Grid scale lithium ion batteries

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This paper provides a reader who has little to none technical chemistry background with an overview of the working principles of lithium-ion batteries specifically for grid-scale applications. It also provides a comparison of the electrode chemistries that show better performance for each grid application.

Two of the main causes driving the growth of stationary energy storage technologies are the increasing environmental regulations that promote a high penetration of non-dispatchable generation and policy changes in the electricity markets that benefit the profit of fast response energy resources such as a battery. The combination of these two factors is drawing the attention of investors toward lithium-ion grid-scale energy storage systems.