurs have a question that even if we make lithium batteries, suppose we start assembling, then who will be responsible for the chances of blast in it? The company which is giving guarantee and warranty, whoever has stamped its stamp on the battery, it is their responsibility. If the standard is not maintained, then there will be more chances of blast in it.

Once the fire starts, it cannot be extinguished.

Shri Ravi Nakra told that we have been working on Lithium for the last 1.5 years. Everyone says that Lithium blasts, but there is no such blast, it can be called fire. Lithium is like petrol, once it catches fire, it cannot be extinguished.

There are 2 to 3 chemistries used in Lithium. These are being used in EVs these days. LFP will only emit smoke, not fire. Lithium Iron Phosphate LFP does not emit fire, it only emits smoke.

99% Lithium Cells are Old

Sh. Ajay Gupta said that at the rate at which batteries are available in India, 99% of the cells are old. Battery manufacturers order cells in bulk from China. This also includes C-1 and C-2. You have to bring them to India and separate them. The one who can segregate them properly will win. The one who can segregate the cells will never have any problem with his battery. There are two types of cells. Prismatic and cylindrical. Cylindrical cells are a little expensive, prismatic cells are cheaper. It is also easy to assemble them. Anyone can do it.

Shri Naresh Tomar told that it

has another advantage. Now, just like earlier when local batteries were made, if one cell got damaged, it was replaced, the same can be done in this case also. The cell which gets damaged is replaced. It is not a big task to fulfill the 3-year guarantee in this.

Now, there are many complaints about e-bike batteries. Everyone is engaged in repairing them. It has become very easy. You cannot stop it. You are making a 100 ampere battery with just 4 cells.

If the cell is getting imbalanced then the cell can be removed and used somewhere else. There is a balancing machine which helps in balancing the cell.

Sh. Ajay Gupta told that if you bring the best of the best cells then the cost of your battery will be 15 thousand rupees and I will think that I will sell it at a low margin of 16 thousand and another person is making a battery with old cells for 7 thousand rupees and selling it for 10 thousand and you cannot justify to the customer that I am making a battery with new cells and he is making a battery with old cells. His battery will also last as long as that. It is also possible that his battery may last better than your battery.

Big companies do not use old cells at all. They use new cells. Like Tata Motors, LG etc. They will buy 1st grade cell batteries and will not even touch second hand cells.

The cells will either come from China, Korea or Japan. **The slogan that Modi sahab has raised, Made in India, regarding lithium batteries is not Made in India but Assembled in India.**

In the market of e-rickshaws, lead acid batteries have become 50% and the smart batteries that have come have ruined the entire market.

Livguard, Luminous are big brands, they will not use old cells. How will a small battery entrepreneur be able to place himself with big brands. Today, just think, if you set up an assembling line, it will cost one crore rupees. As soon as you start, you will have a stock of 1 to 2 crore rupees. Today, factories have been set up at various places, each one is in a room. For 15 to 20 lakh rupees. They replace the battery and also put in a new cell.

Sh. Poonam Chand Kachhawah said that if we also have to supply batteries in our area, then we can buy those batteries from them and market them.

If two-three people work together, the quality will be good and we will also be able to fight the competition. I will definitely take a margin of 5 to 10 percent in whatever is the factory overhead. After that you decide your rates within the market.

There will be more competition in lithium because it will be manufactured in every street. Some big companies have imported so many cells that they will not need to import for the next 3 to 4 years.

What the law says for legal responsibility is most important. Many people are still stuck in the past cases that have been made against people.

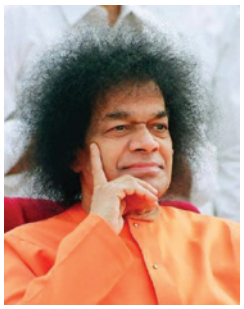
Sh. H.S. Jha took charge of managing the meeting. ❑

Nehal Kachhawa presided over the Youth Parliament in Rajasthan Assembly

Youth Parliament was organized in Rajasthan Assembly on 2 August 2025. The Parliament was inaugurated by Assembly Speaker Vasudev Devnani.

The Youth Parliament was presided over by Nehal Kachhawa. Nehal Kachhawa is the daughter of Shri Poonam Chand Kachhawa, General Secretary of Rajasthan Storage Battery Trade Association.

168 students from various schools participated in the two-day Youth Parliament organized in Rajasthan Assembly. In the Youth Parliament, the youth discussed issues like dealing with terrorist attacks, exposing Pakistan at the international level and PoK being a part of India. ❑



See all work as
spiritual exercise,
as an offering.
Then, work is
transformed into worship.

– Bhagawan Sri Sathya Sai Baba

Late Shri Mangeram Bansal
05 May 1962 - 10 August 2025

Shri Mangeram Bansal merged into Panchtatva

Shri Mange Ram Bansal of **Bansal & Bansal** and **Shree Enterprises** Kanpur passed away on 10th August due to heart attack. He was 63 years old. He was the President of Central East Zone of **Federation of Indian Small Scale Battery Associations** for many years. **Kanpur Battery Parts Manufacturers Association**, Kanpur and **Kanpur Battery Udhyog Association**, Kanpur took Kanpur battery industry to new heights under the chairmanship of **Shri Mangeram Bansal**. Bansal & Bansal started in the year 1987 with the manufacturing of batteries and battery plates. He started lead smelting work in Shri Enterprises.

Shri Mangeram Bansal was well known among battery entrepreneurs for his simple and cheerful nature, liveliness. His 38 year old son **Shri Sushant** lives in Pune, is not in the battery industry. On the demise of Shri Mangeram Bansal, the country's renowned battery entrepreneurs/businessmen have sent condolence messages, some of which are presented here as a tribute to him -

Harashpal Singh Sawhney, President, Federation of Indian Small Scale Battery Associations, Delhi - He was a respected member of the FISSBA committee and a true pillar of the Kanpur battery industry. Shri Bansal played a pioneering role in establishing the battery industry in Kanpur and ensuring that the voice of Kanpur battery entrepreneurs is heard with respect and prominence in India's battery sector. His dedication, vision and commitment are an inspiration to all of us. On behalf of the Federation of Indian Small Scale Battery Associations, we express our heartfelt condolences on this irreparable loss. We pray to God to grant peace to the departed soul and strength to the bereaved family to bear this loss.

Goldstar Power Limited, Hapa, Muljibhai M. Pansara - I am deeply saddened to hear about the sad demise of Shri Mangeram Bansal. During my long journey in the Federation, he was not only my colleague but also a good friend.

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Lithium Batteries will also be Assembled just like Lead Batteries

On one hand, the Indian Government is working towards becoming self-reliant, on the other hand, by promoting Lithium Batteries, it is going to depend on China.

– Kamal Kansal –
President, Central West Zone, Federation of Indian Small Scale Battery Associations, Delhi

I don't think that with the advent of lithium batteries, the battery market will go out of the hands of local battery manufacturers. People are thinking that the lithium battery market will go into the hands of big companies, but if lithium cells continue to be imported from China in large quantities like this, then the lithium battery market will go into the hands of local battery manufacturers and not the big battery companies.

Remember that a few years ago, local battery manufacturers used to buy battery plates, containers, separators etc. from the market and assemble batteries and then make and sell them. If the battery developed problems within a year or two, they used to replace the cell and restart the battery. There was not much expense. The lithium battery assembly machine costs only Rs. 20 to 25 lakh. Lithium batteries can be assembled by bringing cells from abroad and using this machine.

There was no machine for life testing of lead acid batteries, but there is a life testing machine for lithium batteries and it is also known how much energy is left in the cell, how many volts are there, how many life cycles are left. The local battery seller will sell new lithium batteries and will also replace and repair the cells of the old lithium battery. Even the companies will not be able to provide faster service than the

Sh. Kamal Kansal

local battery seller.

Now the number of wholesalers will increase in the market who will import lithium cells and its accessories from China, Taiwan, Thailand etc. and make them available in the country. Just as a few years ago, lead battery spare parts were available on a large scale in the country, battery plates, containers, separators, compounds, chemicals were available, similarly the sale of lithium battery cells and its accessories will start.

Although lithium batteries have just started in the country, but there are two types of lithium batteries available in the market right now - lithium batteries of new cells and lithium batteries of old cells.

On one hand, the Indian Government is working towards becoming self-reliant, on the other hand, by promoting lithium batteries, it

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EPR Credits In India – Lead Metal Recycling From Scrap Batteries

– Dr. Suresh Kapiti, *Battery Consultant,*
Kapiti Overseas Pvt. Ltd., Hyderabad,
Mobile No. 9701029731

What is EPR?

Extended Producer Responsibility (EPR) is a policy approach under which producers are given significant responsibility—financial and/or physical—for the treatment or disposal of post-consumer products. In India, it applies to sectors like plastic waste, e-waste, battery waste, and tyre waste.

EPR in Battery Waste Management

Under the Battery Waste Management Rules, 2022, notified by the Ministry of Environment, Forest and Climate Change (MoEFCC):

- EPR is mandatory for all Producers, Importers, and Recyclers of batteries, including lead-acid batteries.
- The rules cover all types of batteries—portable, automotive, industrial, and electric vehicle batteries.

EPR Credits for Lead Metal Recycling

What are EPR Credits?

EPR Credits (similar to carbon credits) are digital proofs that a certain quantity of waste (e.g., lead-acid batteries) has been recycled or properly disposed of by an authorized recycler. These can be:

- Claimed by Recyclers
- Transferred or sold to Producers, who use them to meet their regulatory obligations.

Who Issues EPR Credits?

- Central Pollution Control Board (CPCB) through an online EPR Portal.
- Authorized Recyclers of lead batteries can register and upload their recycling data.
- The portal tracks collection, recycling, and EPR credit generation.

Lead Recycling from Scrap Batteries

Process Overview:

1. Collection of Used Lead-Acid Batteries (ULABs)
2. Transportation to Authorized Recycler Facility
3. Dismantling & Crushing
4. Separation of Lead, Lead Compounds, Acid, and Plastic Components
5. Refining Lead for reuse
6. Documentation & Reporting to CPCB for EPR credits.

Key Compliance Steps for Recyclers

1. Authorization Obtain from State Pollution Control Board (SPCB).
2. Registration On the CPCB Battery Waste Management Portal.
3. Record-keeping Maintain collection, recycling, and sale data.
4. EPR Reporting Submit data quarterly or as prescribed.
5. EPR Credit Claim. Generate credits for recycled quantity. ❑

International Conference on Lead and Lead Batteries

This year's "**International Conference on Lead and Lead Batteries**" will be held on **1st and 2nd December 2025** at India International Centre, New Delhi. This time the theme will be "**Unleashing the true potential of Lead and Lead Batteries**". This conference is organized every year by India Lead Zinc Development Association, Delhi. Usually this conference is held in November but this time it will be held in December.

With emerging markets, multiple applications including energy storage and e-mobility, the lead battery sector and lead recycling industry are witnessing double digit growth. Both lead and lead batteries have immense potential and this conference will lay down a roadmap to tap these hidden business opportunities.

Supporters

This conference will be organized with full support of lead battery manufacturers, lead recyclers, plant and equipment suppliers, consultants, CPCB, Ministry of Mines, International and Indian professional bodies.

Many leading foreign and Indian experts, scientists, policy makers, regulatory bodies and industry professionals will be making technical presentations at the conference.

Co-sponsorship, Advertising and Registration

For co-sponsorship, advertising or registration for the conference you can contact on the following numbers or email- +91 9871300929 / +91 9873058907 / ilzda.info@gmail.com. ❑

India Achieves 100 GW Solar PV Module Manufacturing Capacity

India has achieved a historic milestone of 100 GW solar PV module manufacturing capacity listed under the list of approved models and manufacturers for solar PV modules. This achievement reflects the country's rapid progress in building a robust and self-reliant solar manufacturing ecosystem in line with the national vision of Aatmanirbhar Bharat and the global imperative of clean energy transition. ❑

Lithium ion can never be an Indian Battery

If we talk about 8 and 8.4mm tubular batteries, then Lithium batteries cannot compete with lead batteries

Satnam Singh Manaktala

The life of a lithium battery depends on where and how we are using it. If we talk about VRLA battery in lead battery, then its life cycle is less and if I talk about tubular, then its life cycle is more. There are segments in tubular also - 6.2mm, 7.3mm, 8mm and 8.4mm. There is a difference in their life. 6.2mm battery gives us 90% backup but its life cycle is less. 7.3mm battery gives 80% backup and its life cycle is more than 6.2mm. If we talk about 8 and 8.4mm, then lithium battery cannot compete with lead battery. This battery gives 65% backup and keeps 35% reserve. Even if a decrement of 4 to 5% is applied every year, then the energy is fulfilled from the remaining 35% quota. Therefore, its average life starts from 7 years. Both over charge and discharge destroys the battery whether it is lithium ion or lead battery.

Lithium ion can never be an Indian battery and we will not be able to recycle it and if it is recycled then the mixture of cobalt and lithium goes to China for recycling. Just like we recycle lead acid batteries, there is nothing like that in lithium. Even though it has 6% lithium but the major parts are copper, nickel, zinc and we will also get steel. The plate on which there is a coating of cobalt and lithium, we will not get that, we will have to import that and this is not a battery that can be made in every home.

Now you can see in Delhi itself that the battery in an e-rickshaw will run for 5 years but nothing like this is happening. Now take the EV, Indra has made a car which has a backup of 280 kmph at a speed of 70 to 80, if the speed goes to 100 then its backup remains 210 and it takes 2 to 3 hours to charge if you have a big charger. If the company says that you can charge it in 8 to 10 hours with a home charger then it is better. The car on which a person has spent Rs. 15 lakhs has become a city car for him.

Be it Japan or America, lithium is coming from China everywhere. So we can never call it our country's battery. We should make our appeal reach the government.

There was a time when even Exide had gone out of the market. Some battery entrepreneurs say that we have gone out of automobile batteries but it is not so. We can come back. There was a time when even a big company like Exide had gone out. Other big battery companies in the market had reduced their prices completely. Exide had also sat aside thinking that we do not have to make such batteries as they are making. We have to maintain our quality, we will not compromise on the quality, if the goods do not sell then it is okay, whatever is going to the government sector, let it go. This competition had increased so much that Exide's market was almost over. Now people came to know in the last 2.5 years that cheap batteries have no life. Even after changing two to three batteries, they are not satisfied, then people started buying Exide batteries again.

Now I will tell you about trucks and tractors. There are two batteries in the truck, it is going from Punjab to Guwahati and the battery is not getting changed in Guwahati and even if it is getting changed, then first they will search for a nearby distributor, then it is not known how many days it will take to change that battery. He will not park the vehicle for that many days. Then what happens is that they take the battery from there and give the old one, then the owner of the battery says that it is guaranteed, I will get it repaired. There are two batteries fitted in a truck but when it is in such a condition after going out, then two more have to be bought. These big battery companies had degraded the quality so much that instead of calling it lead acid, we can call it lead oxide and acid battery. Even a 100Ah battery does not work properly. If someone switched on a fan in the vehicle at night, the battery would go down.

Now people have started demanding automobile commercial batteries from us again. I cannot talk about cars right now, there are many variations in cars, many models are available, so we are not able to make them right now.

In all the commercial vehicles, three-four of our models have started running successfully. Lithium can never replace it. E-rickshaws have such a huge market, our battery is cheap as well as good in it. We should do something for it or else it is on the verge of ending. ❑

There is only one caste, the caste of humanity. There is only one religion, the religion of love. There is only one language, the language of the heart.

– Bhagawan Sri Sathya Sai Baba

Cont. from page no.: 9 →

Promised to cut GST in October

GST Reforms

Next generation GST reforms to be unveiled on Diwali will reduce taxes on essential goods and provide relief to MSMEs, local vendors and consumers.

Reform Task Force for $10 Trillion India

PM Modi announced the formation of a dedicated Reform Task Force to drive next generation reforms. Its mandate will be: accelerate economic growth, reduce red tape, modernise governance and prepare India for the needs of a $10 trillion economy by 2047.

PM Vikasit Bharat Rojgar Yojana worth Rs. 1 lakh crore

Prime Minister Shri Modi launched a mega employment scheme worth Rs. 1 lakh crore under which the youth getting new jobs will get Rs. 15,000. The scheme aims to benefit 3 crore young Indians, thereby strengthening the bridge from independent India to prosperous India.

High-Level Demographic Mission

Prime Minister Shri Modi highlighted the dangers of demographic imbalance due to infiltration and illegal migration in border areas. He announced the launch of a high-level demographic mission to address this national security challenge, so as to ensure the protection of the unity, integrity and rights of the citizens of India.

Energy Independence – Launch of Samudra Manthan

Prime Minister Shri Modi underlined that a large part of India's budget still goes towards import of petrol, diesel and gas. He announced the launch of National Deepwater Exploration Mission to harness ocean resources and major expansion in solar, hydrogen, hydro and nuclear energy. Work is also underway on 10 new nuclear reactors as part of India's mission to increase nuclear power generation capacity more than tenfold in the next two decades.

Jet Engines to be Manufactured in India

Making an important announcement, Prime Minister Shri Modi said that just like we made vaccines during Covid and used UPI for digital payments, we will have to make our own jet engines as well. He urged his scientists and youth to take this as a direct challenge. ❑

> To transform the world from its present state, there is no need for a new social system or a new religion or creed. What is essential is a body of men and women with sacred ideals.

Cont. from page no.: 12 →

we offer our heartfelt condolences on this irreparable loss. We pray to God to grant peace to the departed soul and strength to the bereaved family to bear this loss.

Microtex Energy (P) Ltd., Bengaluru, Ravi Govindan – We are deeply saddened to hear the news of the demise of Sh. Ranjitbhai. He was more than a dear friend to me. He was a mentor and a person whose values and ethics set the highest standards for all who knew him. His practical knowledge and integrity greatly aided my journey in the industry, especially in my initial years. Sh. Ranjitbhai's contribution to the battery industry in India is immeasurable, and his legacy will live on in the lives of countless people he influenced. His generosity, clarity of thought and unwavering principles inspired not just me, but an entire generation in the battery industry. On behalf of myself and all those who respected him, I offer my heartfelt condolences to his beloved family. May God console them with the fact that his life's work and his kindness will never be forgotten. May his soul rest in peace.

Goldstar Power Limited, Hapa, Muljibhai M. Pansara – Very sad news! We pray to Almighty God to grant him a place in his lotus feet and give strength to the family to bear this great loss.

BMR Industries, Pilkhuwa, Naresh Tomar – Very sad news. May God grant him a place in his lotus feet.

Rajasthan Storage Battery Trade Association, Jaipur, President, Amitabh Jhanwar, General Secretary, Poonamchand Kachhawah – We all the members of Rajasthan Storage Battery Trade Association, Jaipur pay tribute with deep grief and sorrow to the great soul who left this mortal world on 11th August 2025 and departed for the Supreme Abode. Late Shri Ranjit Sain Tuli was a gentle, humble and social worker. His life has been a source of inspiration for the society and the family. His contribution and guidance will always be remembered. May God grant peace to the departed soul and give strength to the bereaved family to bear this immense loss. Heartfelt tributes.

Devaki Engineering Enterprises Pvt. Ltd., Bengaluru, Mohan Sundar – Very sad to hear this news. He played a vital role in taking us forward in North India. We can never forget his support and patronage. The battery industry has lost a precious person. Deepest condolences to the entire family and prayers for their strength to overcome this loss.

Intelenergy Global Pvt. Ltd., Gurugram, Madan Kotnala – I knew him personally since the 90s when I met you during the Willard days. His dedication to the battery industry – battery equipment, machinery, availability of raw materials-suppliers, in-depth knowledge of materials from manufacturing of all types of batteries to processing of lead – was unbelievable. Being with a multinational battery company I used to take his technical advice in many areas and I remember an anecdote - he used to tell me Madan ji, European batteries are for cold climate where there are smooth roads, you have to make this product for tropical climate or rough roads - which we implemented

in Prestolite. I salute Tuli sahab and wish all the best to his sons who are truly carrying forward his legacy in their company Sparco/Ultima. My heartfelt condolences on losing such a stalwart of the battery industry. May his soul rest in peace and give strength to the bereaved family to bear this loss, Om Shanti.

India Lead Zinc Development Association/ Battery Society of India, Delhi – It is very sad to lose Tuli sahab. He was a gentleman, we pray for peace to his soul. Deepest condolences to the family.

Goldstar Power Limited, Hapa, Navneet Pansara – We are deeply saddened to hear the news of the sad demise of our dear Ranjeet uncle. I have seen a strong bond between him and my father Muljibhai. His contribution to the Indian small battery industry will be remembered for decades to come. We pray to God to rest the departed soul and give strength to all of you to bear this loss.

Murphy Battery Corporation, Pune – May his soul rest in peace. He will be missed by all who knew him. Om Shanti.

RRG Energies Pvt. Ltd., Lucknow, Umesh Chandra Gupta – The entire battery community has suffered an irreparable loss with the passing away of our Ranjit Tuli ji, the Bhishma Pitamah of the entire battery world who taught hundreds of people the battery business.

S.G. Associates, Kanpur, Saurabh Grover – The demise of Shri Ranjit Sain Tuli is a great loss for us.

M.Y. Environment and Projects Pvt. Ltd., Ghaziabad, Arif Saifi – I am deeply saddened by the demise of Shri Ranjit Sain Tuli ji. May his soul rest in peace. His kindness, intelligence and warmth will always be remembered. Heartfelt condolences to his family in this difficult time.

Amalan Kanti Das, Gurugram – My heartfelt condolences to his family. This is a great loss for the industry! Very sad news indeed.

Emark Energizers Pvt. Ltd., Mumbai, Mahesh Shah – Condolences and prayers to his family in this hour of grief.

Gupta Metal Works, Ghaziabad, Anoop Gupta – Respectful salutations to Shri Ranjit Sain Tuli ji, a hardworking, diligent and efficient personality of the battery world. I wish that Shri Hari gives you a place in his feet.

Surjeet Singh Sahni, Delhi – Heartfelt tribute

Confederation of Bahadurgarh Industries, Bahadurgarh, Vice President- Vipin Bajaj, General Secretary- Pradeep Kaul – On the demise of late Shri Ranjit Sain Tuli ji, the Confederation of Bahadurgarh Industries pays tribute on behalf of all the industries of Jhajjar district. We pray to Almighty God to give strength to his entire family in this hour of grief and may the blessings of late Shri Ranjit Sain Tuli remain on all of us. Om Shanti Om. ❑

12% and 28% GST slabs scrapped 5% and 18% slabs to remain

Eight years after the introduction of the GST, the Centre has released the blueprint for GST 2.0, which will have two main slabs - 5% for commonly used goods and 18% for other goods. It aims to make life simpler and less taxable for citizens and businesses. The Centre has proposed scrapping the 12% and 28% slabs, along with abolishing the compensation cess and imposing a 40% tax on hazardous goods before the March deadline.

Food, medicines and medical equipment, stationery and educational products and everyday essentials, such as hair oil and tooth brushes, will be in the zero or 5% slabs, officials said. Items used by the middle class, such as ACs, TV sets and refrigerators, will fall in the 18% slab, though it is not yet clear how the government will tax automobiles and cement, which are currently taxed at 28%.

A senior government official said, "We have suggested a very simple, streamlined, next-generation GST... Broadly, the tax burden will be reduced as rates will be reduced on most items that fall in the 12% and 28% slabs." The plan is to bring 99% of commonly used items that fall in the 12% slab into the 5% slab, and some items into the 18% slab. The proposed changes, which need to be approved by the GST Council, will put an end to the dilatory approach that has been in place since 2017, with minor changes being made at every ministerial meeting. ❑

Lithium Batteries will also be Assembled...

Cont. from page no.: 19 ➞

is going to depend on China. Recently, China has banned the export of rare earth metals for EVs. Rare earth metals include magnets and antimony without which e-vehicles cannot be made and the cost of lead batteries has increased.

Recently Adani has received a license to set up a sodium battery manufacturing plant. There will not be any dependence on lithium for long as sodium batteries will replace it. Sodium is available everywhere. Sodium is a metal that is as free as it gets, the sea is full of sodium.

Small battery industry people should not think that they will lose all their business. You will have to change a little according to the times. Consider assembling lithium batteries. Importers of chemicals etc. should start importing lithium cells and its accessories and make them available to small battery assemblers. ❑

Humanness means unity in thought, word, and deed.

Cont. from page no.: 18 ➞

His demise has created a huge void in the Federation. I and all of Goldstar pray for the peace of the departed soul and strength to the family to bear this loss.

Microtex Energy (P) Ltd., Bengaluru, Shri Ravi Govindan – Sorry to hear this. Heartfelt condolences to the family.

Hyderabad Battery Association, Hyderabad, Madan Lal – Sorry to hear this.

BMR Industries, Pilkhuwa, Naresh Tomar – It is a very sad incident. Om Shanti Om.

AK Auto Agency, Mumbai, Ajay Gupta – Om Shanti.

Pentagon Power India Pvt. Ltd., Hapur, Kamal Kansal – It is very sad news. I pray to God to give a place to the departed soul in his lotus feet and give strength to the family to bear this moment of grief.

Hi Tech Insulators Pvt. Ltd., Jaipur, Sh. Hansraj Agarwal – I pray to Almighty God to grant peace to the departed soul and give strength to the family to bear this blow of lightning that has befallen on them.

Emark Energizer Pvt. Ltd., Mumbai, Mahesh Shah – My condolences and prayers are with his family in this hour of grief.

Indo Automotive Batteries Pvt. Ltd., Pune, Dr. Dhanyesh Lohokare – I am shocked to hear the news of sudden demise of our Battery Federation Committee member and my well-wisher Mange Bhai due to heart attack. His guidance, warmth and contribution to our community will always be remembered. Heartfelt condolences to his family in this difficult time. May God give peace to his soul.

Balaji Storage Batteries Ltd., Jaipur, Poonam Chand Kachhawa – I pray to Almighty God to grant peace to the departed soul and give strength to the family to bear this blow of lightning that has befallen on them.

Roshan Battery Company, Kolkata, Umesh Kedia – Very sad. Deepest condolences to the family.

Devaki Engineering Enterprises Pvt. Ltd., Bengaluru, Mohan Sundar – His presence at the Federation meetings will surely be missed. He was a man who never hesitated to express his opinion frankly. Deepest condolences to his entire family.

Kota Metchem Pvt. Ltd., Kota, Ravi Nakra – May his soul rest in peace. ❑

When we "skill" our knowledge, life is well-balanced. When we "kill" our knowledge, the balance is upset.

Delhi Government forms committee to draft Electric Vehicle Policy

The Delhi Government has formed a ministerial committee to formulate an "effective and people-centric" electric vehicle policy. The committee will submit its report to Chief Minister Rekha Gupta.

The committee, which will formulate the electric vehicle policy, will be headed by Home Minister Ashish Sood. Chief Minister Rekha Gupta said, "Our government is dedicated to the people of Delhi and is constantly taking decisions in public interest."

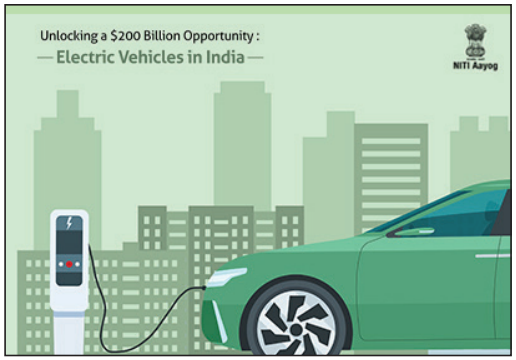
The Delhi Government a few days ago extended the existing electric vehicle policy till March 31, 2026, or till the new policy is officially notified, whichever is earlier. The extension was approved in a cabinet meeting chaired by the Chief Minister. Officials said the government wants more time for public consultation before implementing a revised policy ready for the future. The draft of the new policy is still under discussion and suggestions will be taken from citizens, industry, environmental experts, academic institutions and private stakeholders. ❑

The one who respected his parents became worthy of everyone's respect. The one who did not respect his parents had to bow down before everyone. No one can change this immutable rule.

NITI Aayog Releases Report

A $200 Billion Opportunity in Electric Vehicles

Taking a significant step towards accelerating India's clean mobility mission, NITI Aayog has released a landmark report titled – **"A $200 Billion Opportunity: Electric Vehicles in India"**. The report was released on 4th August 2025 in New Delhi. This comprehensive report lays out a clear roadmap for accelerating the adoption of electric vehicles in India. It analyses the current progress, identifies key challenges, and suggests strategic suggestions to propel India towards global leadership in the electric vehicle sector.



The report was formally released by Shri Rajiv Gauba, Member, NITI Aayog. Shri B.V.R. Subrahmanyam, CEO, NITI Aayog, Shri Kamran Rizvi, Secretary, Ministry of Heavy Industries, Shri O.P. Aggarwal, Distinguished Fellow, NITI Aayog, Shri Sudhendu Sinha, Programme Director – E-Mobility, NITI Aayog were present on the occasion. Their presence reflects the government's commitment to grow India's EV ecosystem into a robust and sustainable sector.

India's Ambitious EV Targets

India has set a target of 30% electric vehicle sales across all vehicle categories by 2030. The progress so far has been as follows:

EV sales in India grew from 50,000 in 2016 to 2.08 million in 2024.

Global EV sales grew from 9.18 lakh in 2016 to 18.78 million in 2024.

This report is the result of extensive stakeholder dialogue through seven special consultation sessions organised by NITI Aayog. These meetings were attended by experts from government, industry and research sectors who identified key barriers and suggested solutions. The report emerges as a blueprint for India's EV future, guiding the way towards achieving both economic growth and environmental sustainability goals. ❑

Tenders for Battery Industry

Supply, Installation, Testing and Commissioning of 02 Nos. 24 V, 50 A D.C. Float Cum Boost Battery Charger at Salawa and Bhola Power Houses under EGD, Muzaffarnagar.			
Bid Validity(Days)	180	Period Of Work(Days)	60
Location	Muzaffarnagar	Pincode	251001
Bid Opening Place	Muzaffarnagar		
Published Date	14-Aug-2025 05:00 PM	Bid Opening Date	16-Sep-2025 12:00 PM
Document Download / Sale Start Date	14-Aug-2025 05:00 PM	Document Download / Sale End Date	15-Sep-2025 04:00 PM
Bid Submission Start Date	14-Aug-2025 05:00 PM	Bid Submission End Date	15-Sep-2025 04:00 PM
Tender Inviting Authority			
Organisation Chain	Uttar Pradesh Jal Vidyut Nigam Limited||Chief Engineer OM Lucknow||SE (Khara)||EE (EGD) Muzzafarnagar		
Name	Executive Engineer		
Address	195, Patel Nagar, New Mandi, Muzaffarnagar.		

**For more information on this Tender please visit website: https://etender.up.nic.in/nicgep/app*

Supply of Lead Acid Secondary Cells and Lead Acid Battery for S AND T of MGR ATPS, BTPS, DTPS, Kakri AND khadia of ATP, Anpara					
Tender Value in ₹	3,55,184				
Contract Type	Tender	Bid Validity(Days)	120	Period Of Work(Days)	120
Location	SE MMC-II ATP ANPARA, Pincode, 231225				
Published Date	02-Aug-2025 09:00 AM	Bid Opening Date	29-Aug-2025 06:00 PM		
Document Download / Sale Start Date	02-Aug-2025 09:00 AM	Document Download / Sale End Date	27-Aug-2025 04:00 PM		
Bid Submission Start Date	02-Aug-2025 09:00 AM	Bid Submission End Date	27-Aug-2025 04:00 PM		
Tender Inviting Authority					
Organisation Chain	UP Rajya Vidyut Utpadan Nigam Ltd||Anpara Thermal Power Project- UPRVUNL- Sonebhadra				
Name	SE MMC-II ATP ANPARA				
Address	SE MMC-II ATP ANPARA				

**For more information on this Tender please visit website: https://etender.up.nic.in/nicgep/app*

OPERATION AND MAINTENANCE OF BATTERY ASSEMBLING UNIT AT MUNICIPAL CORPORATION BHOPAL (THIRD CALL)			
Tender Value in ₹	**14,91,600**		
Bid Validity(Days)	180	Period Of Work(Days)	30
Location	CENTRAL WORKSHOP MUNICIPAL CORPORATION BHOPAL, Pincode, 462003		
Published Date	08-Aug-2025 02:00 PM	Bid Opening Date	08-Sep-2025 02:00 PM
Document Download / Sale Start Date	09-Aug-2025 12:00 PM	**Document Download / Sale End Date**	**06-Sep-2025 05:30 PM**
Bid Submission Start Date	09-Aug-2025 12:30 PM	**Bid Submission End Date**	**06-Sep-2025 05:30 PM**
Organisation Chain	Directorate Urban Administration and Development||Muncipal Corporations - UAD||Muncipal Corporation-Bhopal - UAD||Central Workshop - MC Bhopal- UAD		
Tender Reference Number	524/CWS/2025		
Tender ID	**2025_ UAD_421735_3**	Withdrawal Allowed	Yes
Tender Inviting Authority			
Name	HARSHIT TIWARI		

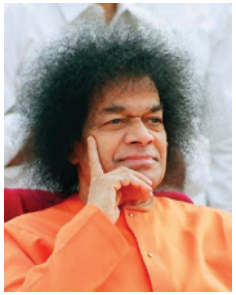
**For more information on this Tender please visit website: https://mptenders.gov.in/nicgep/app*

Supply Erection testing and commissioning of Complete battery bank with Buy-back of old battery bank installed at DCRTPP			
Bid Validity(Days)	270	Period Of Work(Days)	90
Published Date	18-Apr-2025 05:00 PM	Bid Opening Date	29-Aug-2025 03:00 PM
Document Download / Sale Start Date	18-Apr-2025 05:00 PM	**Document Download / Sale End Date**	**26-Aug-2025 01:00 PM**
Bid Submission Start Date	18-Apr-2025 06:00 PM	**Bid Submission End Date**	**26-Aug-2025 01:00 PM**
Tender Inviting Authority			
Organisation Chain	Haryana Board Corporation||HPGCL||DCRTPP WYC Yamunanagar		
Tender ID	2025_HBC_441098_1		
Name	SEMMAND STORES		
Address	DCRTPP YAMUNA NAGAR		

**For more information on this Tender please visit website: https://etenders.hry.nic.in/nicgep/app*

Setting up of 500 MW/2000 MWh Standalone Battery Energy Systems under Tariff Based Global Competitive Bidding in Rajasthan with Viability Gap Funding Support under BOO model			
Bid Validity(Days)	180		
Location	Different GSS of RVPN, refer Rfs, Pincode, 302005	Pre Bid Meeting Place	Jaipur
Pre Bid Meeting Address	Vidyut Bhawan Jaipur		
Pre Bid Meeting Date	**26-Aug-2025 02:00 PM**	Bid Opening Place	Jaipur
Published Date	08-Aug-2025 04:00 PM	Bid Opening Date	24-Sep-2025 11:00 AM
Document Download / Sale Start Date	08-Aug-2025 04:00 PM	**Document Download / Sale End Date**	**23-Sep-2025 04:00 PM**
Clarification Start Date	08-Aug-2025 04:00 PM	Clarification End Date	25-Aug-2025 06:00 PM
Bid Submission Start Date	08-Aug-2025 06:00 PM	**Bid Submission End Date**	**23-Sep-2025 04:00 PM**
Tender Inviting Authority			
Organisation Chain	**RRVUN - CMD||RVUN - CE (TD) - Jaipur||SE (TD)**		
Tender Reference Number	TN-07/2025-26		
Tender ID	**2025_ RRVUN_491949_1**	Withdrawal Allowed	Yes
Name	CE (NPP)		
Address	6th Floor, LIC Investment Building, DC-03 Lalkothi Jaipur-302005		

**For more information on this Tender please visit website: https://eproc.rajasthan.gov.in/nicgep/app*



View all work as a spiritual practice, an offering. Then work becomes worship.

– Bhagawan Sri Sathya Sai Baba

Supply erection testing and commissioning of 220V 1450AH 108 cells Lead Acid Tubular battery including buy back Exide make 220V 1400AH 108 cells existing battery set			
Bid Validity(Days)	180	Period Of Work(Days)	90
Published Date	11-Aug-2025 03:30 PM	Bid Opening Date	28-Aug-2025 02:30 PM
Document Download / Sale Start Date	11-Aug-2025 03:45 PM	**Document Download / Sale End Date**	**27-Aug-2025 02:00 PM**
Bid Submission Start Date	11-Aug-2025 04:00 PM	**Bid Submission End Date**	**27-Aug-2025 02:00 PM**
Tender Inviting Authority			
Name	CE MTPS1		
Address	CE MTPS1 METTURDAM		
Organisation Chain	TNEB Limited||TANGEDCO||CE-MTPS-I - TANGEDCO||SE-Purchase and Administration-MTPS-I - TANGEDCO		
Tender Reference Number	CE MTPS1 SE PA MM JE4 OT NO 564 2025 26		
Tender ID	2025_EB_591545_1		

**For more information on this Tender please visit website: https://tntenders.gov.in/nicgep/app*

Supply, installation, testing and commissioning of 2 No.s new 100 KVA Monolithic UPS with Modular Architecture, 1 No. 12V, 200AH Battery Bank, dismantling of 2 No. existing 160 KVA UPS and other related works in TGSPDCL Data centre, Groundfloor B block, Corporate Office, Hyderabad			
Tender Value in ₹	41,31,742/- (Excluding GST)	Period Of Work(Days)	6 weeks
Bid Opening Date	04.09.2025@ 4.00 PM		
Document Download / Sale Start Date	18.08.2025 at 10:30 am	**Document Download / Sale End Date**	**02.09.2025 upto 05:00 PM**
Bid Submission	Online	**Bid Submission End Date**	**03.09.2025 upto 1:00 PM**
Tender Inviting Authority			
Name	Chief Engineer/Projects/TGSPDCL		
Address	O/o Chief Engineer/Projects,TGSPDCL Corporate Office, Mint Compound, Hyderabad		
Organisation Chain	SOUTHERN Power Distribution Company Of TELANGANA. Limited		
Tender Specification Number	07 of CE/Projects/SE/Civil/CorporateOffice/2025-26		
Circle / Division	CE/Projects/TGSPDCL, Mint compound Hyderabad		

**For more information on this Tender please visit website: https://tender.telangana.gov.in/TenderDetailsHome.html#*

Government will develop 97 GW Thermal Power Generation Capacity

Based on Coal and Lignite

The Ministry of Power informed Parliament that it plans to develop an additional 97 GW of coal and lignite-based power generation capacity to achieve the required 307 GW thermal power installed capacity by 2034-35.

In a written reply in the Lok Sabha, Minister of State for Power Shripad Yesso Naik said, "The projected thermal power (coal and lignite) capacity requirement by the year 2034-35 is estimated to be about 3,07,000 MW, while the installed capacity as on March 31, 2023 was 2,11,855 MW."

The minister informed the House that to meet this requirement, the Ministry of Power envisages setting up a minimum of 97,000 MW of additional thermal power capacity based on coal and lignite.

The installed power generation capacity in the country as on June 2025 is 485 GW. According to the National Electricity Plan (Generation) published in May 2023, India's installed generation capacity is expected to increase to about 870 GW by 2031-32.

In FY 2024-25, contracts for 15,440 MW thermal power capacity have been awarded and construction is to be completed. To meet the projected demand in the country, 35,460 MW coal and lignite based potential has been identified which is in various stages of planning in the country, he said.

He said 1,58,450 MW renewable capacity including 74,150 MW solar power, 30,080 MW wind power and 53,750 MW hybrid power is under construction, while 62,000 MW renewable capacity including 46,010 MW solar power and 15,990 MW hybrid power is in various stages of planning and is targeted to be completed by 2029-30.

The Minister said that the demand for electricity in the country has increased due to several factors such as rapid economic growth, expanding household electrification, growing urbanisation, improving living standards and increasing use of energy-intensive technologies such as air conditioners and electric vehicles.

He said that adequate generation capacity has been planned to meet the growing demand for electricity in the country, including the increase in electric vehicles. ❑

Tubular Plate Manufacturing

– C.S. Ramanathan –

Battery Consultant, Mob. +91 9845049975, E-mail: ramanathancs58@gmail.com

Tubular positives are used in a wide range of batteries for different applications. However processing the plates from alloy to final battery charging has several steps which are critical to get a plate with good electrical performance and life.

1. Uniformity of filling weight : Uniform filling weights of powder is an important parameter which determines the variation in capacity between batteries and cells. Reversal of polarity of some cells and batteries after deep discharge in a string of 24 cells for 48 V or 55 cells for a 110V in Telecom and Railways respectively. Most of you are aware about the 'one –cell' failure in different types of batteries .One major reason for all of the above is the filling weight variation between plates.

2. Adhesion between grid and active material : Good contact between spine and active material helps in reducing the electrical resistance at the interface. Reducing electrical resistance helps to augment capacity at all rates especially at high rates like C_2 and C_3. This is best achieved by building a corrosion layer on the spine. Such a layer can be obtained only by good curing at high humidity and high temperature We shall discuss about curing subsequently.

3. Surface finishing of spine and adhesion: Surface finish of spines made on Pressure-die-casting machines has a smooth finish ,a replica of the polished mould. For good adhesion, the surface of spine should be rough . In addition, the silicone spray used on PDC machines leaves a thin layer of oil on the spine. The oil acts as a barrier layer preventing good adhesion. Instead of silicone spray, one may try powders like borax or other powders for mould release.

4. But spines made on semi-automatic machines use a cork spray which gives a replica of the rough surface on the spine. Good adhesion is thus obtained. Cohesion between particles of powder is always good due to the compression by the tubular bag. Also cohesion is always stronger than adhesion.

Tubular Filling

There are 3 methods of filling tubular plates.

1. Powder- Filling: mostly followed in India is not readily amenable to curing. A modified procedure of pickling helps to cure the plates.

2. Slurry Filling:A positive paste mix is first made by the usual procedure and then diluted with water to get a slurry of density of about 2g/cc which is pumped into the tubes. The fabric of the tube acts as a filter and retains the solids allowing the filtrate to flow out. The plates are then cured under high temperature and high humidity similar to flat plates.

3. Paste Filing: A positive paste mix is first made in the usual manner and then extruded into all individual tubes. Paste filling machines are made by HADI of Austria and ZIBO of China. Paste-filled plates can be cured like flat plates.

Now we shall deal with only powder filling since this is used mostly by Indian manufacturers in the medium and small scale sector.

Variation in filling weight

In many cases the variation noticed in plate weights is as high as +/- 15 %. This is still high when the weight of powder filled in considered. This is unacceptably high and is the main cause of the above problems. Such large variations are not seen in pasted plates. We need to look into the following processes to identify the major causes to take remedial action.

✶ Blended powder generally Grey oxide and Red lead

✶ Filling machine and process which is commonly a vibrator which allows the inverted tubes to be filled from the top.

✶ The gauntlet tube with the spine in the centre.

Blended powder of grey oxide and Red lead

Let us consider a blend of ball mill oxide (Grey Oxide) of Apparent Density 1.4 g/cc and Red lead of AD 1.6 g/cc at a level of 50 % each. The lower density material has particles smaller than the higher density red lead. The smaller particles occupy the voids between large particles and thus the apparent density and packed density of the blend is increased.

The lower density material will also have a larger proportion of fines. These are very small particles which pass through the weave of the tube during filling and handling of filled tubes. Later I shall show the connection between the fines and the variation in filling weights. The proportion of fines is less when the AD is high. Thus if both grey oxide and red lead are of high density say 1.6-1.7 g/cc, then the finer particles will be less and the filling weight variation will be correspondingly less.

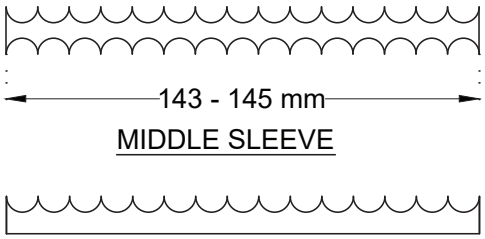
Filling machine and process.

The blended material stored in the top hopper fills all the 10-12 tubes fitted into the cassettes. Vibration for a predetermined duration allows the free- flowing powder into each tube. The amplitude of vibration is also set at a predetermined value.

The relationship between filling weight and duration of filling is normally expected to be linear. But in many

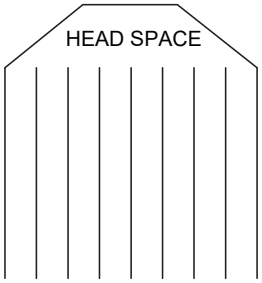
DEVICE TO IMPROVE UNIFORMITY OF FILLING (8mm 15 SPINES)

RUBBER SLEEVE - CONTOUR MATCHING
THE TUBE OF (8mm ID AND 15 SPINES)



THICKNESS OF RUBBER - 2mm

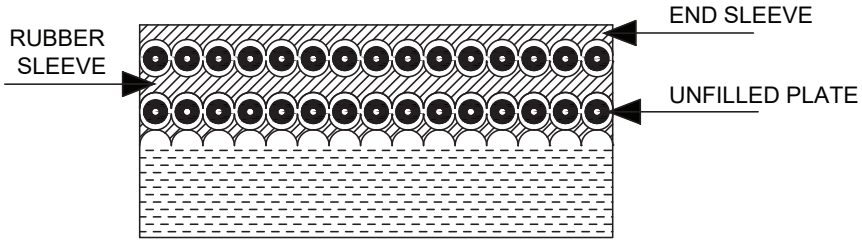
THERE IS A RUBBER SLEEVE BETWEEN TWO TUBES.



WOODEN CASSETTE

WOODEN BOX FOR FILLING

WOODEN BOX CAN BE OPENED FROM THE SIDE TO INTRODUCE PLATE AND ALSO FROM TOP TO FILL OXIDE POWDER.

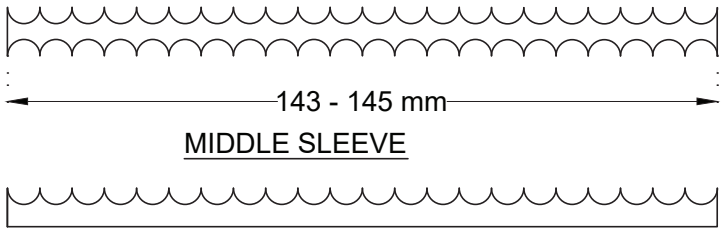


WOODEN BOX TOP VIEW

PACK REQUIRED NO. OF TUBES (SAY 10 -12).
TWO ARE SHOWN IN THE SKETCH.

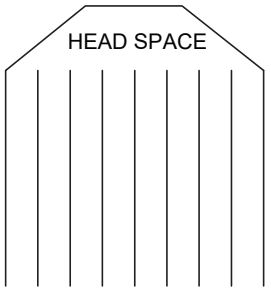
DEVICE TO IMPROVE UNIFORMITY OF FILLING (6mm 22 SPINES)

RUBBER SLEEVE - CONTOUR MATCHING
THE TUBE OF (6mm ID AND 22 SPINES)



THICKNESS OF RUBBER - 2mm

THERE IS A RUBBER SLEEVE BETWEEN TWO TUBES.



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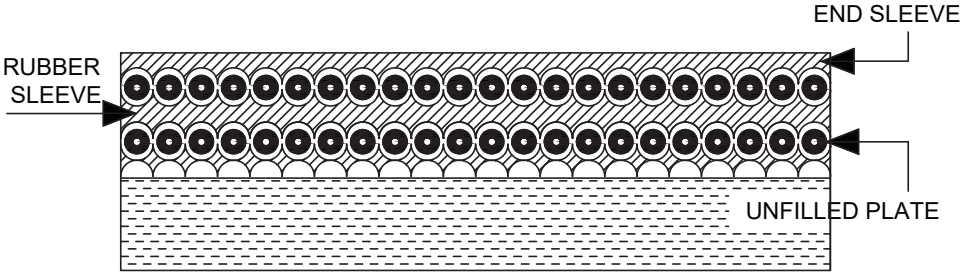


WOODEN BOX TOP VIEW

PACK REQUIRED NO. OF TUBES (SAY 10 -12).
TWO ARE SHOWN IN THE SKETCH.

cases it is not. The reason is that as the powder is getting filled, the finer particles pass through the weave of the tube. IT IS SIMILAR TO A WATER TUB BEING FILLED WITH WATER WHILE AT THE SAME TIME A TAP IS OPENED TO DRAIN IT. In such a situation, the filling weight will decrease or remain the same after a certain duration of filling. This is the one major cause of the variation of filling weight. If possible choose a tube with closer weave.

The filling jig has aluminium plate with corrugations to match the contour of the gauntlet tube. This prevents loss of powder to some extent. However the height of the corrugated aluminium plate extends only to about 20 mm to 50 mm and does not cover the full height of the gauntlet. The loss of fine powder occurs below the aluminium plate. Providing a corrugated rubber sleeve between 2 plates for the full height will prevent loss of powder through the weave. In such a case the aluminium corrugation is not required. Rubber is chosen since it is resilient unlike aluminium. This is a device developed by Hadi Machinenbau of Austria, well –known maker of battery manufacturing machines.

A wooden cassette to enclose 10-12 plates to be filled with a head space for oxide adequate to fill all the plates is made.(see sketches) Several cassettes can be made ready for smooth working and good throughput. Sketch of rubber sleeve is shown below. The common gauntlets of 8mm/15 spines and 6mm/22 spines are shown in the sketches. The same procedure can be used for other tube diameter and pitch.

The close contact between rubber and tube ensures that there is no loss of powder during filling. All powder remains within the tube .Thus variation in filling weight is controlled and more uniform weights are obtained. The procedure works even when tubes having different weaves are used.

Precaution to avoid loss of material after filling:

Powder can be lost even after plates are taken out for pickling The following procedure of handling is recommended.

- Do not transport the plates over long distances. This will result in loss of powder. It is better to use a closely woven tube through which the small particles (fines) of powder do not readily fall .
- Use high density oxide to reduce fine particles
- The usual brushing procedure is not necessary
- Pickle the plates in acid or ammonium sulphate in the same premises or close by. Once pickled, there is no possibility of loss of material
- Transport or storing of plates is best done after washing, curing and drying of the pickled plate. There will be no further loss of material
- The filled weights will be more uniform. ❑

Love lives by giving and forgiving.
Ego lives by getting and forgetting.

Cont. from page no.: 13 →

Federation wrote a letter to the Finance Minister...

unreliable grid supply (especially rural India), lead-acid batteries ensure continuity of power for lighting, fans, and appliances. (It is telling that one major inverter brand claims "1 in every 8 Indian households" uses its inverter battery system, underscoring how commonplace this technology is in daily life.)

• **Telecom & Railways:** The telecom sector, with **over a million mobile towers** nationwide, uses lead-acid battery banks as backup power to keep networks running during electricity cuts. Similarly, the Indian Railways employs lead-acid batteries in signaling systems, emergency lighting, and diesel locomotive starting. These batteries guarantee fail-safe operation of critical infrastructure such as railway signals, station lighting, and telecom exchanges, where interruption can impact public safety and connectivity.

• **Solar Energy Storage & Backup Power:** In off-grid and hybrid solar installations, tubular lead-acid batteries are widely used to store energy. They provide an economical storage solution for solar home systems and solar street lights across India. Even in urban areas, office complexes and hospitals use large battery banks (often lead-acid) with inverters/UPS to ensure backup power for critical loads.

• **Industrial & Material Handling Equipment:** Lead-acid batteries (in deep-cycle designs) power forklifts, industrial golf carts, and other material handling equipment in factories and warehouses. Their robustness and costeffectiveness have made them the standard for motive power in indoor electric vehicles that keep India's logistics and manufacturing sectors moving. Notably, the market size for lead-acid batteries in India is around $5 billion (including automotive and industrial segments), with a healthy annual growth rate of ~7–% driven by new applications like e-rickshaws and rooftop solar. This underlines that lead-acid technology remains highly relevant and in demand. In summary, **lead-acid batteries are deeply embedded in India's infrastructure**, ensuring mobility, connectivity, and energy security for millions of citizens and enterprises every day. Treating them as a "luxury"item with 28% GST is inconsistent with their indispensable role.

Employment and MSME Impact

The lead-acid battery industry in India is a significant generator of **employment, especially in the MSME sector. There are over 1,200 Micro, Small, and Medium Enterprises (MSMEs) engaged in battery manufacturing** and allied activities, together **providing approximately 2.5 lakh (250,000) jobs** to skilled and semi-skilled workers across the country. These include small-scale battery assembly units, component suppliers, and a vast retail/service network for battery sales and maintenance.

Such widespread MSME involvement means the industry's prosperity directly benefits entrepreneurship and livelihoods at the grassroots. However, the current 28% GST rate places heavy strain on these small enterprises, squeezing their working capital and margins. It also makes locally made batteries more expensive for consumers, dampening demand and in turn affecting production and jobs. The high tax effectively penalizes domestic manufacturers while imported lithium batteries (largely made in China) enjoy a lower 18% GST. A reduction of GST on lead-acid batteries to 5% would

energize the MSME sector by improving affordability, boosting sales, and enabling producers to reinvest in business growth. This move will help protect and potentially expand the ~2.5 lakh jobs that the sector supports, aligning with the government's focus on MSME development and employment generation.

Environmental Sustainability: Recycling vs. Waste Challenges

From an environmental perspective, lead-acid batteries excel in recyclability and end-of-life management when compared to newer chemistries like lithium ion:

• **Closed-Loop Recycling of Lead-Acid:** Lead-acid batteries are one of the most recycled consumer products in the world. An estimated 95–8% of each battery is recyclable, and in practice over 98% of battery lead is recovered and reused ehp. niehs.nih.gov. India has a well-established ecosystem for lead-acid battery recycling, developed under regulatory frameworks like the Batteries (Management & Handling) Rules. There are hundreds of authorized recyclers across the country —over 600 units are registered with CPCB for handling used lead batteries cpcb.nic.in — ensuring that used batteries are collected and recycled in an environmentally sound manner. The reclaimed lead and plastic are fed right back into battery manufacturing, creating a circular economy with minimal waste. This high recycling rate means very little lead from In summary, lead-acid batteries offer an environmentally sustainable profile thanks to near-closed-loop recycling in India, whereas **lithium-ion batteries currently carry significant end-of-life liabilities.** Promoting lead acid batteries through favorable GST rates would support an industry that already operates in a circular economy model, as opposed to incentivizing a technology that might leave behind a legacy of waste **(<5% recycling, >95% waste)**. It also aligns with India's commitments to sustainable resource use and could reduce pressure on waste management systems.

Import Dependency and Foreign Exchange Outflow

Another critical aspect to consider is **India's import dependency for advanced batteries** and the forex outflow associated with it. **Lithium-ion batteries are almost entirely import-dependent** –both the cells and most raw materials are sourced from abroad. As of 2024, **nearly 100% of India's ~15 GWh annual Liion battery demand is met through imports.** We import lithium cells (and often assembled packs) predominantly from China, South Korea, and Vietnam. In fact, **India has no significant domestic production of lithium-ion cells yet,** and more importantly, **lacks indigenous sources of critical minerals like lithium, cobalt, and nickel.** This means that for every lithium battery deployed in India, we are effectively importing both the energy storage device and the raw material value chain behind it.

This heavy dependence is reflected in trade statistics. **Lithium-ion battery imports have surged exponentially over the past decade**, paralleling the growth in consumer electronics, solar storage, and electric mobility. Just a few years ago (FY2016-17), India imported around 175 million lithium-ion cells. By FY2018-19, this had **quadrupled to about 713 million units**. In value terms, imports jumped from **₹2,500 crore in 2016-17 to over ₹8,700 crore in 2018-19**. This trend has continued: according to DGCIS data,

India imported 63,000 metric tons of lithium-ion batteries in 2021 (up from 40,000 tons in 2019), with the import value reaching **₹5,800 crore in 2021**.

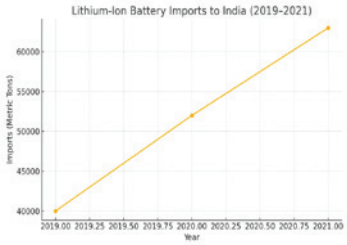


Figure 1

Figure 1: Lithium-ion battery imports to India (in metric tons) for 2019, 2020, and 2021. The chart highlights a steep rise in imported volumes –from **40,000 tons in 2019 to 63,000 tons in 2021** – reflecting India's growing dependence on foreign batteries. Each ton represents many thousands of individual cells. China alone accounts for over **60% of India's lithium battery imports by value**, indicating a significant strategic reliance on a single country for energy storage technology.

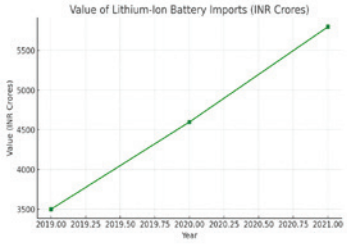


Figure 2

Figure 2: Value of India's lithium-ion battery imports in INR crores (1 crore = 10million INR). The import bill climbed from ₹3,500 crore in 2019 to ₹5,800 crore in 2021, a 66% increase in just two years. This escalating outflow of foreign exchange is driven by rising demand for imported lithium batteries. Left unchecked, such outflows will continue to grow as India's EV and renewable energy sectors expand, potentially impacting our trade balance. Reducing reliance on imports by supporting domestic alternatives (like lead-acid for appropriate applications) can help curb this forex drain.

It is important to stress that **lead-acid batteries are largely made in India**, with domestically recycled lead as a key raw material. India has ample lead recycling capacity (over 3.5 million tonnes per annum authorized) cpcb.nic.in, and a significant portion of lead demand for batteries is met through secondary (recycled) lead produced within the country. Thus, every lead-acid battery sold involves a much higher share of value addition within India's economy as compared to a lithium battery (which is mostly imported). High GST on lead-acid batteries inadvertently tilts the market towards imported lithium batteries, **increasing our import bill and resource dependency** further. This runs counter to the objectives of reducing the trade deficit and achieving self-reliance in the energy sector. Moreover, without a domestic recycling industry for lithium-ion (which will take years to establish at scale), **imported lithium batteries pose a double cost to India** –first the cost in foreign exchange to import them, and later the environmental cost of dealing with their waste. If India becomes a dump for spent lithium batteries with <5% being recycled, we may eventually have to invest heavily in remediation or shipping waste abroad. In contrast, lead-acid batteries form a **closed-loop within our economy** – domestic production, domestic use, and domestic recycling –minimizing environmental leakage and keeping value within India.

Alignment with National Initiatives & Energy Security

Lowering the GST on lead-acid batteries to 5% would strongly **support India's national policy goals** and strategic interests:

• **Atmanirbhar Bharat (Self-Reliant India):** Promoting technologies that we can

manufacture and manage end-to-end domestically is at the core of self-reliance. The lead-acid battery industry, with its extensive MSME base and recycling network, is an existing strength of India's manufacturing sector. By making these batteries more affordable and competitive (through a tax cut), we encourage domestic production and R&D in energy storage. This reduces dependence on imported batteries and aligns with the vision of Atmanirbhar Bharat. Conversely, maintaining a high tax on domestic batteries while imported lithium batteries enjoy lower tax sends a contradictory signal, effectively incentivizing imports over local products. Arationalized GST will correct this and favor "Make in India" solutions for our energy storage needs.

• **Reducing Forex Outflow:** As illustrated, India is spending thousands of crores annually on importing lithium-ion batteries. Every lead-acid battery that can substitute a lithium battery in appropriate applications translates to **forex savings** for the nation. For example, telecom tower backups or inverter batteries do not necessarily require lithium-ion –using indigenous lead batteries for these can save import costs. Scaling domestic battery production also opens up possibilities for **export** in the future (Indian leadacid battery brands are already exported to various countries). Thus, a GST reduction can help improve our balance of payments in the long run by both reducing imports and enabling growth of exports.

• **Supporting Renewable Energy & Energy Access:** The government has aggressive targets for renewable energy deployment (e.g., 450 GW of RE by 2030) and rural electrification. Energy storage is a crucial enabler for these goals. While lithium-ion is targeted for electric vehicles and grid-scale storage, lead-acid batteries are the workhorses for distributed renewables and backup systems. Cheaper lead-acid batteries (via GST reduction) will directly benefit programs like rooftop solar with storage, solar pumps, and off-grid village electrification, by lowering the cost of storage. It will also make backup power solutions more affordable for small businesses and clinics in energy-deficient areas, thus complementing government schemes like Saubhagya (Power for All). In essence, this tax reform would bolster India's overall energy security –ensuring that reliable storage is available and affordable across urban and rural areas.

• **Environmental and Circular Economy Goals:** The Ministry of Environment, Forest and Climate Change has emphasized a circular economy approach for batteries (as seen in the new Battery Waste Management Rules). Lead-acid batteries already embody the circular economy, with up to 98% recycling and reuse ehp.niehs.nih.gov. By enabling this sector to grow, India can further reduce the need for virgin resource extraction (lead) and avoid environmental damage. It also buys time for lithium battery recycling technology to catch up. In short, supporting lead-acid batteries is aligned with our **climate commitments and Swachh Bharat** (Clean India) ideals, as it leverages recycling to reduce waste. It is prudent to incentivize the environmentally friendlier option through supportive tax policy.

• **Fairness and Equity in Taxation:** Lead-acid batteries are not luxury goods; they are necessity items for the common man's vehicle and home. **The 28% GST rate is typically reserved for luxury or demerit goods,** which lead-acid batteries clearly are not (they are neither sinful nor discretionary indulgences). In fact, they contribute to public welfare by providing energy access and mobility. A high GST also disproportionately affects rural consumers and small businesses who rely on lead-acid batteries for basic needs (since alternatives like lithium are often costlier upfront). **Rationalizing GST**

to 5% will demonstrate the government's commitment to equitable tax treatment for products that have high social and economic utility. As noted by industry representatives, a battery is "not a luxury item" and deserves a lower GST slab.

Our Humble Request and Recommendations

In light of the above facts and arguments, we humbly **urge the Government and GST Council to reduce the GST rate on lead-acid batteries from 28% to 5%.** This single policy change will have far-reaching positive impacts: it will **level the playing field** for an important domestic industry, **preserve and create jobs,** encourage **Make in India, and promote environmentally sustainable practices.** We also recommend complementary measures such as continued support for battery recycling infrastructure and enforcement of battery EPR norms, to fully realize the environmental benefits.

To summarize our appeal:

1. Reduce GST on lead-acid batteries to 5% (from 28%) – bringing it in line with other essential renewable energy components and EV batteries, thereby removing the current disadvantage for domestic lead battery producers.

2. Support Domestic Industry & Jobs – send a strong signal in support of the 1,200+ battery MSMEs and 2.5 lakh workers, securing existing employment and fostering growth in this sector.

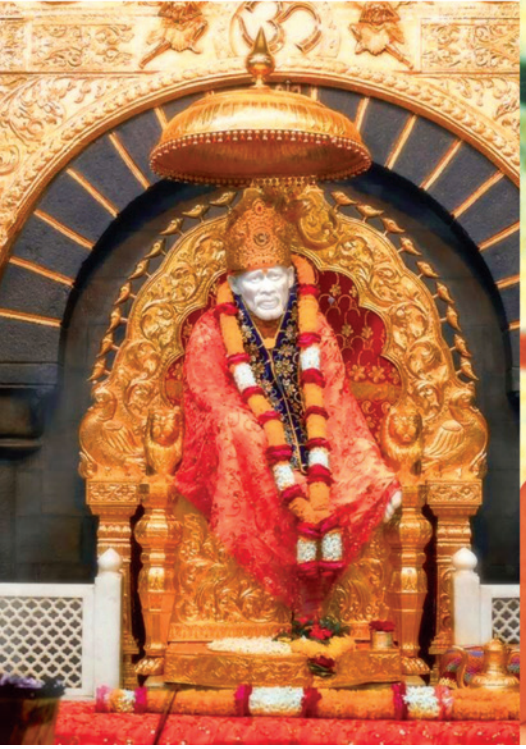
3. Strengthen Energy Self-Reliance – help reduce import dependence on lithium batteries by making reliable Indian alternatives more viable. This will conserve foreign exchange and enhance energy security through diversified storage solutions.

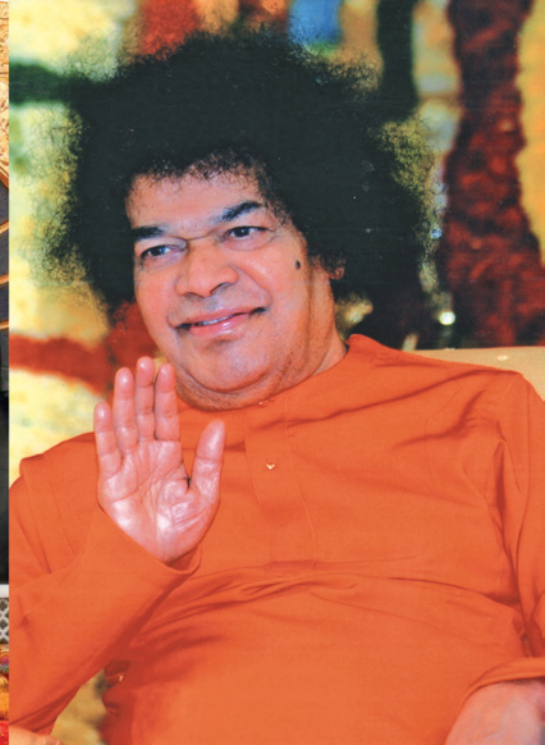
4. Enhance Environmental Outcomes – incentivize the battery chemistry that is almost fully recyclable in India, while we build up capabilities to safely handle newer chemistries. This keeps India's environment cleaner and aligns with global best practices in battery waste management.

We firmly believe that this **GST rationalization is in the national interest** and is a timely step. India is on the cusp of an energy storage revolution –by correcting the tax structure now, the government can guide this revolution to be both **selfreliant and sustainable.**

Conclusion: Lead-acid batteries are a **proven, reliable, and environmentally friendly** technology that have served India for decades. They will continue to play a vital role alongside emerging battery technologies in the coming years. A supportive tax framework will empower this industry to modernize, expand, and contribute to India's goals of economic growth, job creation, and universal energy access. Conversely, maintaining a prohibitively high GST could stifle an industry that has so much more to deliver to the nation. We trust in your vision of an inclusive and self-reliant India, and are hopeful that our request will be considered favorably in the upcoming GST Council deliberations. Thank you very much for your time and consideration. Please let us know if any additional data or clarification is required –we would be happy to provide further information.

Yours faithfully,
Naresh Tomar
Secretary, FISSBA (Federation of Indian Small Scale Battery Associations)





The Unique Power of the Gayatri Mantra

– Bhagavan Sri Sathya Sai Baba –

Man today spends his life fully preoccupied with worldly concerns. Owing to attachment to the body; he forgets his true nature, is immersed in the affairs of the body as permanent and. makes bodily comforts his goal in life. These are the things which every individual experiences in daily life.

If anybody accosts a person and asks him, "Who are you?", out of his identification with the body he gives his name in reply. In answer to further questions he introduces himself as a doctor, a farmer, or student, or the like. When the enquiry goes further, he identifies himself with his nationality as an American, an Indian, a Pakistani or so on.

When you examine these answers deeply, you will find that none of them gives the truth. He got his name from his parents. It did not belong to him at birth. His identification with one or other of his professions is not true because he is not the profession. What, then, is the truth about him?

"I am the Atma. That is my true Self." That is the truth.

But people identify themselves with their names, professions and nationality and do not base their lives on the Atma. No driver of a car identifies with the car. Likewise the body is a car and the Atma is the driver. Forgetting one's true role as a driver, one is identifying one's self with the body, which is only a vehicle.

This truth is emphatically brought out by the Gayathri manthra.

When one views one's self from the Athmik standpoint, one is identical with the Divine. "I am you and you are me."

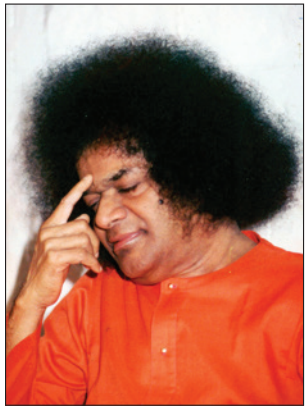
Our life is a three-storeyed mansion

Every man has thus three aspects. Our life itself is a three-storeyed mansion. The Brahmacharya (celibate) stage is the foundation of this mansion. After that, the stage of Grihastha (householder) is the first floor. Then you have the Vanaprastha (retirement from the life of a householder) stage as the second floor. Finally, there is the stage of the Sanyasa (renunciant), consisting-the third floor.

Thus, Brahmacharya is the foundation for the other three stages of life. The safety and security of the other three floors depend on the strength of the foundation, vis, Brahmacharya. Hence, Brahmacharya is the basic foundation. But, unfortunately this vital fact has been forgotten by people. They feel happy on seeing the super-structure. But the whole edifice may collapse at any time if the foundation is weak. When you feel happy at the sight of a tree and its flowers and fruits, you must be concerned about its roots. The unseen foundation is the basis for the visible mansion. The invisible roots are the basis for the visible tree. Likewise, the invisible Prana (Life-Breath or Force) is the basis for the visible body. Prana has no form, while the body has a form. There is, however, the Athmik principle which confers all the potencies for the Prana (Life Force). It is because of the power imparted by the Atma that the Life Force is able to activate the body. The body inherently is inert. It is made up of different kinds of material substances.

Three potencies in man

In the Gayathri Manthra the first line is: "Om Bhur bhuvas suvah." This manthra is assumed to refer to three worlds, the earth, the middle world and Heaven - Svarga, the land of the gods.



Bhu refers to the body. It is made up of PanchaBhuthas (five great, elements). These five elements constitute Prakrithi (Nature). There is an intimate relationship between the body and Nature. The same five elements that are in the nature are also in the body.

Bhuvah is the Prana Shakthi (Life Force) that animates the body. Even if the Life Force exists, without Jnana (Awareness) the body will be of no use. It is on this account that the Vedas declared:

It is by the presence of Prajnana that the Life Force is able to animate the body. The body represents inert matter. The Life Force operates in the body as a vibration. This Vibration derives its power from Prajnana, which finds expression in radiation.

Therefore, the body, the Life Force

and the Prajnana are all within man. The entire cosmos is present in miniature within man. It is because of these three constituents that we are able to see the cosmos and experience many other things. Every potency is within us. The external is a reflection of the inner being. It follows from this that true manavathvam (humanness) is Dhaivathvam (Divinity) itself.

Hence, the Vedas declared that the divine appears in human form. Every human being is inherently Divine, but owing to his attachment to the body he' considers himself a mere man. How did this human body get animated by the Life Force? Whence has this Life Force come? It is from the Atma-Shakthi (the power of the Self). Making use of this power of the Self, the Life Force carries out all activities.

Triple aspects of Gayathri

Who is Gayathri? Gayathri is not a goddess. Gayathri is present wherever the manthra is chanted. Gayathri, however, has three names, Gayathri, Savithri, Sarasvathi. These three are present in everyone.

Gayathri represents the senses. It is the master of the senses.

Savithri is the master of Prana (Life Force).

Many Bharatheeyas are familiar with the story of Savithri who brought back to life her dead husband, Sathyavan. Savithri signifies truth.

Sarasvathi is the presiding deity of Vak (Speech).

The three represent Thrikarana Shuddhi (purity in thought, word and deed). Although Gayathri has three names, all the three are in each of us as the senses (Gayathri), the power of speech (Sarasvathi) and the Life Force (Savithri).

Gayathri is said to have five faces and hence is called Panchamukhi.

Is there anybody in the world with five faces? No. In the Ramayana, Ravana is said to have ten heads. If really he had ten heads how would he be able to lie in his bed or move about? This is not the inner meaning of this description. He is said to be ten-headed because he was the master of the four Vedas and the six Shasthras.

Likewise, Gayathri is described as five-faced. The five faces are as follows.

Om (the Pranava) is the first face. The Pranava Principle represents the Ashta-Aishvarya (eight different forms of wealth).

The second face is: "Bhur Bhuvas Suvah."

The third is: "Thath-Savithur-varenyam."

The fourth is: "Bhargo Dhevasya dheemahi."

The fifth face is: "Dheyo yo hah prachodayath."

When the Gayathri manthra is understood in this way, it will be realised that all the five aspects of Gayathri are within each of us.

Power of Gayathri Manthra

The Gayathri manthra has all the three elements which figure in the adoration of God description, meditation and prayer. The first nine words of the manthra - "Om-Bhur-Bhuvas- Suvah-Thath-Savithur- Varenyam-Bhargo-Devasya" - represent the attributes of the Divine. Dheemahi pertains to dhyana (meditation). "Dheyo yo hah Prachodayath" is the prayer to the Lord. The manthra is thus a prayer to God to confer all powers and talents.

Gayathri is the bestower of all that is beneficial. If the manthra is chanted, various kinds of powers will emerge in one. Hence the Gayathri manthra should not be treated casually. In our respiration process the sound of Gayathri is embedded. That sound is a reminder of our true form. In the breathing process, there is inhalation and exhalation. In the Yoga-Shasthra, inhalation is termed Puurakam and the exhalation is called Rechakam. Holding the breath is called Kumbhakam. When air is inhaled, the sound that is produced' is 'So-o-o.' When it is exhaled, the sound is 'Ham-m-m.' 'So-ham, Soham.' (Bhagavan demonstrated how this happens while breathing in and out). 'So' is "that." 'Ham' is "I". "I am that," "I am Divine." Every breath proclaims this.

Gayathri is the indweller in the heart

Don't imagine God is somewhere remote from you. He is within you. You are God. People want to see God. They transcend the categories of time and place. Truth is that which is valid at all times - past, present and future. That truth is Gayathri. Gayathri is thus the indweller in the Hridhaya (heart).

But to what extent is it shown in real life? Very little. All the while only anger, jealousy, pride and hatred are displayed. These evil qualities are not natural to man. They are opposed to human nature. It has been declared that one who bases himself entirely on the mind is a demon. One who bases himself on the body is an animal. One who follows the Atma (the Self) is divinely endowed. One who relies on the body, the mind and the Atma is a human being. Humanness is the combination of the body; mind and Atma. Man should strive to ascend to the divine and not descend to the demonic or animal nature.

How to remove insecurity and secure security

From today onwards parents should teach their children stories with morals. You all know in what a chaotic condition the world is today. Disorder and violence are rampant everywhere. Peace and security are not to be found anywhere. Where is peace to be found? It is within us. Security is also within us. How is insecurity to be removed and security secured? It is by giving up desires. In the language of the ancient Bharatheeyas this was termed Vairagya (giving up attachment). This does not mean giving up home and family and retiring into the forest. It is reduction of wants. As a householder limit your desires to the needs of the family. As a student, stick to your studies. As a professional, adhere to the duties of your profession. Do not indulge in excesses of any kind. ❑

There is only one caste, the caste of humanity. There is only one religion, the religion of love. There is only one language, the language of the heart.

– Bhagawan Sri Sathya Sai Baba

Remembrance on Death Anniversary

(Passed away in the month of August)

Tribute

Late S. Baldev Singh
8.1.1957 - 24.8.2024

Punjab Packages, Ludhiana

Late S. Baldev Singh

Late S. Baldev Singh of Punjab Packages, Ludhiana passed away on 24 August 2024 at the age of 67.

Punjab Packages manufactures battery machines like die for plastic injection mould, heat sealing plant, plate grinding etc.

Tribute

Pro. Dutchko Pavlov
1930 - 25.8.2017

Pro. Detchko Pavlov

Prof. Detchko Pavlov, head of the Lead Acid Battery Department of the Bulgarian Academy of Sciences and president of the International Lead Acid Battery Conference LABAT, passed away on 25 August 2017. Prof. Pavlov was a professor of electrochemistry and was always engaged in research work to keep lead acid batteries ahead of other battery technologies.

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