ICMSTS - E036

Environmental Impact of Electric Vehicle Battery: An overview

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Abstract:

Batteries are a common and convenient way to charge gadgets, especially since people frequently travel with electronic devices in their hands. Because of the proliferation of electronic gadgets, the disposal of expended batteries has become an ever-increasing economic and environmental burden, with projections showing a CAGR of 15% by 2020, rising to 25%–30% by 2030. Lack of laws for the safe storage and management of waste streams allows for the build-up of garbage in open settings and the escape of dangerous compounds from landfills. Moreover, modern battery production practices call for the use of novel materials, such as ionic liquids for electrolytes and nanostructures for cathodes, to improve batteries' energy qualities and durability. Uncertainty about the true environmental impact of innovative battery chemicals may add obstacles to recycling and containment initiatives. The purpose of this review is to synthesize the known and unknown battery pollutants, the possible harm they might do to the environment, and the existing approaches of recycling batteries.

Keywords: CAGR, Uncertainty, battery, pollutants, electronic devices.

ISBN 978-819620985-8