

# Battery Daily News from the entire web

- July 31, 2019

## Top Stories

### Business Partnership

#### [Ossia Partners with NGK to Implement Cota Real Wireless Power with EnerCera series Rechargeable Batteries](#) (Benzinga)

Ossia Inc. and NGK Insulators, Ltd. today announced a strategic partnership to provide customers with a first-of-its-kind, wirelessly powered rechargeable battery solution ideally suited for Internet of Things (IoT) applications. NGK's EnerCera<sup>®</sup> series Li-ion secondary batteries are ultra-small, ultra-thin, and ultra-high performance.

#### [Toyota Bets Big on Chinese EV Market With BYD Partnership](#) (ENGINEERING.com)

Toyota is partnering with BYD, a Chinese electric automaker, to build electric vehicles (EV) and EV batteries-for the Chinese market. In a joint statement, the companies said that they would develop sedans and sport utility vehicles to be sold in China under the Toyota brand as early as next year.

### Government/Regulatory

#### [Europe is beating the US in the battery race-with China's help](#) (Quartz)

The biggest reason we hear so much about electric cars is because of the falling costs of batteries. Lithium-ion batteries today cost less than one-fifth as they did in 2010. Within the next five years, some experts estimate that the total cost of owning an electric car-that is, upfront cost plus lifetime fuel cost-will be lower than that of gasoline-powered cars.

#### [Umicore facing challenges from electric vehicle subsidy reforms, poor battery demand, CEO says](#) (INDUSTRIAL MINERALS)

Battery raw materials producer Umicore continues to expect stable or falling income in 2019, with the sector under pressure from reforms of the subsidy system in China. Chinese subsidy reforms will cool down the electric vehicle (EV) market and weigh on battery demand in the second half of 2019, Umicore chief executive officer Mark Grynberg said in a conference call on Wednesday July 31.

#### [Ministry reiterates call to curb lithium battery manufacturing](#) (ANTARANEWS.com)

Director of Innovation System at the Research, Technology & Higher Education Ministry Ophirtus Sumule urged to control lithium battery manufacturing in Indonesia, as it is the dominant technology in electric vehicles, both motorcycles and cars. "Electric cars are part of the national strategy. The key technology that exists in electric cars is battery," Sumule stated here on Wednesday.

#### [Tri-Wall secures government funding to proceed with Libris project](#) (Automotive Logistics)

Packaging specialist Tri-Wall Europe has secured funding of more than Â£700,000 (\$874,000) from the UK government's Faraday Battery Challenge scheme, aimed at driving research and innovation into the country's industrial strategy and a crucial part of the UK's efforts towards net zero emissions. The scheme brings business and academia together to accelerate the development of electric vehicle (EV) battery technologies.

## Earnings/ Financial Results

### [Panasonic posts bigger than expected 44% slump in Q1 profit](#) (CNBC)

Japan's Panasonic Corp reported on Wednesday a sharper than expected 44% plunge in first-quarter operating profit, as Sino-U.S. trade tensions dampened demand for its auto components and factory equipment in China. Panasonic, the exclusive battery cell supplier for Tesla Inc , posted an operating profit of 56.39 billion yen (\$519.68 million) for the April-June quarter, down from 99.96 billion yen a year prior.

### [Solvay Beats Second-Quarter Sales, Profit Estimates Despite Lower Volumes](#) (The New York Times)

Belgian chemicals group Solvay reported higher-than-expected second-quarter sales and earnings on Wednesday, saying higher prices helped offset a fall in volumes. The maker of lithium derivatives for batteries blamed a significant decline in demand from automotive, electronics and oil and gas markets for a 2.2% drop in total volumes.

## Research & Development

### [Electric car research boosted by cobalt-free battery](#) (EurekAlert!)

The elimination of cobalt -- an expensive chemical component currently required to power our smartphones and laptops -- from lithium-ion batteries has been the goal of Texas Engineer Arumugam Manthiram for much of his career.

## Environment/ Climate

### [Circa Group providing bio-based solvent Cyrene to UK EV battery recycling project](#) (Green Car Congress)

Australia-based biotechnology company Circa Group, which produces its bio-based solvent Cyrene from waste cellulose, is participating in a project to develop the first UK industrial scale capability to reclaim and reuse the most valuable components of end-of-life electrical vehicle (EV) batteries.

## Production/Operations

### [Samsung SDI sees battery demand growth accelerating](#) (ArgusMedia)

South Korean battery producer Samsung SDI said it sees demand for its products accelerating in this year's second half as automakers gear up to introduce new electric vehicles (EVs) and domestic sales of energy storage systems (ESS) rebound.

## Investment

### [CECRI to make EV batteries; invest 100-cr](#) (The Hindu Business Line)

The Tamil Nadu-based Central Electrochemical Research Institute (CECRI), a research institute under the Council for Scientific and Industrial Research, has decided to set up a factory to produce batteries for electric vehicles. CECRI developed lithium-ion based cells a few years ago. However, its efforts to licence out the technology were not successful.

## Patent (Powered by Global IP News)

## Intellectual Property

[Panasonic Intellectual Property Management Co Ltd Obtains Patent for Lithium-Ion Battery](#) (US Patent News)

Alexandria, July 31 -- Panasonic Intellectual Property Management Co Ltd has obtained a patent for lithium-ion battery. This invention was developed by Shishida Yoshinori, Date Kenji and Kuromiya Takao.

[Tianjin University Awarded Patent for Cylindrical Single-Piece Lithium-Ion Battery of 400Ah and Its Preparation Method](#) (US Patent News)

Alexandria, July 31 -- Tianjin University has been awarded a patent for cylindrical single-piece lithium-ion battery of 400Ah and its preparation method. This invention was developed by Tang Zhiyuan, Sun Lei, Wang Qi and Ling Guowei.

[Analog Devices Global Unlimited Company Granted United States Patent for System and Method to Reduce Data Handling on Lithium Ion Battery Monitors](#) (US Patent News)

Alexandria, July 31 -- Analog Devices Global Unlimited Company has been granted a patent (10,365,332) for system and method to reduce data handling on lithium ion battery monitors. This invention was developed by Gorbald Jeremy R.

[Industry-University Cooperation Foundation Hanyang University Gets Patent for Positive Active Material Composition for Lithium Battery, Method of Preparing the Same, and Lithium Battery Including the Same](#) (US Patent News)

Alexandria, July 31 -- Industry-University Cooperation Foundation Hanyang University has received a patent for positive active material composition for lithium battery, method of preparing the same, and lithium battery including the same. Sun Yang-Kook and Park Byung-Chun developed the invention.

More Battery patents [can be viewed at](#)

## Journal

### Studies/Surveys

[Flexible, three-dimensional ordered macroporous ZnO electrode with enhanced electrochemical performance in lithium-ion batteries](#) (Microporous and Mesoporous Materials)

Metal oxide has attracted large quantities of interests in the field of lithium-ion battery due to its high specific capacity, abundance and environmental benignity. However, the large volume expansion and intrinsic poor electrical conductivity still severely hinder its performance.

[Preparation and Characterization of LiSb\(OH\)6 and LiSbF6 for Lithium-Ion Batteries](#) (JOM)

In this article, the methods of lithium salt and potassium salt were used to synthesize LiSb(OH)<sub>6</sub>. Meanwhile, LiSbF<sub>6</sub> was also prepared by the methods of neutralized dissolution and hexafluoroantimonic acid. The relative contents of Li, Sb, and F in LiSb(OH)<sub>6</sub> and LiSbF<sub>6</sub> were determined, and the results showed these values were extremely similar to the theoretical values.

More Battery journal articles [can be viewed at](#)

## News Stories

### Production/Operations

[Plug-In Light Towers Gain Exposure](#) (For Construction Pros)

Electric light towers have traditionally been deployed in the entertainment world, where noise is an issue, or indoors where the use of diesel engines is prohibitive. That's changing and changing rapidly. These units with LED technology now shed light on construction sites, remote areas, and virtually anywhere shore power or a generator is being used.

#### [Magnis Provides Updates on Imperium3 Townsville and Nachu Graphite Project](#) (investing news)

Magnis Energy Technologies Ltd is pleased to present its Quarterly Activities Report for the period ended 30 June 2019. The major activities announced during the past quarter are summarised in this report.

#### [Life-sized elephant made out of 30,000 used batteries highlights number dumped in landfill every year](#) (Independent)

A life-sized elephant has been created using nearly 30,000 used batteries to highlight the thousands of tonnes of cells that end up in landfill each year. More than one million schoolchildren collected the batteries used to create the 10ft-tall structure, which weighs two tonnes.

#### [ComEd Simulates Islanding with its Bronzeville Community Microgrid](#) (TDWorld)

The Bronzeville Community Microgrid (BCM) took one more significant step toward fruition when a simulated islanding test was successfully completed on April 16, 2019. This field-test provided further evidence that the technology that had already been demonstrated in the lab will provide substantial value to the community by making it more reliable, resilient, and sustainable.

#### [National program to drive virtual power plant participation in Australia](#) (pv-magazine)

As the energy sector undergoes momentous change, moving towards a decentralized generation model, the Australian Energy Market Operator (AEMO) is looking to harness the potential of distributed energy resources. In its latest move, AEMO has opened registrations for participation in its virtual power plant (VPP) demonstration program.

#### [Hexagon Resources identifies outcropping graphite target at US project](#) (Proactiveinvestors)

Hexagon Resources Ltd (ASX:HGX) has completed reconnaissance exploration at its 500-acre Ceylon Graphite Project, which hosts the historical Ceylon Mine and Rushing property. Notably, abundant at-surface graphite mineralisation has been identified over a 1-kilometre strike length with graphite grading up to 4.93% total graphitic content (TGC).

#### [Energy storage to surge past 1,000GW worldwide by 2040 as costs halve](#) (businessGreen)

The global stationary energy storage market is set for surging growth over the next two decades, as sharp declines in lithium-ion battery costs and rising demand for wind and solar power drives capacity to more than 1,000GW worldwide by 2040.

#### [American Battery Metals sees the light on solar energy](#) (Proactiveinvestors)

American Battery Metals Corporation has long mined for lithium under the hot Nevada sun now the company is looking to it as a power source. The Incline Village based Nevada company announced Tuesday that it has signed a letter of intent with the renewable energy company Panel the Planet Inc to explore possible solar energy projects on its property.

## Studies/Surveys

#### [Move Over, Energizer Bunny! NASA's Mars 2020 Rover Just Got Its Nuclear Bunny](#) (Space.com)

NASA's next spacecraft on Mars is getting a nuclear battery to do science on the Red Planet. The Mars 2020 rover will soon be fueled using a multi-mission radioisotope thermoelectric generator, which is essentially a battery to keep it warm and productive on its mission in search of signs of habitability on Mars.

## Investment

[BNEF revises forecast for global investment in energy storage](#) (Renewable Energy Magazine)

Energy storage installations around the world will multiply exponentially, from a modest 9GW/17GWh deployed as of 2018 to 1,095GW/2,850GWh by 2040, according to the latest forecast from research company BloombergNEF (BNEF).

## Health

[Soft Wearable Health Monitor Uses Stretchable Electronics](#) (YugaTech)

A wireless, wearable monitor built with stretchable electronics could allow comfortable, long-term health monitoring of adults, babies and small children without concern for skin injury or allergic reactions caused by conventional adhesive sensors with conductive gels.

## Event/Conference/Seminar

[2019 FRANKFURT MOTOR SHOW PREVIEW: HERE'S WHAT'S COMING THIS SEPTEMBER](#)

(Autoweek)

The Frankfurt motor show is just over a month away, and it's already shaping up to be one of the busiest in this decade, with a number of significant production debuts ahead of the start of sales later this year.

## New Products/Services

[BMW i3 and i8 Batteries Find A Home On The Ocean In Torqeedo's Electric Boats](#) (Forbes)

Transferring the basics of electric mobility from the road to the water is not only possible, it's happening now. Electric boat company Torqeedo, for example, has been converting the powerful battery modules from the BMW i3 and i8 electric vehicles for use in e-boats. Turns out, an EV's benefits make the transition as well.

## Management Issue

[Tesla Just Lost Its Chief Innovator](#) (Yahoo)

Tesla, Inc., just lost one of the most respected innovators in the electric vehicle business, which brings up competitive implications for the future of what will be powering EVs. After Tesla co-founder JB Straubel revealed his plan to leave the company, a few big questions came up What will the next phase of the electric vehicle battery war look like?

## Investor Relations

[Lithium success will take time to fully charge](#) (MORNINGSTAR)

The world's largest lithium miner, Albemarle, produces the soft white metal, a crucial metal used in rechargeable batteries, from salt brine lakes in Chile among the cheapest sources and two joint ventures in Australian mines, Talison and Wodgina. The price of Chilean lithium carbonate has fallen from 2018 highs of about US\$13,000 a metric tonne, to about US\$12,000 a tonne which Morningstar expects will be the median price for 2019.

## Research & Development

### [OXIS Energy to Develop Proof-of-Concept Advanced, Lightweight Lithium Sulfur Cells for BYE AEROSPACE](#) (Yahoo)

The OXIS Energy Lithium-Sulfur battery cell technology offers significant benefits to aviation and as a result, it is collaborating with Bye Aerospace of Denver, Colorado to produce a common Li-S advanced battery cell for the high voltage battery pack system to be considered for Bye's future electric aircraft.

## Vendor/ Supplier Related

### [As lithium supply outpaces demand for electric cars, a local company now faces a big stock drop](#) (The Philadelphia Inquirer)

When Philadelphia-based Livent went public in October 2018, investors thought the lithium miner and processor would do extremely well because the metal is a key ingredient in the batteries of electric vehicles and smart phones, both strong sectors.

## Environment/ Climate

### [CalEPA looking for members of new Lithium-ion car battery recycling advisory group](#) (Green Car Congress)

The California Environmental Protection Agency has issued a solicitation for members of a new advisory group to help steer policies pertaining to the recovery and recycling of lithium-ion vehicle batteries sold with motor vehicles in the state.

## Technical issues

### [Charging battery blamed for causing Redding fire](#) (Redding)

Fire officials are blaming a lithium ion battery for starting a fire in Redding on Monday night. The fire started at about 10:15 p.m. in the garage of a home in the 2100 block of Sophy Place, which is east of Victor Avenue in Redding, the Redding Fire Department said.

## Government/Regulatory

### [Bill supports proper recovery of MRF hazard](#) (Resource Recycling)

Legislation making lithium-ion battery producers responsible for collecting and recycling the products they sell is advancing in California. Assembly Bill 1509 establishes an extended producer responsibility (EPR) program for lithium-ion batteries and sets recycling rate targets for retailers selling products that contain these batteries.

More Battery news stories [can be viewed at](#)

## Opinion/Feature/Trends

## Studies/Surveys

### [ATVs: Gas or Electric?](#) (BUCKMASTERS)

Which is right for you depends on how you use it. As more people try to reduce their consumption of fossil fuels, electric and hybrid automobiles are becoming available and more popular. The same is somewhat true off the road, although electric ATVs, or EVs, have actually been available to the masses for quite awhile.

#### [Lithium: It's not all alike and it's not all for electric vehicles](#) (Stockhead)

Lithium is practically synonymous with electric vehicles a market with much hype but little progress seen in Australia. But this does not mean the mineral has no use Down Under. One use of lithium ion batteries is in Energy Storage Systems (ESSs) which serve households and businesses where energy supplies vary.

### Pricing

#### [WHY HAVE COBALT PRICES CRASHED](#) (International Banker)

Few commodities have experienced more pronounced volatility over the last few years than cobalt. This versatile, ferromagnetic metal has been increasingly sought after in recent times, thanks in no small part to its use in lithium-ion batteries (as well as cobalt's use in catalysts, electronics and superalloys to a lesser extent)

### Press Release

### Production/Operations

#### [Sandia Labs manufacturing spinoff steps into national market](#) (EurekAlert!)

Joe Beck and Eric Branson's business grew so fast it took them a year just to find time to put up a sign. "It's since gone way beyond our expectations," said Beck, president and CEO of Albuquerque-based Advanced Manufactured Power Solutions, or AMPS. The custom manufacturing company builds battery packs, cables and other small components of larger machines.

### New Products/Services

#### [Sunrun Introduces Brightbox Home Solar Battery to Greater Houston and Dallas Areas](#) (Business Insider)

As residents throughout Texas endure increasingly frequent weather-related outages, the nation's largest home solar and battery provider, Sunrun Inc. (Nasdaq: RUN), today announced it is bringing its Brightbox home solar and battery service to households in the greater Houston and Dallas areas in Texas.

### Earnings/ Financial Results

#### [Macarthur Minerals Second Quarter 2019 Update](#) (GlobeNewswire)

Macarthur Minerals Limited is pleased to provide an update to Shareholders outlining an active and significant second quarter 2019 in the ongoing development of the Company's Lake Giles Iron Ore Projects and exploration activities across the lithium, gold, nickel and cobalt projects in Western Australia and Nevada, USA.

### Business Partnership

#### [Lithium Australia to market LFP, the safe lithium-ion battery](#) (Lithium Australia)

Lithium Australia NL (ASX: LIT) is forming a business partnership with leading Chinese battery producer DLG Battery Co. Ltd ('DLG') to launch a new range of lithium-ion batteries ('LIBs') in the Australian market, with a focus on industry-scale energy storage systems ('ESS').

## Awards/Accolades

### [Kreisel Electric Applauded by Frost & Sullivan for the Design Excellence of its High-performance Batteries for the Automotive Industry](#) (Finanznachrichten.de)

Based on its recent analysis of the global high performance battery market, Frost & Sullivan recognises the Austria-based Kreisel Electric GmbH & Co KG with the 2019 Global Product Leadership Award for developing the most lightweight, high-performance battery solutions.

## Ratings/Rankings

### [NIO Ranks Highest in China NEV New-Vehicle Quality](#) (PressReleasePoint)

Addressing both new and traditional vehicle quality problems is crucial for New Energy Vehicle (NEV) manufacturers to improve product competitiveness and win consumers' favor, according to the J.D. Power Inaugural China New Energy Vehicle Experience Index (NEVXI) Study, SM released today.

## Video

## New Products/Services

### [Powerbeats Pro Battery Shown Off In Ad Featuring 174-Mile Run Through Iceland](#) (Redmond Pie)

Now that the Powerbeats Pro earphones are starting to become more widely available the advertising push has commenced. A new ad highlights the battery prowess of the wireless earphones by following a Paris running club as it takes on a 174-mile relay race through Iceland over a period of 24 hours.

## Technical issues

### [Video Shows How Swollen iPhone Battery Can Explode During DIY Repair](#) (ValueWalk)

Exploding phones is nothing new, and almost every week we hear of such news. This time, it is the iPhone 5s battery that exploded when a repair person was trying to open it up. The whole incident of the swollen iPhone battery exploding was caught on camera.

## Research Paper

## Studies/Surveys

### [Overlooked electrolyte destabilization by manganese \(II\) in lithium-ion batteries](#) (Nature)

Transition-metal dissolution from cathode materials, manganese in particular, has been held responsible for severe capacity fading in lithium-ion batteries, with the deposition of the transition-metal cations on anode surface, in elemental form or as chelated-complexes, as the main contributor for such degradations.

## Photograph

## New Products/Services

### [E90 Type N To AA Battery Adapter](#) (Thingiverse)

E90 Type N To AA Battery Adapter. Use with rechargeable E90 batteries to charge in AA chargers. Cut a nail to 21mm to use as an electrode. I used a nail with a 3.4mm diameter shaft but this can be customized. Sand the ends of the nail until shiny before inserting into hole. OpenSCAD file is available to customize.

## Snippet

### Studies/Surveys

[Stationary Battery Storage Market Still Has Room to Grow: Emerging Players Toshiba, Samsung SDI, Koninklijke Philips](#) (Digital Journal)

[Soaring Demand for Absorption Chillers as Energy-Efficient Alternatives Support Process Chillers Market Growth, 2018 to 2027](#) (Wedbush Securities)

[Powered Surgical Instruments Market 2019 Industry Analysis, Size, Share, Growth by 2024](#) (MarketWatch)

[Global Wet-Laid Battery Separators Market Report, History and Forecast 2014-2025, Breakdown Data by Manufacturers, Key Regions, Types and Application](#) (Digital Journal)

[Leadless Pacing Systems Market Are a Novel Technology in the Cardiac Pacemaker Market](#) (Digital Journal)

[Battery Management Market Insights by Application, Product Type, and Competitive Landscape & Regional Forecast 2025](#) (MarketWatch)

[Disposable Batteries Market Growing on the Back of Expanding Consumer Electronic Industry - Forecast 2023](#) (Benzinga)

[Global Commercial Electric Vehicle Market Analysis 2013-2025 - Growing Adoption in Developing Economies Spells Opportunities](#) (Wedbush Securities)

[Lithium-ion Battery Market 2019 Overview and Share Forecasted to 2024 - MRE Report](#) (MarketWatch)

[Lead Acid Battery Market 2019 Global Leaders: Exide Technologies, ATLASBX, Johnson Controls, C&D Technologies, Narada Power Source, GS Yuasa](#) (openPR)

[Global Smoke Detector Industry](#) (Business Insider)

[Bike and Scooter Rental Industry Worth \\$10.1 Billion by 2027 - Exclusive Report by MarketsandMarkets](#) (Business Insider)

[Gastric Electric Stimulators Market to Reach a 6.4% of CAGR by 2026 - PMR](#) (Daily Herald)

[Electric Smart Meters Market Analysis 2019 Industry Demand and Growth Top Leading Players](#) (ITS FOR HOME)

### New Products/Services

[Lenovo to launch 5G laptops with all-day battery life by the end of 2019](#) (TechRadar)

[Trinity White Carbon 3.7v 1S 8000mah LiPo](#) (RC Car Action)

[Jaybird's New VISTA Totally Wireless Headphones Redefine Audio for Athletes](#) (PressReleasePoint)

[Lenovo introduces 3 new Intel-powered Chromebooks](#) (Liliputing)

[Lost Vape Orion DNA Go Review](#) (EcigaretteReviewed)

[2019 Zero FXS is the low cost electric motorcycle field's best kept secret](#) (Electrek)