

CXO INSIGHTS

Need for Energy Storage System to Protect Energy Future

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With close to 20 years of experience, Suhas, as the president of ACME is responsible for managing P and L for Energy Storage business with Lithium ion battery including setting up factory, development of new products, Go-to market strategy, build Sales & service teams and manage customer satisfaction.

Traditionally, India was power deficit country. The major power production used to happen from either Thermal power plant or Hydro power plants in the country. If you see the statistics published, it will give a better idea.

The government policies are motivational towards renewable energy and the production of power from natural resources & wind and solar is becoming very popular these days. As per the reports and forecast, we see clear visibility that by 2025 more than 50 percent of total power production will come from Wind and Solar. This will help country and world in many ways as we are using natural resources. The advantages are like reduction in CO2 emission will improve carbon footprint challenge.

India spends huge foreign exchange on buying the crude product to run the diesel generators and mainly the transport vehicles like car, buses and 2/3 wheelers, etc.

In coming days India will become power surplus country and this stage is not far off. When we produce power through natural resources like wind and solar we do face some challenges .e.g. solar energy get produced only in day time but what about night ?

In a scenario of power surplus condition we need to store the surplus energy and use it as and when required



by the consumers. These need efficient Energy Storage devices. We have seen battery as best storage device. Lead acid batteries are used in many cases to store the energy. These batteries are having many limitations by its design. New technology of Lithium ion battery is looking best. These Lithium Ion batteries are having very long life about 2000 to 5000 cycles which is much more than traditional lead acid batteries. The recharge time of these batteries is as low as 2 hours which is generally 8 hours in lead acid battery. The lower footprint and weight is much lower in case of Lithium batteries.

These Storage devices can help in reducing Generator run time .Managing fuel of generator is a big hassle as storage of fuel and pilferage of fuel is very tedious job. We see big generators in Industries and Residential / commercial complex. Lithiumion Storage doesn't need any fuel or maintenance.

This Energy Storage is capable to give Industrial grade power whenever you need. Energy Storage is

very popular globally and it is possible to store energy from 100 Watts to 100 MW now.

Electric Vehicles are the big beneficiaries of this as this light weight and last longing Lithium batteries. No doubt this technology will make big boom in Electric Vehicle sales in the country. The electric vehicles will not have any vibrations as fuel engine is replaced by the electric motor and battery pack. The ride for the passenger is very smooth and no noise as well as fuel pollution for the environment. The battery management systems are so advancing which can give complete data about usage, life and back up time. Electric vehicles maintenance cost is very negligible as compare to traditional fuel based vehicles.

Also Government is giving subsidy to motivate electric vehicles in many states which is a making more lucrative proposal for buyers. Government should continue this support for next few years. In smart city



employment in coming years.

In coming years Indian Economy is growing in very big way and need such power infrastructure which is reliable and uninterrupted to support IT / banking network. This Energy storage can be used in many ways where you need uninterrupted power in Industry. This can improve the production value of the Industrial sector.

Government need to motivate the Industry to use Lithium ion technology by means of giving subsidies as this is a green technology and not harmful to the nature. This will also save good amount of foreign currency which can be used for development of the country. **CR**

concept government has designed charging points for these vehicles .Charging cost of Lithium Ion battery is very low which can further reduce burden on the owner while using the vehicle. These charging stations will also bring lot of