The Growing Demand for Advanced Battery Technology

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For most of its long history, battery technology has been at best a curiosity and at worst a failure. But at the end of the Twentieth Century several relatively sudden improvements in battery chemistry positioned batteries to become the cornerstone of the major technologies that will shape human society in the Twenty-First Century. Three main challenges drive these technologies: the need to reduce consumption of hydrocarbons and their associated atmospheric emissions; the need to develop cleaner and more efficient electricity systems; and the need to facilitate the internet of things (IoT), the next great enabler of human productivity. Addressing each of these challenges will push industry to find better ways to store increasing amounts of energy in increasingly smaller amounts of mass. As this ability increases, the worldwide market for advanced batteries will grow dramatically. As the market for more powerful batteries grows, so too will opportunities for advanced materials suppliers.