Batteries: Where do we go from here?

Batteries are everywhere. Without rechargeable batteries, portable technology would be impossible. From cell phones to laptops, batteries are critical to your daily experience. But the most common type of battery -- the lithium ion battery -- has its flaws.

[Crash Course clip]

Think back to your own experience with smartphones. Despite the label on the box, your phone, laptop, smartwatch, etc. seems to last less and less time each day. For this inconvenience, you have Lithium-Ion batteries to thank. So, of course, the question on everyone's mind: where do we go from here? To answer this question, let's look back at the history of Lithium-Ion batteries. These batteries were first developed way back in 1970. It wouldn't be for another 20 years, in 1991, when Lithium-Ion would go commercial. At the time, they were a steep upgrade from old battery tech, and the reasons why have to do with the properties of Lithium itself:

[Real Engineering Clip]

Batteries are not only critical to laptops and smartphones. In just the last decade, batteries have become sources of power for our homes and cars. Maybe the most important application of effective batteries is renewable energy. For renewable energy to be viable, it desperately needs a reliable form of storage. [Maybe find a clip to help with this?] Despite their spot at the top for over 30 years, Lithium-Ion batteries have failed to grow in capacity or efficiency much at all since they first came out. That's why scientists are hard at work trying to find the next generation of batteries.

[CNBC clip]

With so many potential paths, it's nearly impossible to tell what the future holds for batteries. For now, it seems like squeezing out as much juice as possible from Lithium-Ion batteries is the best we can do. But there are reasons to hope for innovation just across the horizon. [I have lots of print sources for future battery tech, so I have yet to find audio clips]

In the quest for a sustainable future, advanced batteries are the fuel that renewables need -- literally. Whether it's portable electronics, wearable tech, laptops, smarthomes, electric cars, or even just an iPhone you don't need to charge every day, breaking the secret to better batteries is the gateway to the future.