Energy Harvesting for Electric Vehicles 2012-2022

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Abstract:

The electric vehicle industry - land, water and air - is rapidly rising to become a huge market of over $200 billion in 2022 at ex-factory prices. Some run entirely on harvested energy as with solar lake boats. Others recycle energy as with regenerative braking of cars, buses and military vehicles harvesting kinetic energy. Others use different forms of harvesting either to charge the traction batteries or to drive autonomous devices as we progress to the wireless vehicle. In some cases, harvesting is making completely new forms of electric vehicle possible such as ""glider"" Autonomous Underwater Vehicles (AUVs) that stay at sea for years and surface to gain electricity from both wave power and sunshine whenever necessary. Indeed, multiple forms of energy harvesting on one vehicle is becoming much more common from cars to superyachts. This report is the first to provide technical and marketing analysis of the rapidly growing market for energy harvesting in electric vehicles - land, water and air - with forecasts.

This report gives a wealth of examples of energy harvesting in action on electric vehicles by land, water and air. It summarises trends in diagrams, tables and text to make it easy to compare essential information. Forecasts for adoption in 2012 and 2022 are backed by ten year forecasts for electric vehicle sales by type, 2012-2022 by category - number, unit value and market value. A critical explanation of all the technologies is given with the good and bad aspects and assessment of likely future progress. The work of a large number of suppliers and adopters is assessed.

Electric Vehicle experts IDTechEx have encapsulated over ten years of research and analysis into an easy to digest electric vehicle encyclopedia. All the technologies are covered and supported with over 100 tables and illustrations and over 200 acronyms and terms are explained. This encyclopedia, worth $1,500, is given as a free PDF download when you buy this report.

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