Aloe Ecell Project

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Why is in news? "Empowering Green Innovation: Aloe Ecell's Eco-Friendly Primary Batteries Garner Support from TDB"

In consonance with Prime Minister Narendra Modi's visionary initiative, 'Mission LiFE' (Lifestyle for Environment), the Technology Development Board (TDB) is proud to announce its collaboration with M/s Aloe Ecell Pvt. Ltd., an innovative startup rooted in Lucknow, Uttar Pradesh. This strategic alliance shines as a beacon of progress, seamlessly echoing the Prime Minister's call for sustainable practices and indigenous creativity.

The core objective of the **project harmonizes seamlessly with 'Mission LiFE's' ethos** – to introduce lifestyle choices in harmony with ecological well-being.

By spearheading the cause of eco-friendly primary batteries, Aloe ECell may contribute to a cleaner, healthier environment while addressing longstanding concerns tied to the toxic composition in conventional batteries.

Aloe Ecell:

The Aloe Ecell has developed the **world's first 100% Eco-Friendly and Non-Hazardous** 1.5V AA and AAA size batteries.

Aloe vera batteries are **green sources of energy** that are **non-explosive and free of non-toxic components** like lead or mercury.

They are also eco-friendly, causing no damage to ecosystems when disposed of. The **product is yet to be patented**.

About the battery:

The **plant's chemical energy is converted to electrical energy**, which is obtained from the aloe vera plant, specifically the aloe vera gel, as well as other plant substances.

The power source **can power low, medium and high-drain devices** and works with conventionally used items like clocks and remotes.

The manufacturing is **estimated to cost less than chemical batteries** and **may last for around 50% longer**. The makers say the average cost of these batteries will be around Rs 9-10 (€0.11/$0.13) per unit in India.

Apart from the environmental impact of their use, aloe vera batteries have an economic advantage as well. The Indian economy could benefit from its product, especially since that's where the conceptualisation of the product happened.

Additionally, farmers and producers of the aloe vera plant could avail increased demand for the product, which may create job opportunities in the industry.