SIDLEY Deloitte. Exponent

SIDLEY'S BATTERY AND CRITICAL MINERAL SERIES

2023 Battery Summit: Power Up and Take Charge

July 26, 2023

TALENT. TEAMWORK. **RESULTS.**

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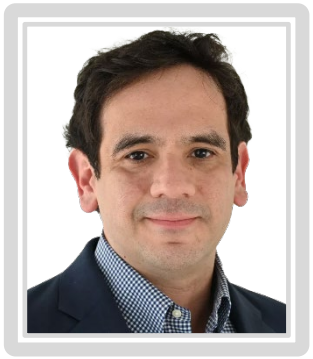
Our Speakers

Steve Murray
Group Vice President and Principal Engineer
Exponent



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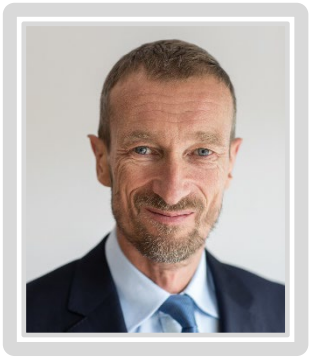

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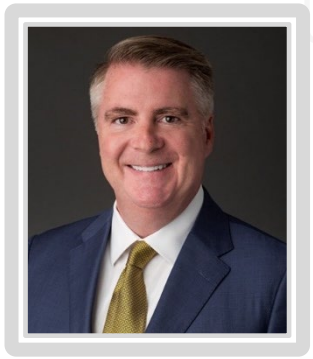

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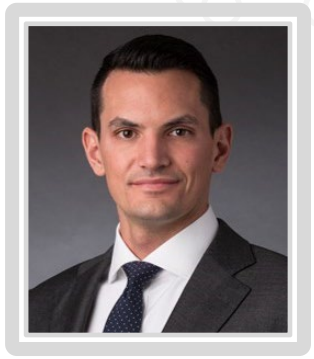

Marshall R. Morales
Senior Managing Associate
Sidley

Agenda

Topics

Battery School 101 with **Exponent**

Inflation Reduction Act with **Deloitte**

Legal and Policy Roundtable with **Sidley**

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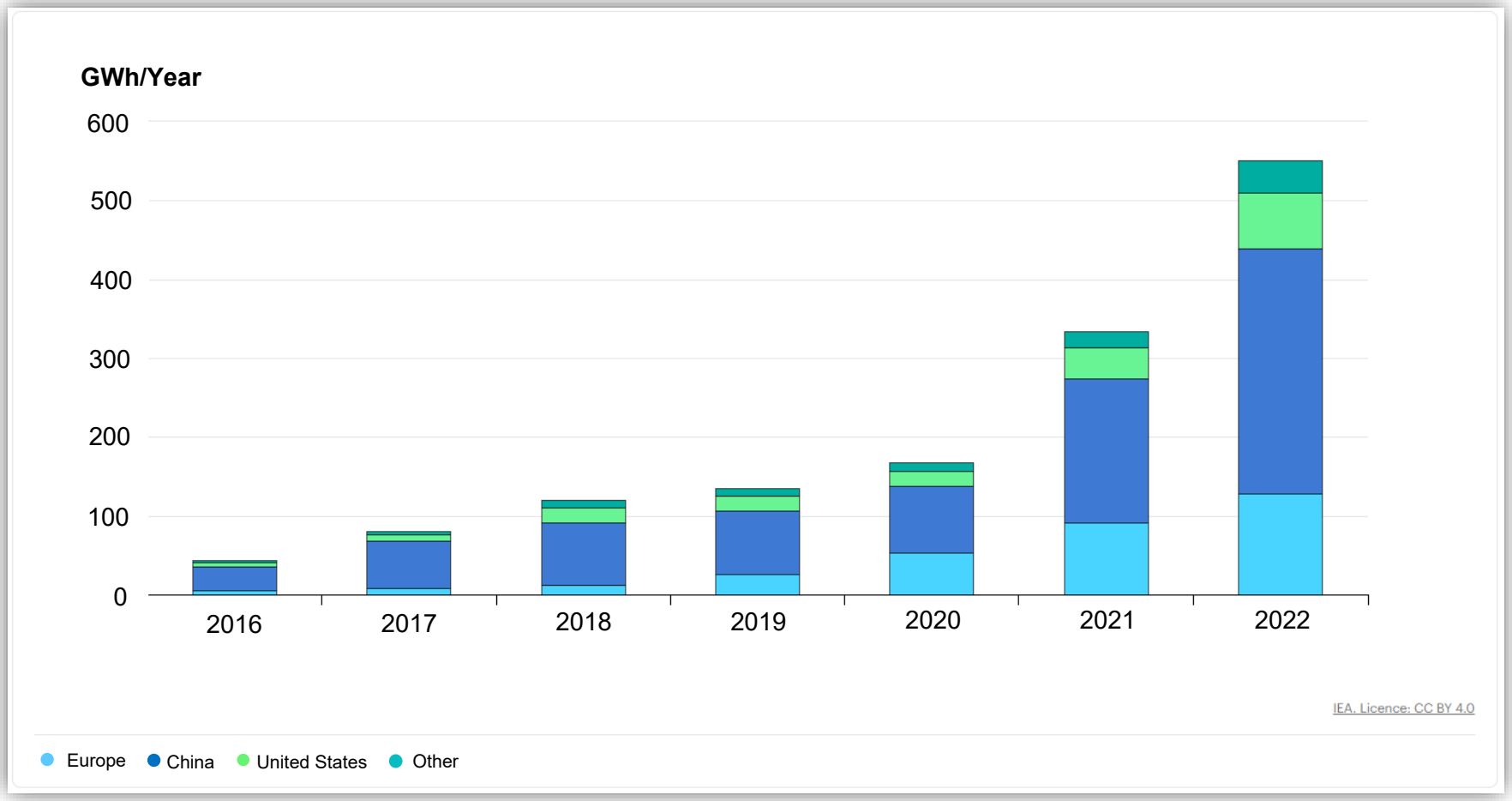
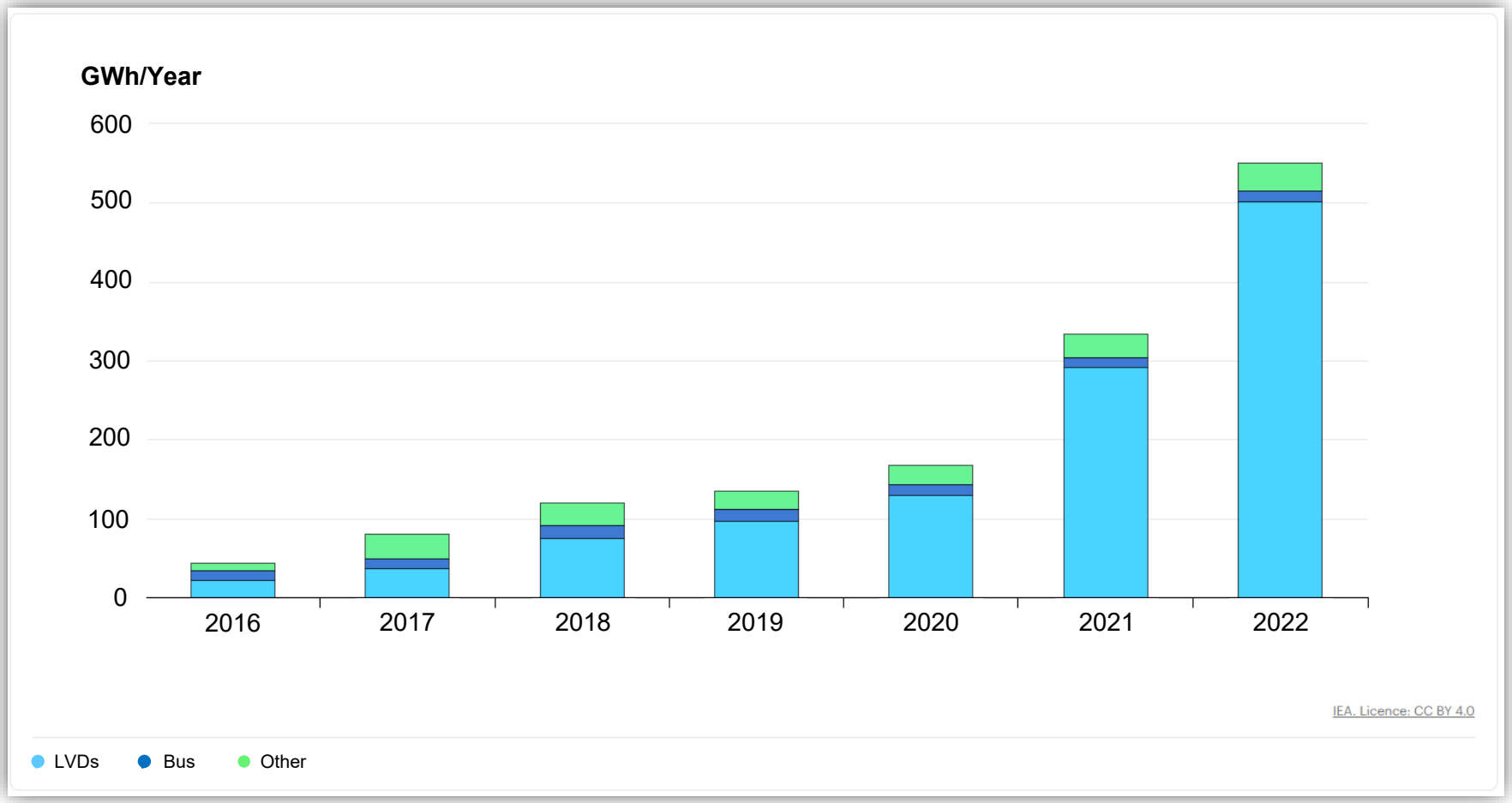
INDUSTRY OUTLOOK

Global Demand for Li-ion Batteries Is Growing in All Regions



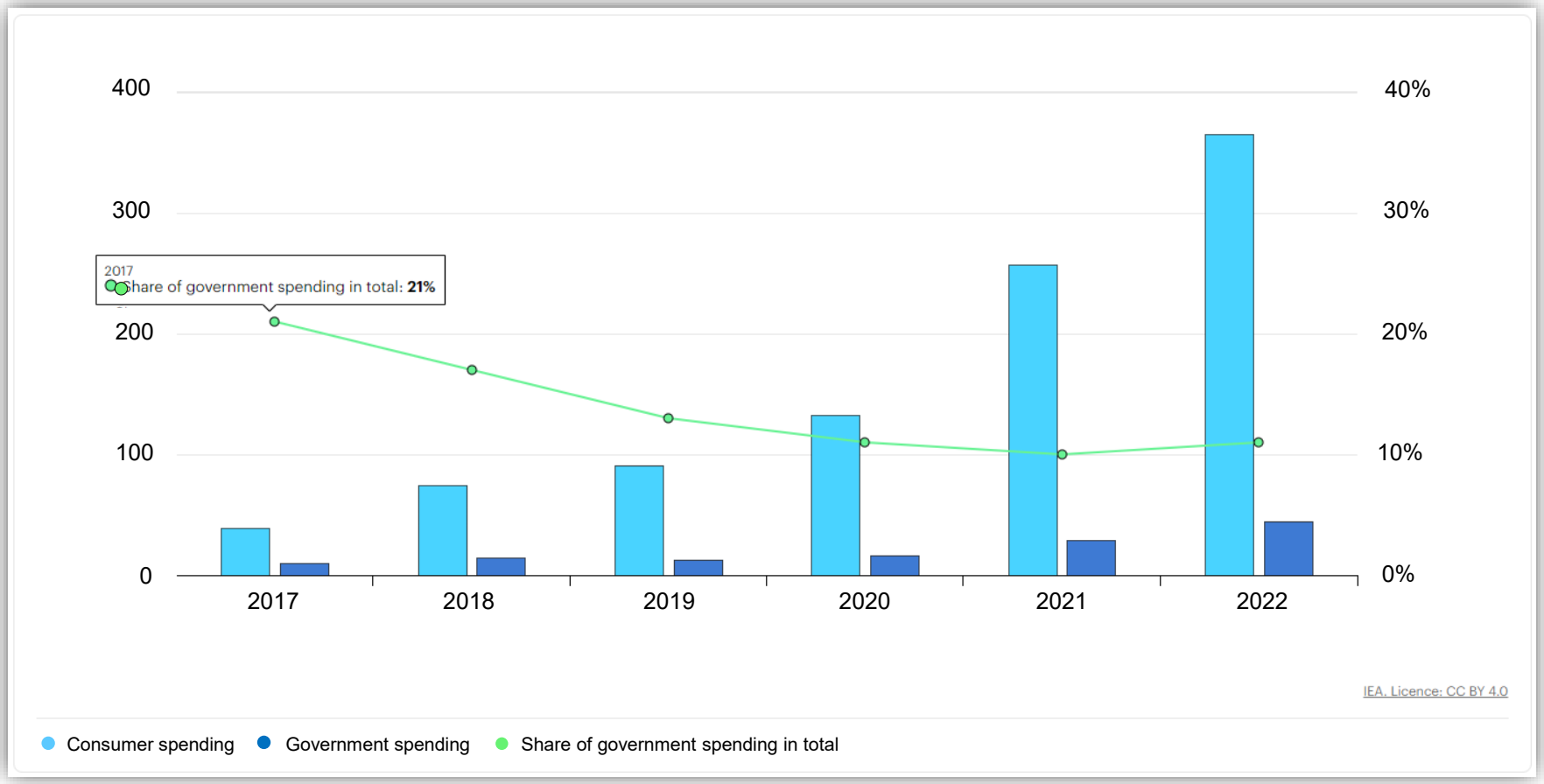
https://www.iea.org/data-and-statistics/charts/battery-demand-by-region-2016-2022

Demand for Li-ion Batteries Is Driven by EVs



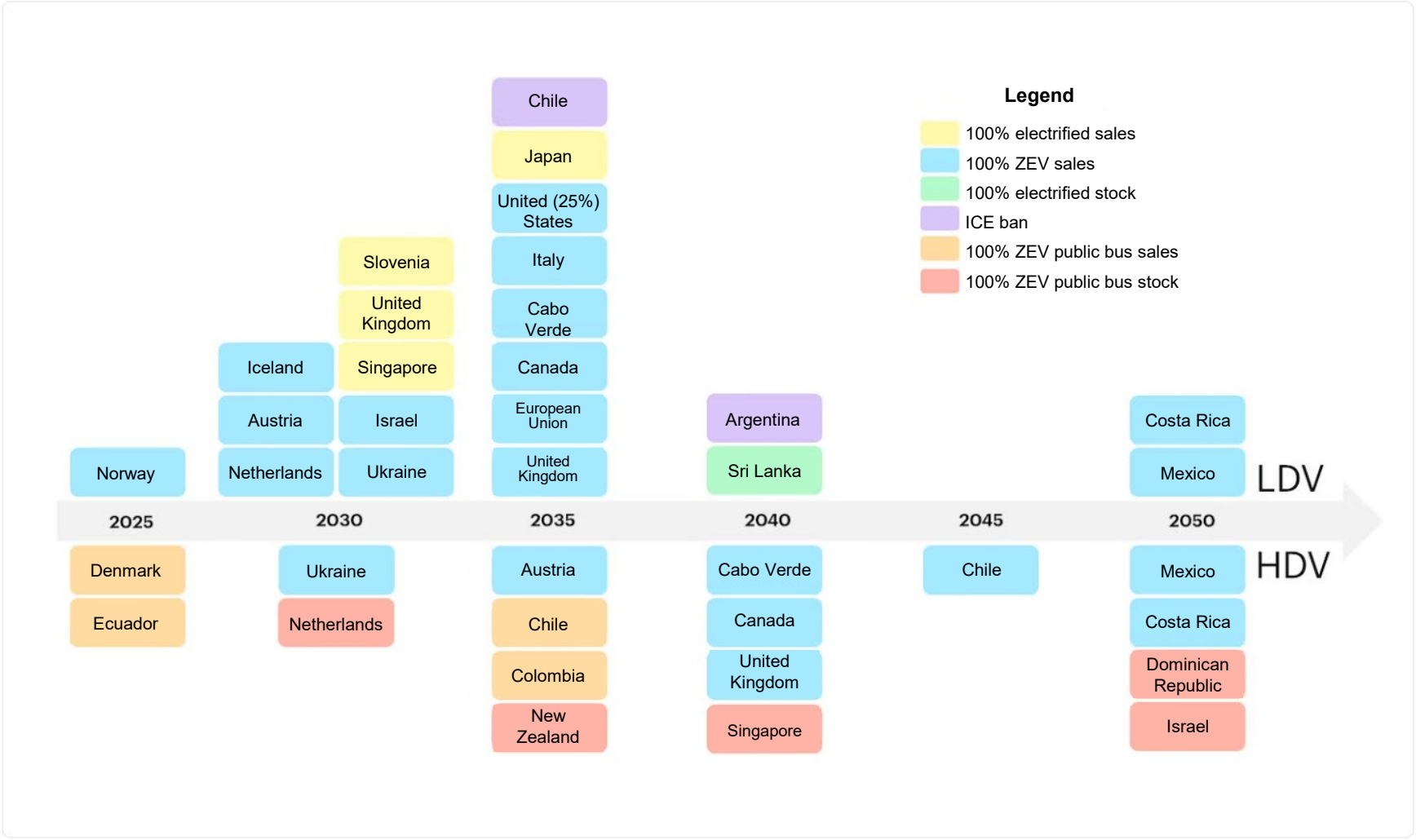
https://www.iea.org/data-and-statistics/charts/battery-demand-by-mode-2016-2022

Global Consumer and Government Spending on EVs



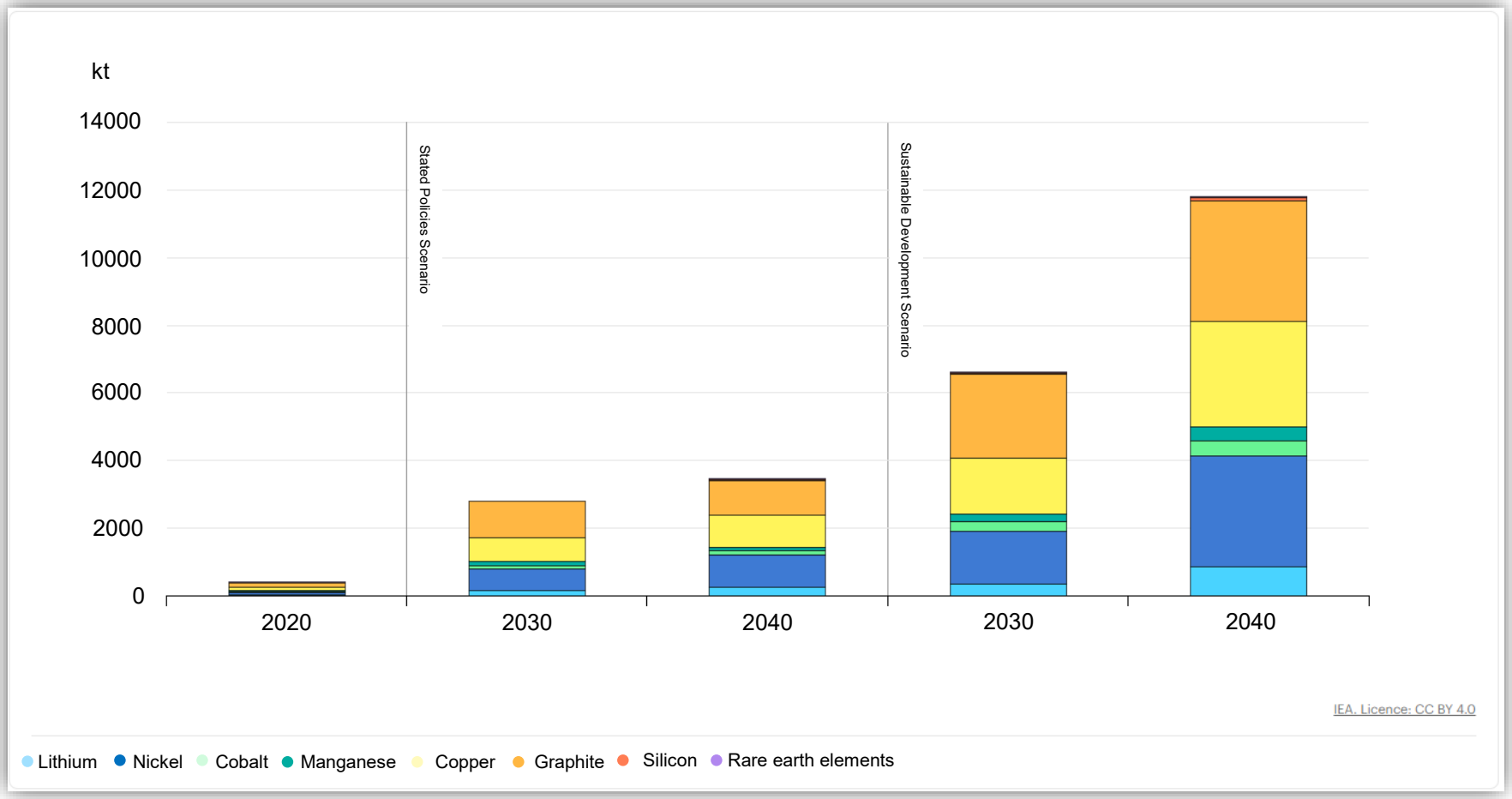
https://www.iea.org/data-and-statistics/charts/global-spending-on-electric-cars-2017-2022

Global Policy Transitions to EVs



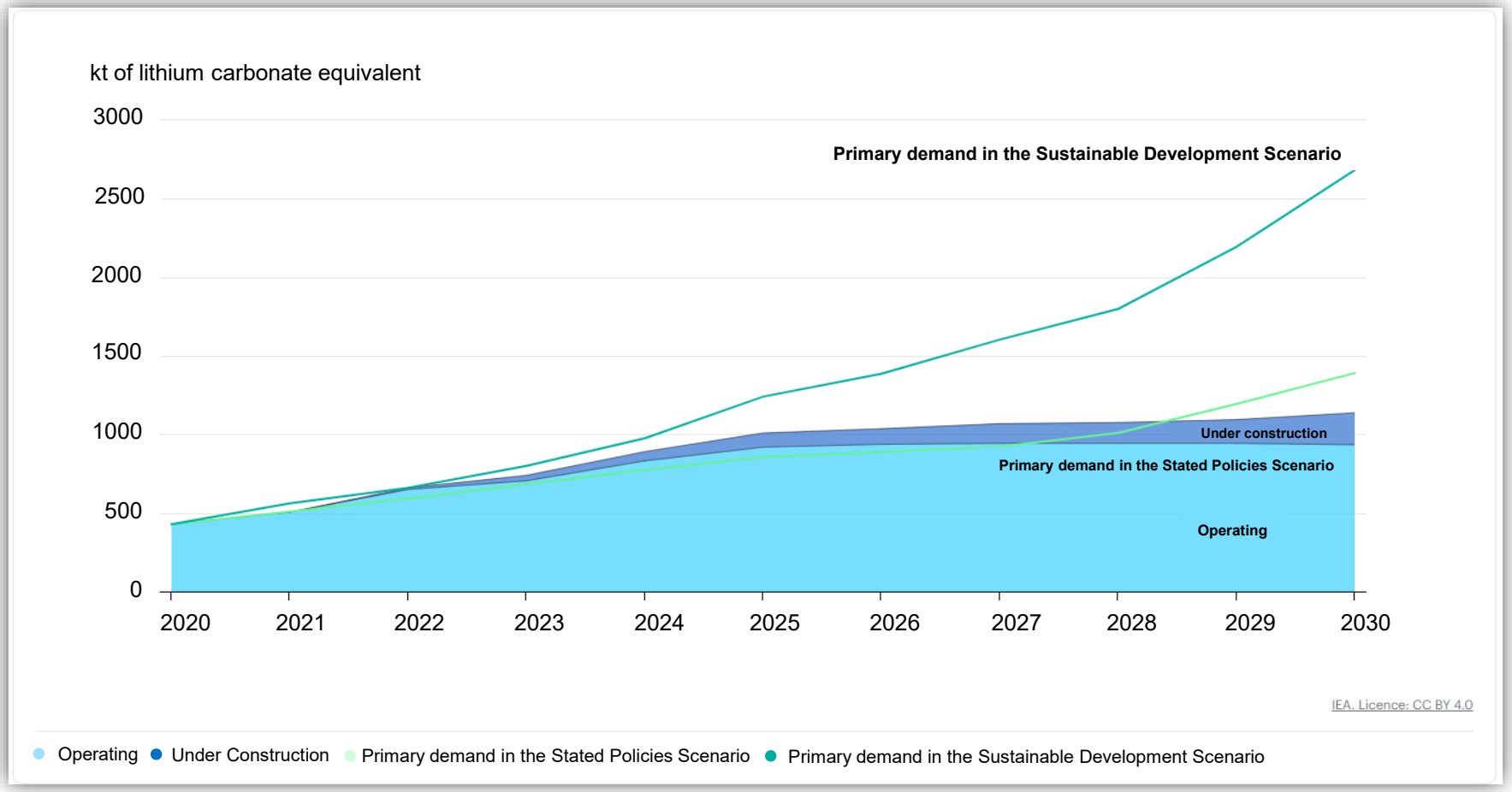
https://www.iea.org/reports/global-ev-outlook-2023/policy-developments#abstract

Projected Demand for Selected Minerals From New EV Sales



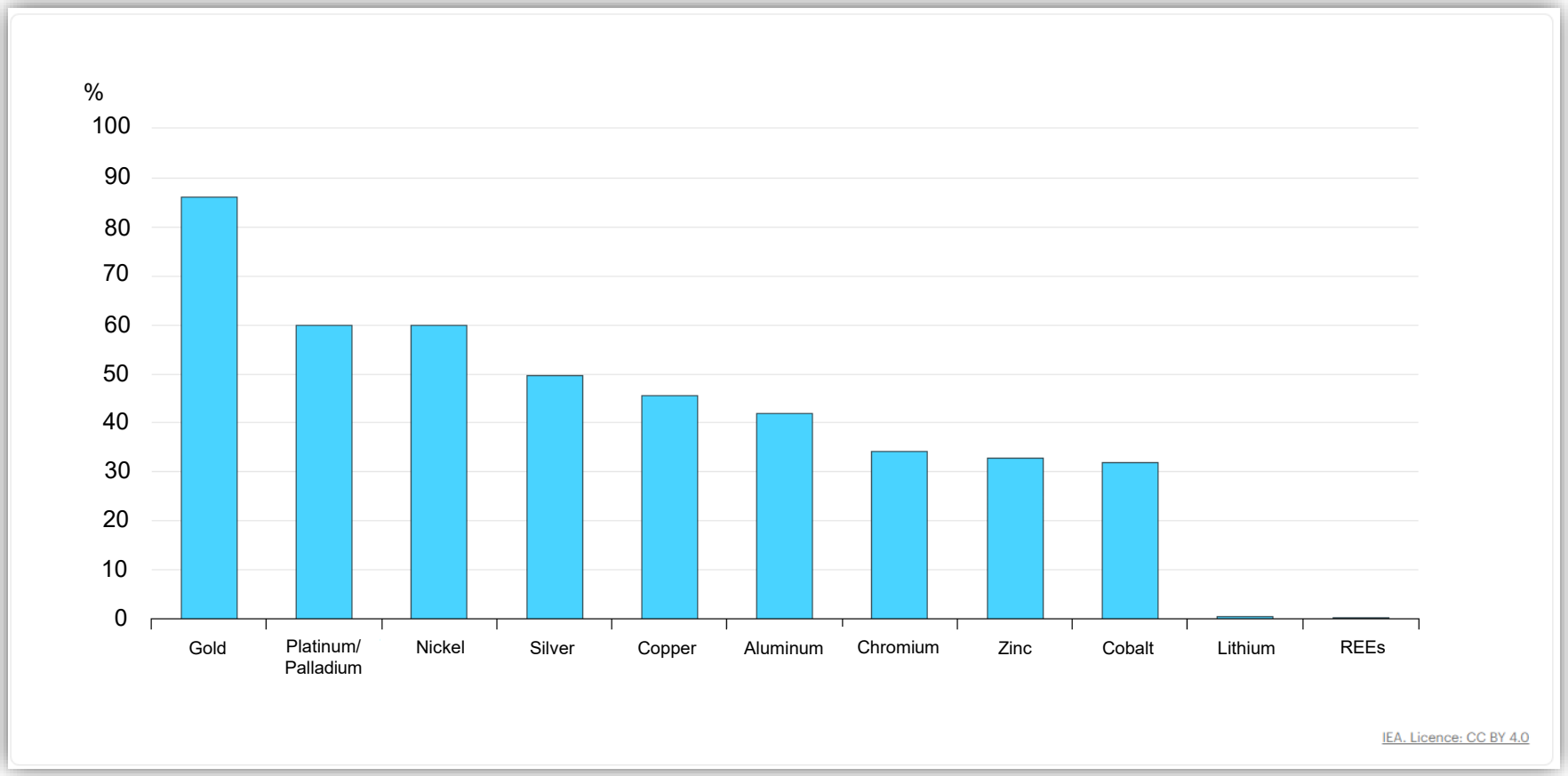
https://www.iea.org/data-and-statistics/charts/total-mineral-demand-from-new-ev-sales-by-scenario-2020-2040

Committed Lithium Production May Not Meet Future Demand



https://www.iea.org/data-and-statistics/charts/committed-mine-production-and-primary-demand-for-lithium-2020-2030

End-of-Life Recycling Rates for Selected Metals



https://www.iea.org/data-and-statistics/charts/end-of-life-recycling-rates-for-selected-metals

What Challenges Face the Battery Supply Chain?

Dramatic Growth for Li-Ion Batteries

- The demand for lithium-ion batteries is growing, driven by electric vehicle (EV) sales and policies
- The demand for critical minerals is growing, driven by EV sales and energy transitions

Relatively Rare Raw Materials

- Batteries use diverse and innovative chemistries, many involving critical minerals
- Projected production of many critical minerals may not meet projected demand

More Waste, More Recycling

- Waste management will be an increasing concern with batteries
- Recycling is essential to meet ongoing critical minerals and materials demands

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BATTERY SCHOOL 101

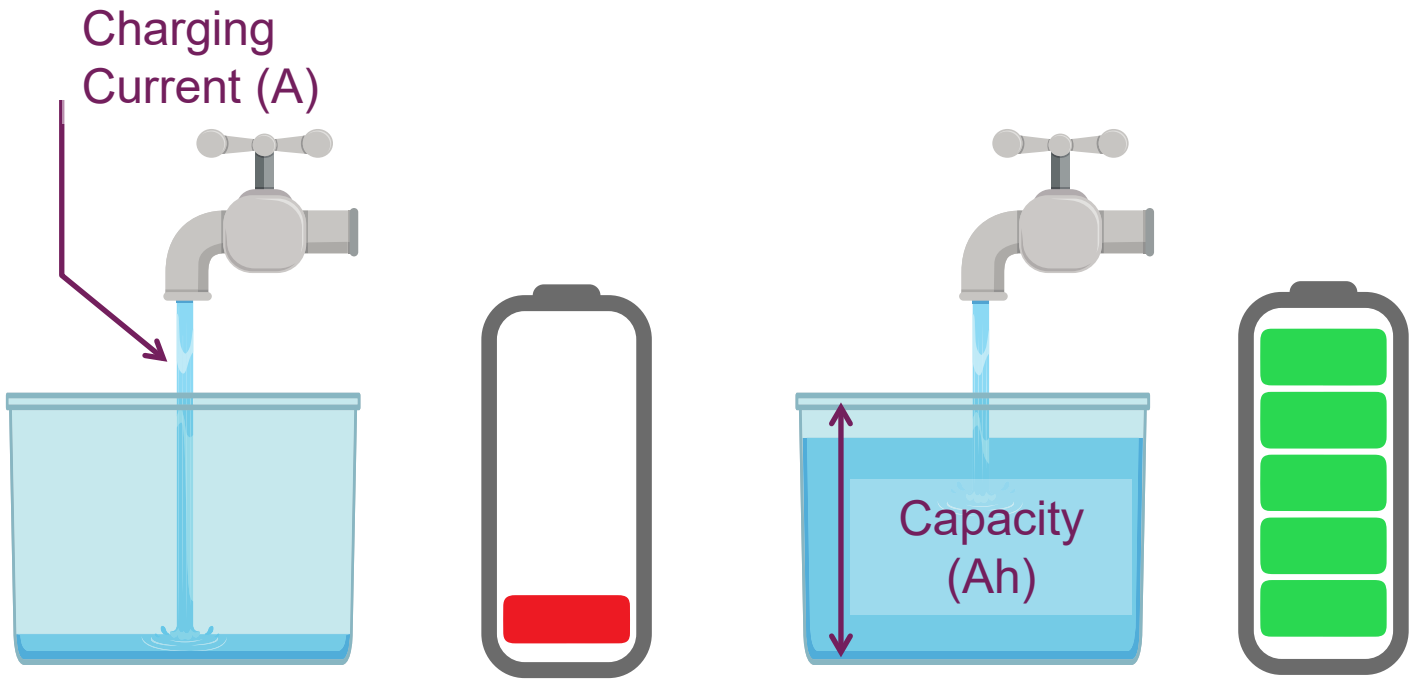
Presenters: Exponent

Steve Murray, Ph.D., P.E.
Group Vice President and
Principal Engineer

Sergio Mendoza, Ph.D.
Senior Manager

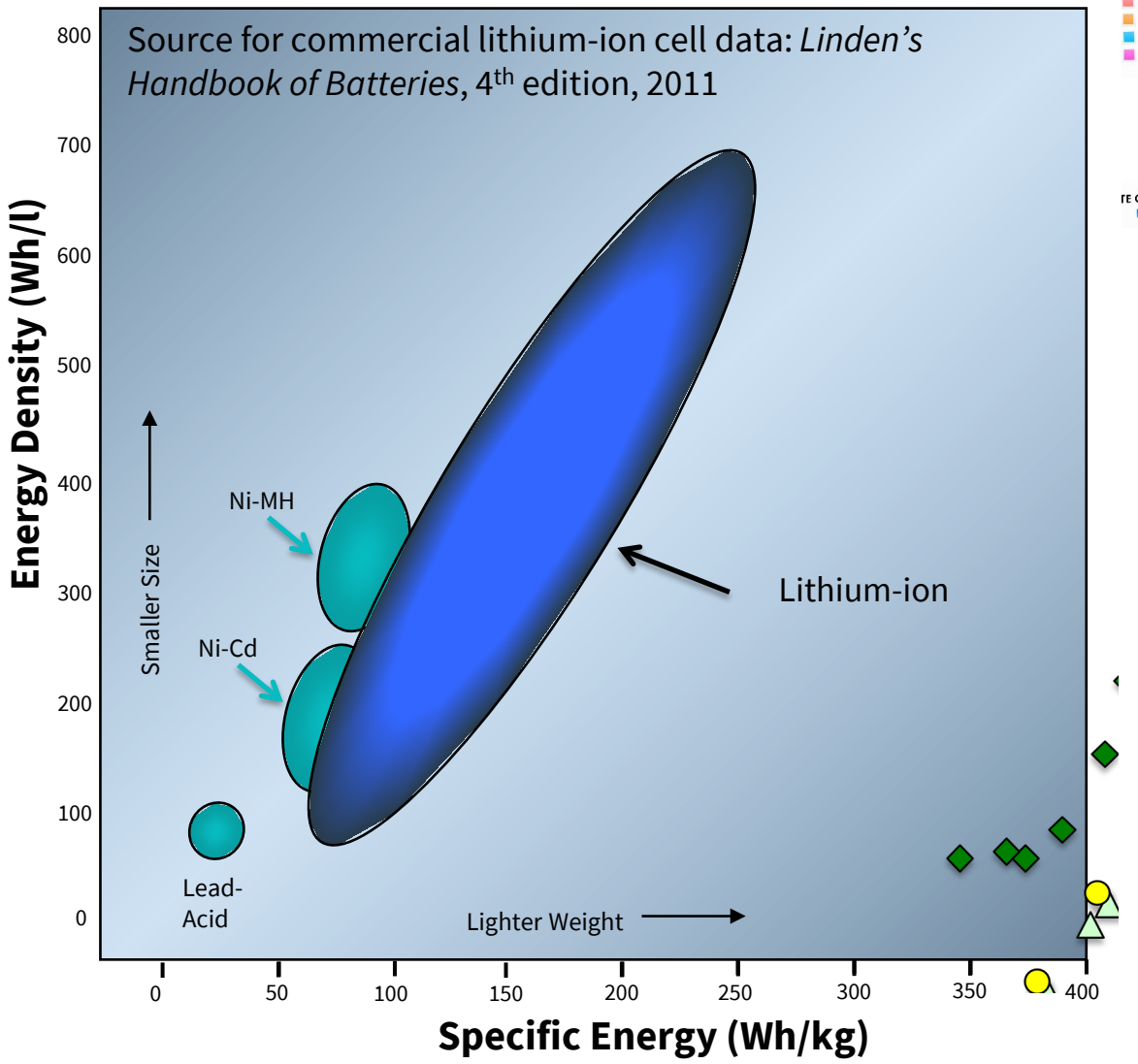
LITHIUM-ION BACKGROUND

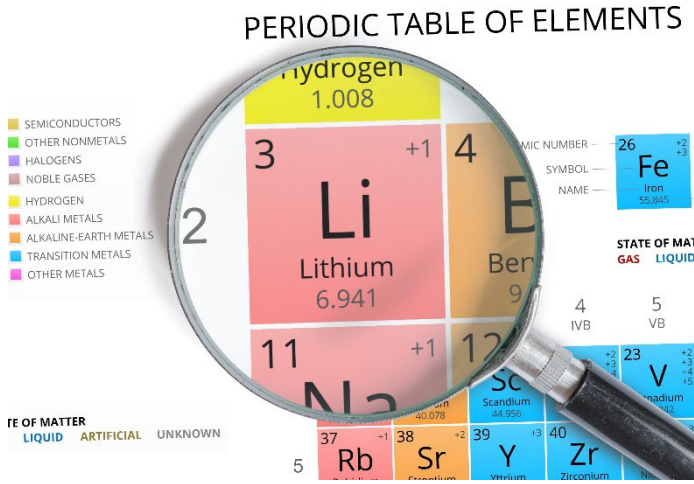
Energy Storage – Terminology



- Current (Amps): Rate of electron flow
- Capacity (Amp - hours): Amount of electrons a battery can store
- Voltage (Volts): How much work can be done by each electron (like water pressure)
- Energy (Watt - hours): Total ability to do work – Capacity x Voltage

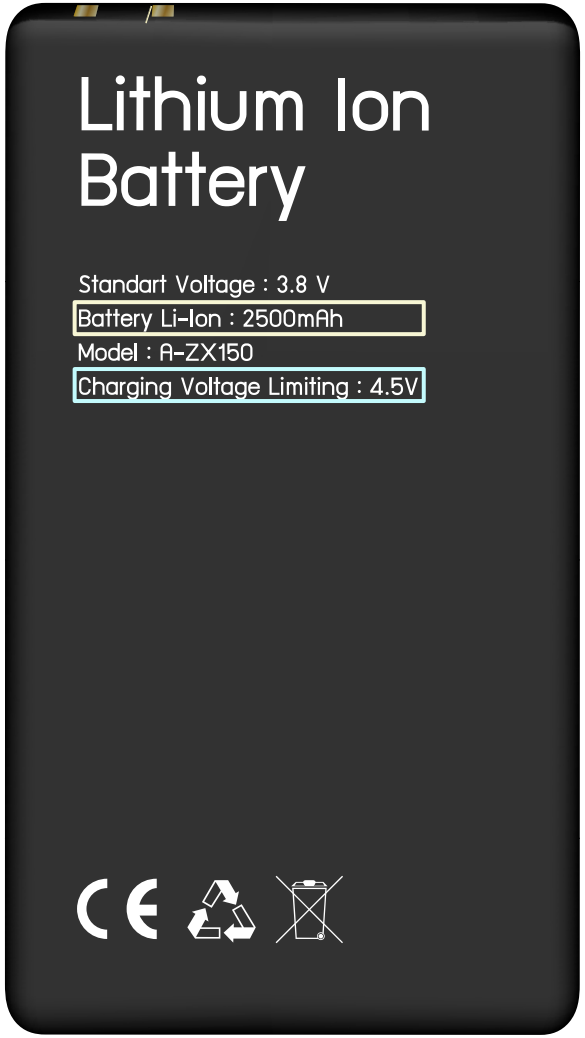
How is Lithium-ion Different?



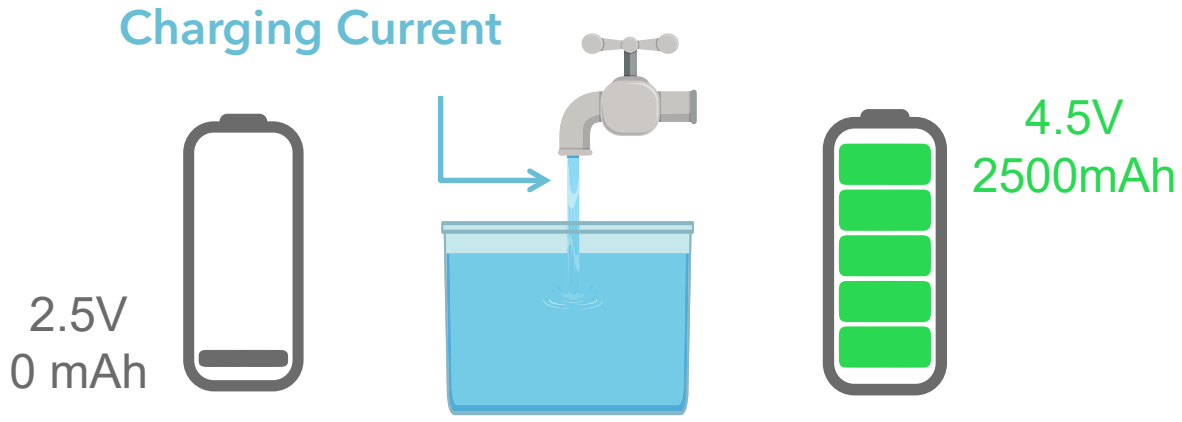


- Highest energy density of all commercial rechargeable batteries
- Tight manufacturing control and cleanliness is needed

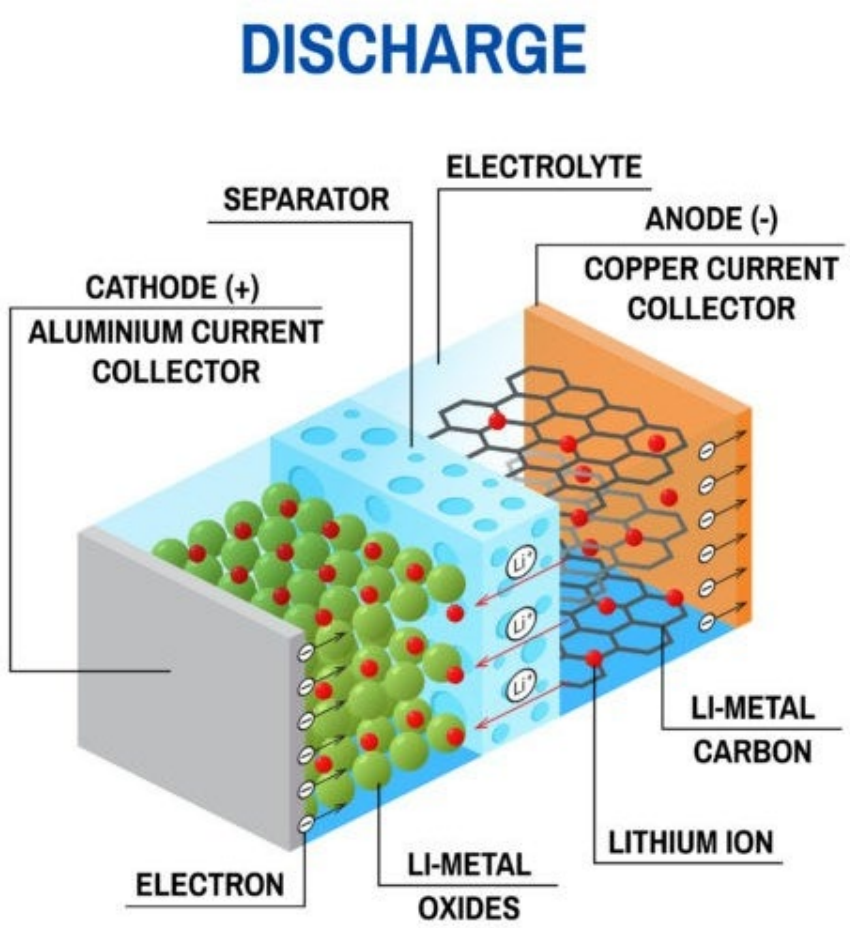
Lithium-ion Cell Specification



Item	Specification
Capacity	Min. 2250mAh Typ. 2500mAh
Nominal Voltage	3.8V
Min/Max Voltage	2.5V / 4.5V
Charging	CC-CV 1125mA; 4.5V, 112.5mA
Temperature	Charge & Discharge 0 ˚C to 45 ˚C
Chemistry	NCM



Lithium-ion Battery Chemistry



Electrode Redox Reactions

Positive electrode reaction:

$$LiMO_2 \rightleftarrows Li_{1-x}MO_2 + xLi^+ + xe^-$$

Negative electrode reaction:

$$xLi^+ + xe^- + C_6 \rightleftarrows Li_xC_6$$

$LiMO_2$ = Lithium Metal Oxide

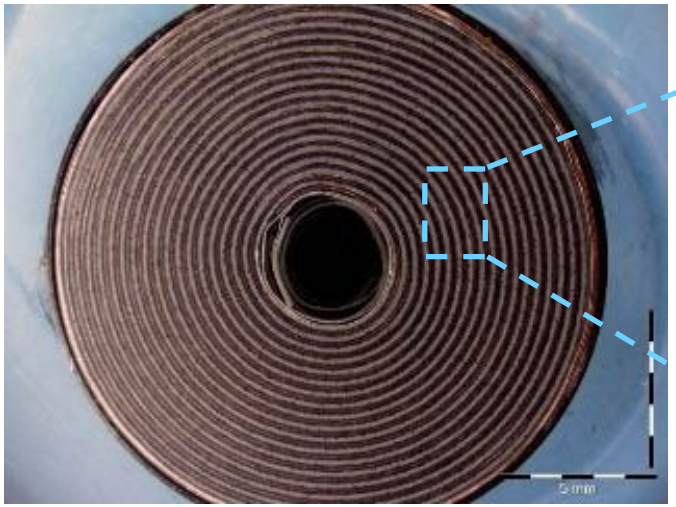
Cell Form Factors

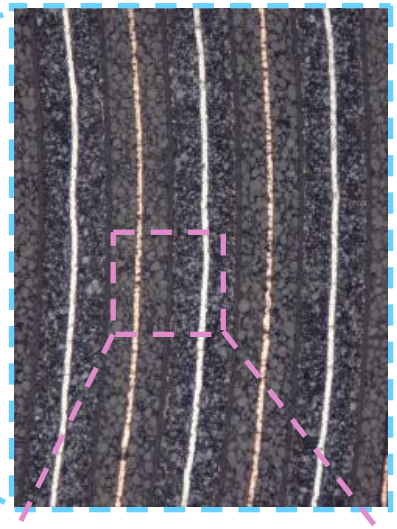
https://industry.panasonic.eu/company/newsroom/ncr18650bd-improved-ultimate-generation-safe-smart-and-stable-li-ion-cell

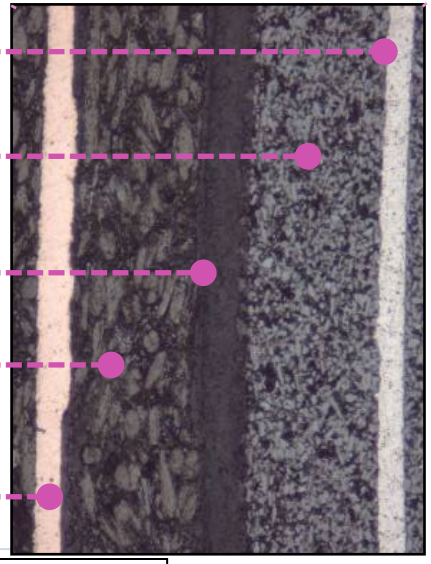
Pouch

Prismatic

Cell Construction







Positive Current Collector (Al)

Positive Electrode
(lithium metal oxide)

Separator

Negative Electrode
(graphite)

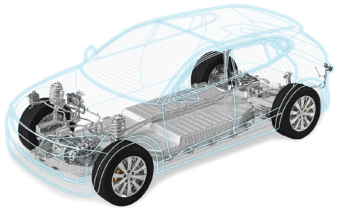
Negative Current Collector (Cu)

100 µm

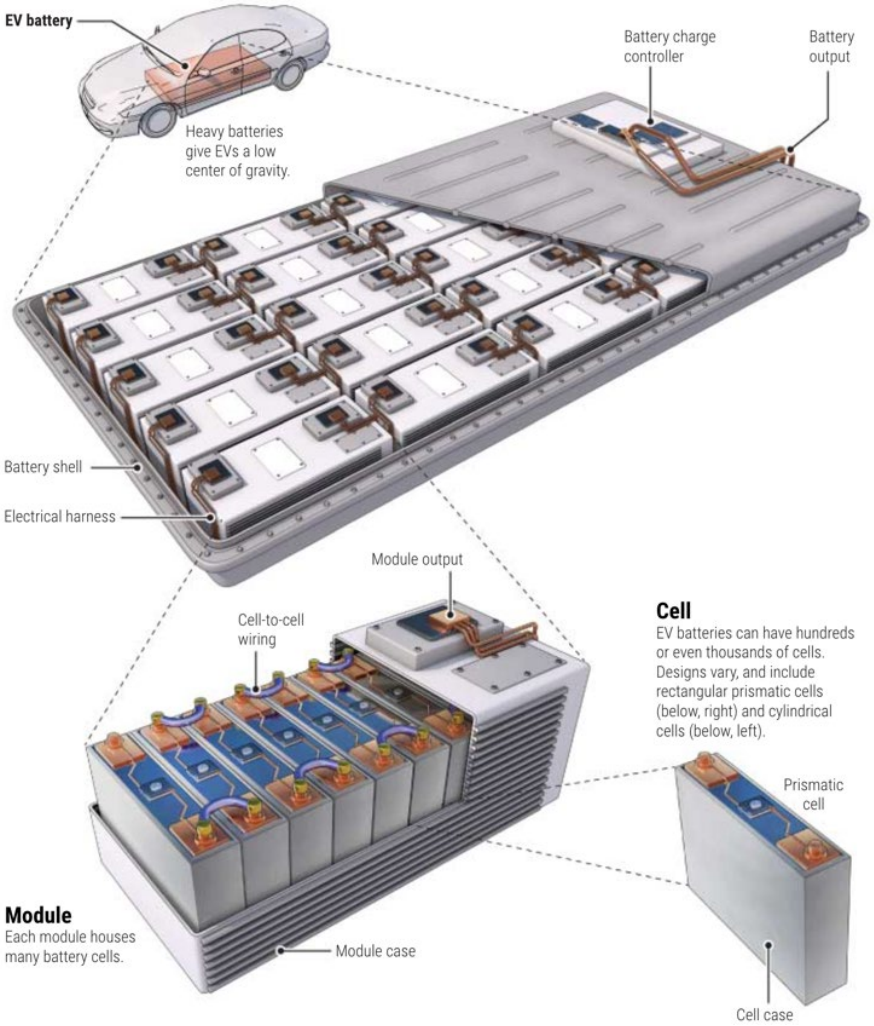
From Cell to Pack

BEV Truck: 900 kWh

BEV PLDV 100 kWh

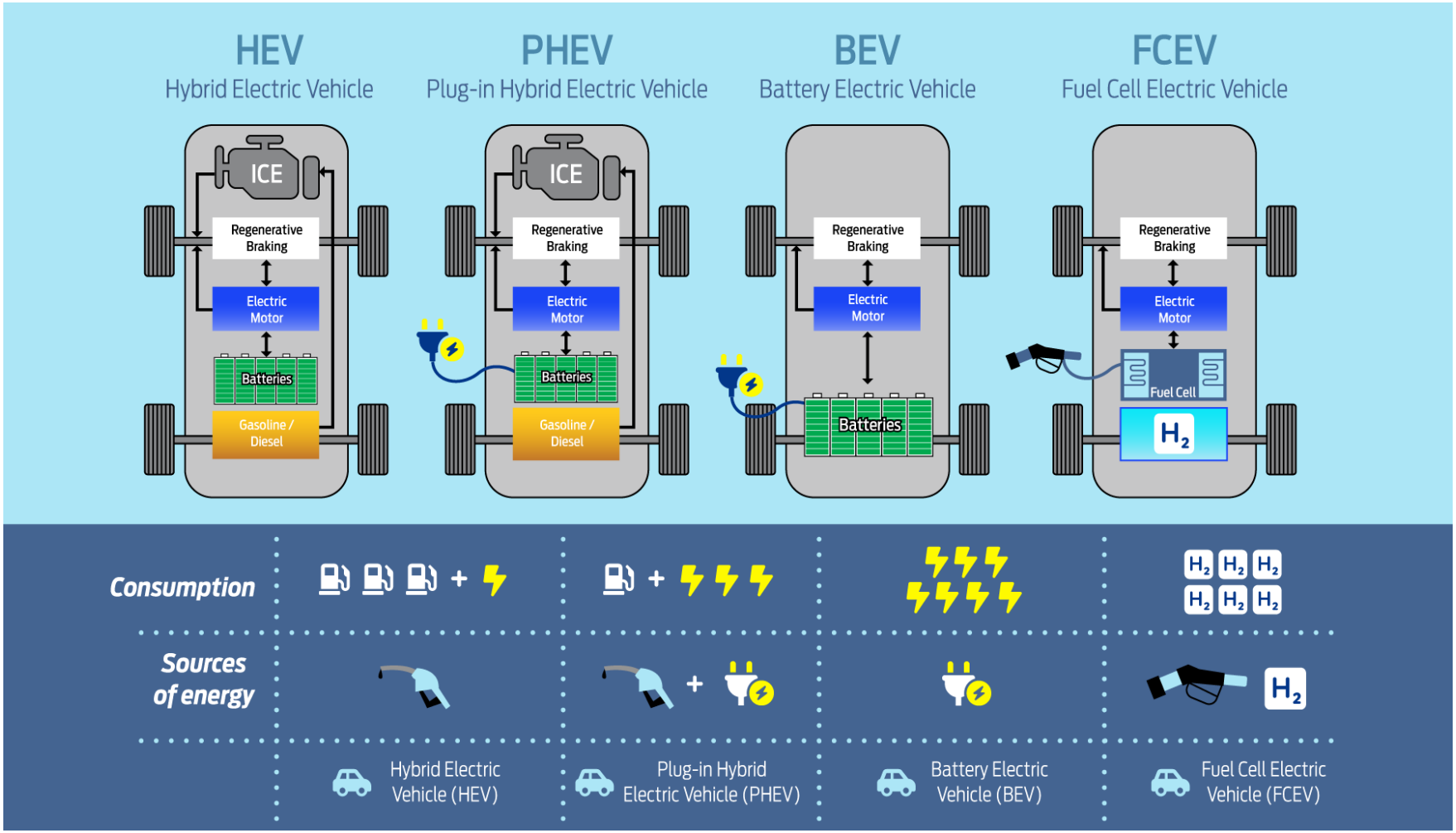


PHEV PLDV 25 kWh

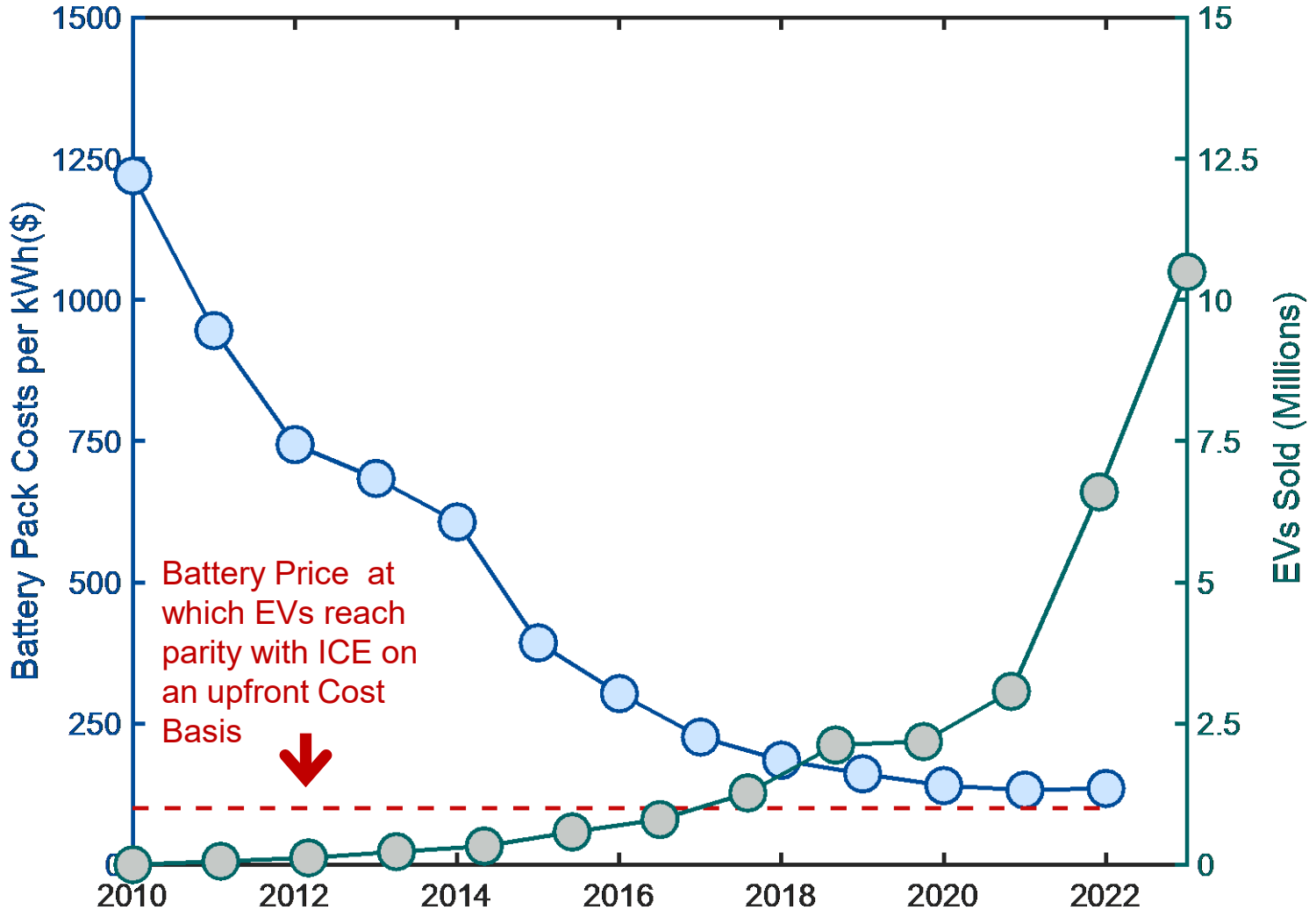


https://www.science.org/content/article/millions-electric-cars-are-coming-what-happens-all-dead-batteries

What Are EVs?


HEV
Hybrid Electric Vehicle
PHEV
Plug-in Hybrid Electric Vehicle
BEV
Battery Electric Vehicle
FCEV
Fuel Cell Electric Vehicle
ICE
Regenerative Braking
Electric Motor
Batteries
Gasoline / Diesel
Fuel Cell
H_2
Consumption
Sources of energy
Hybrid Electric Vehicle (HEV)
Plug-in Hybrid Electric Vehicle (PHEV)
Battery Electric Vehicle (BEV)
Fuel Cell Electric Vehicle (FCEV)

Road to Electrification



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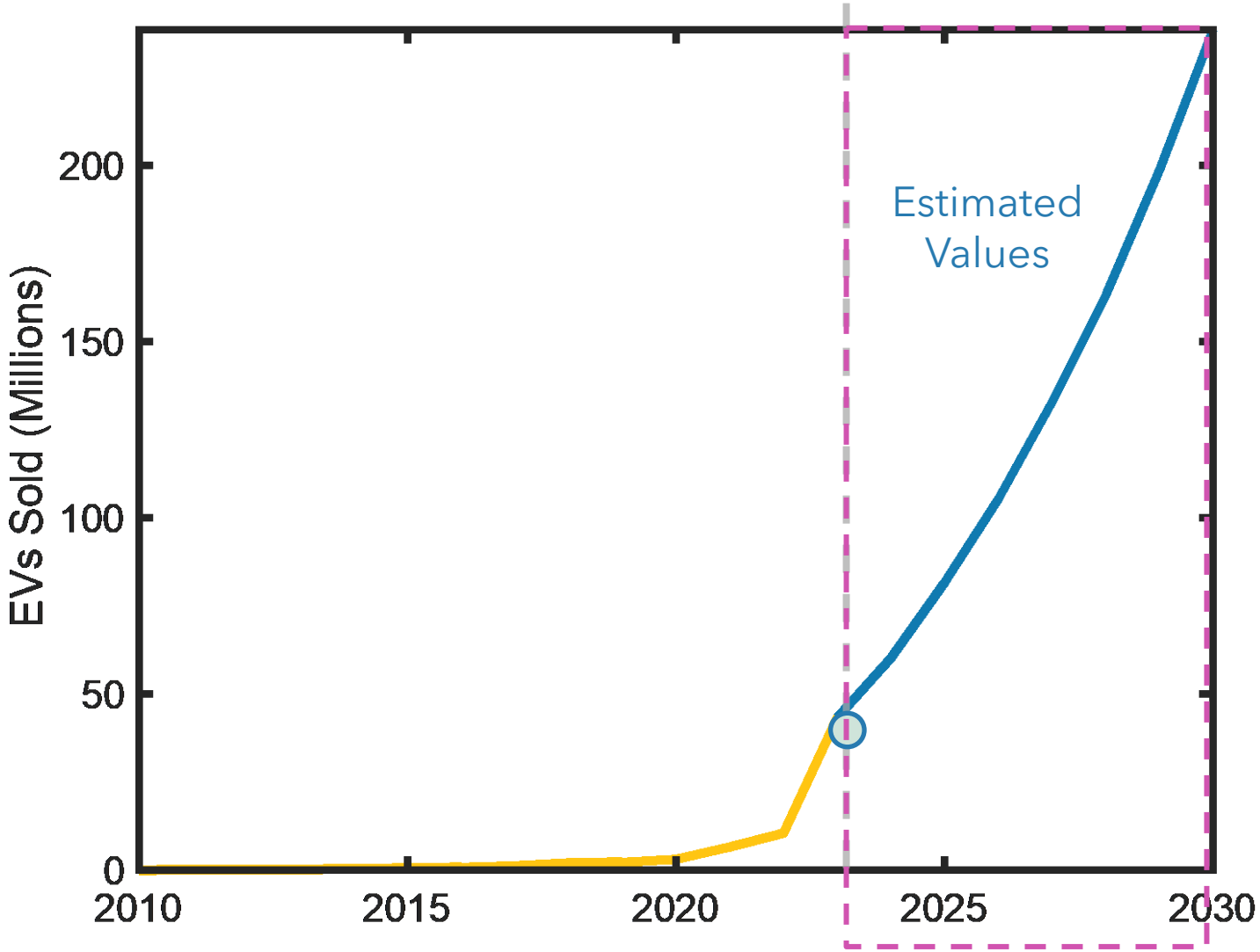
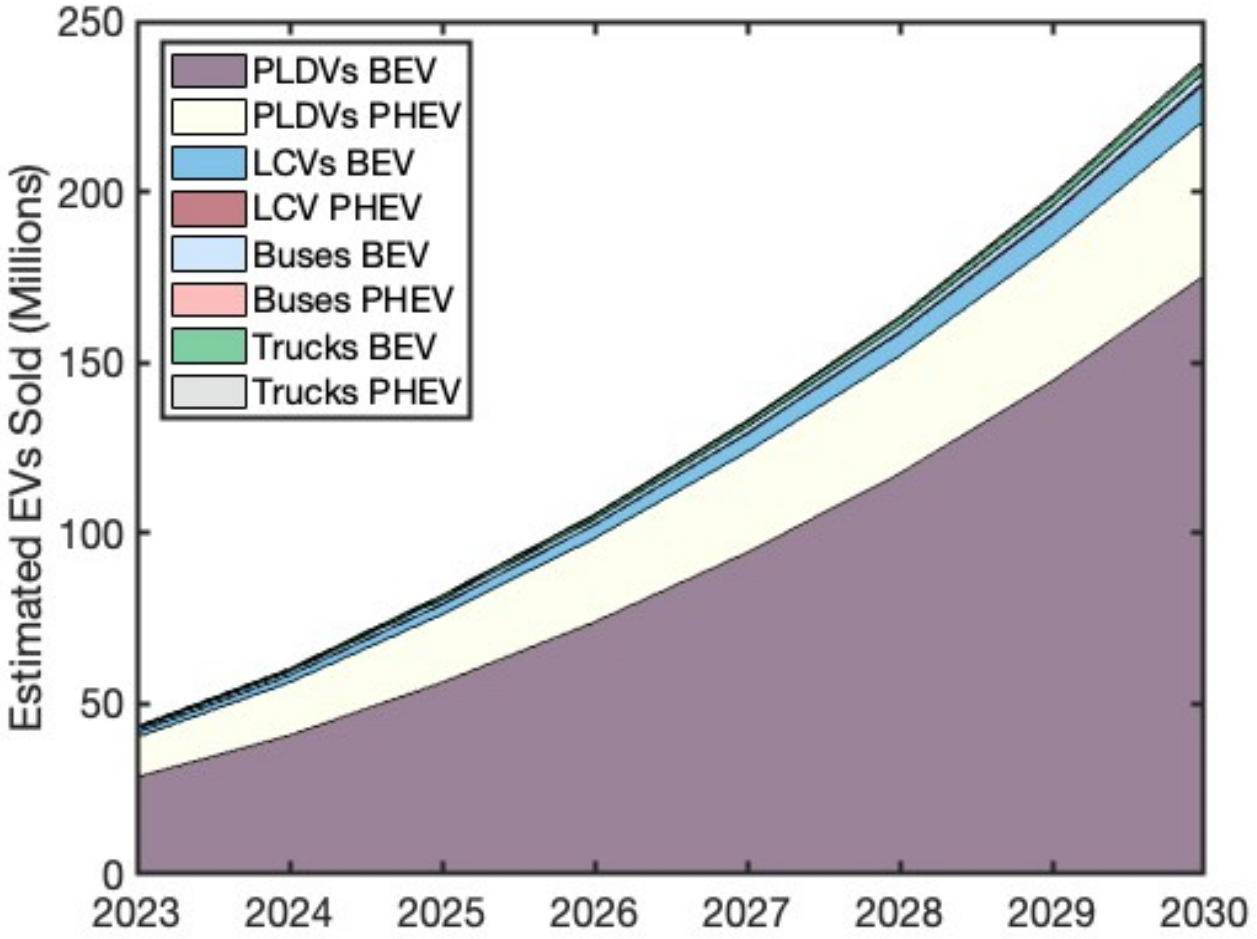
https://about.bnef.com/blog/top-10-energy-storage-trends-in-2023/

…What's Next?



https://iea.blob.core.windows.net/assets/ad8fb04c-4f75-42fc-973a-6e54c8a4449a/GlobalElectricVehicleOutlook2022.pdf
https://about.bnef.com/blog/top-10-energy-storage-trends-in-2023/

How Do We Get to 250M EVs?



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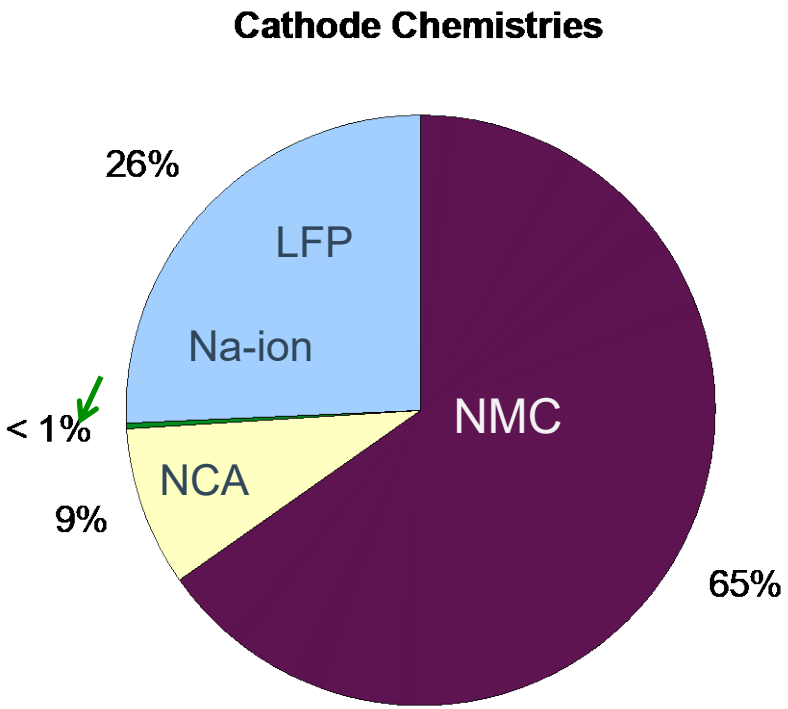
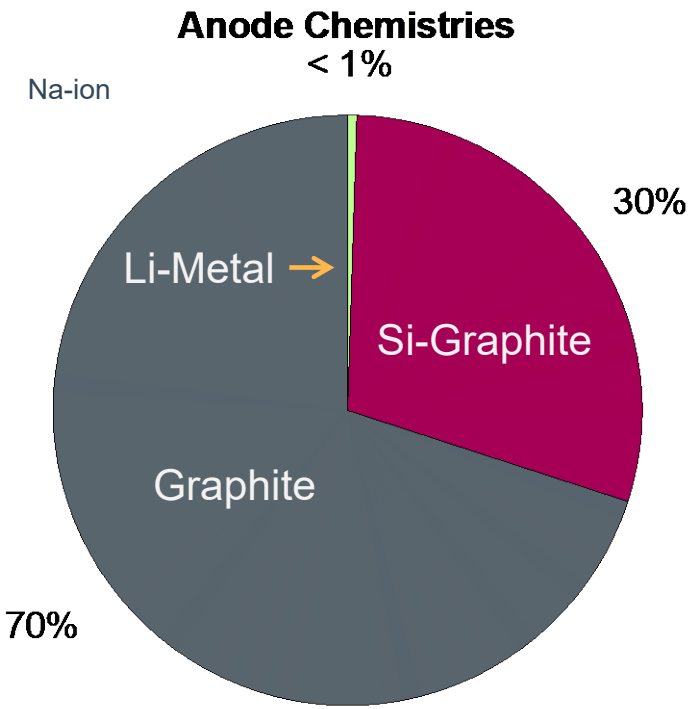
https://about.bnef.com/blog/top-10-energy-storage-trends-in-2023/

DEVELOPMENT IN DESIGN AND ENGINEERING

Cell Chemistries

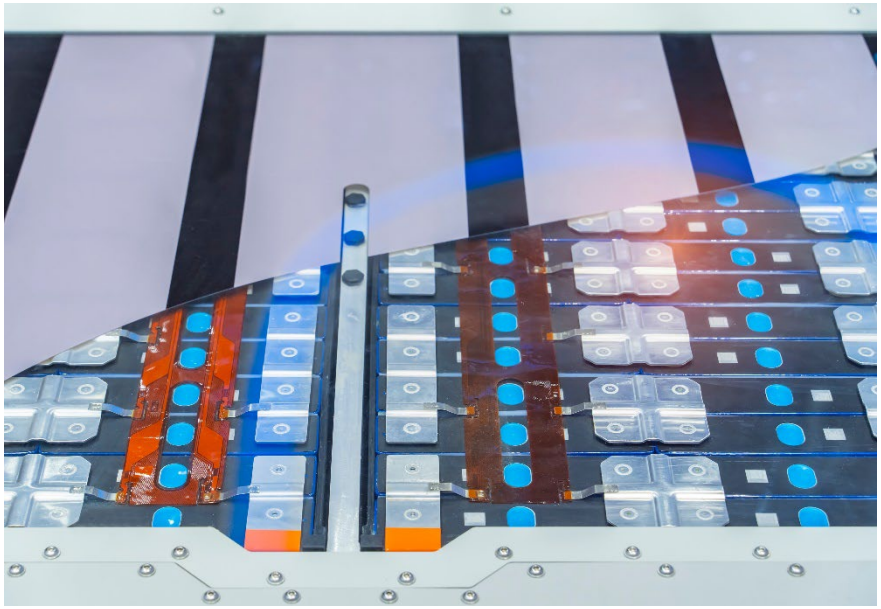




https://www.iea.org/reports/global-ev-outlook-2023/trends-in-batteries

- LFP batteries contrast with other chemistries in their use of iron and phosphorus rather than the nickel, manganese and cobalt found in NCA and NMC batteries.
- Sodium ion has the dual advantage of relying on lower cost materials than Li-ion, leading to cheaper batteries, and of completely avoiding the need for critical minerals

Battery and Thermal Management Systems

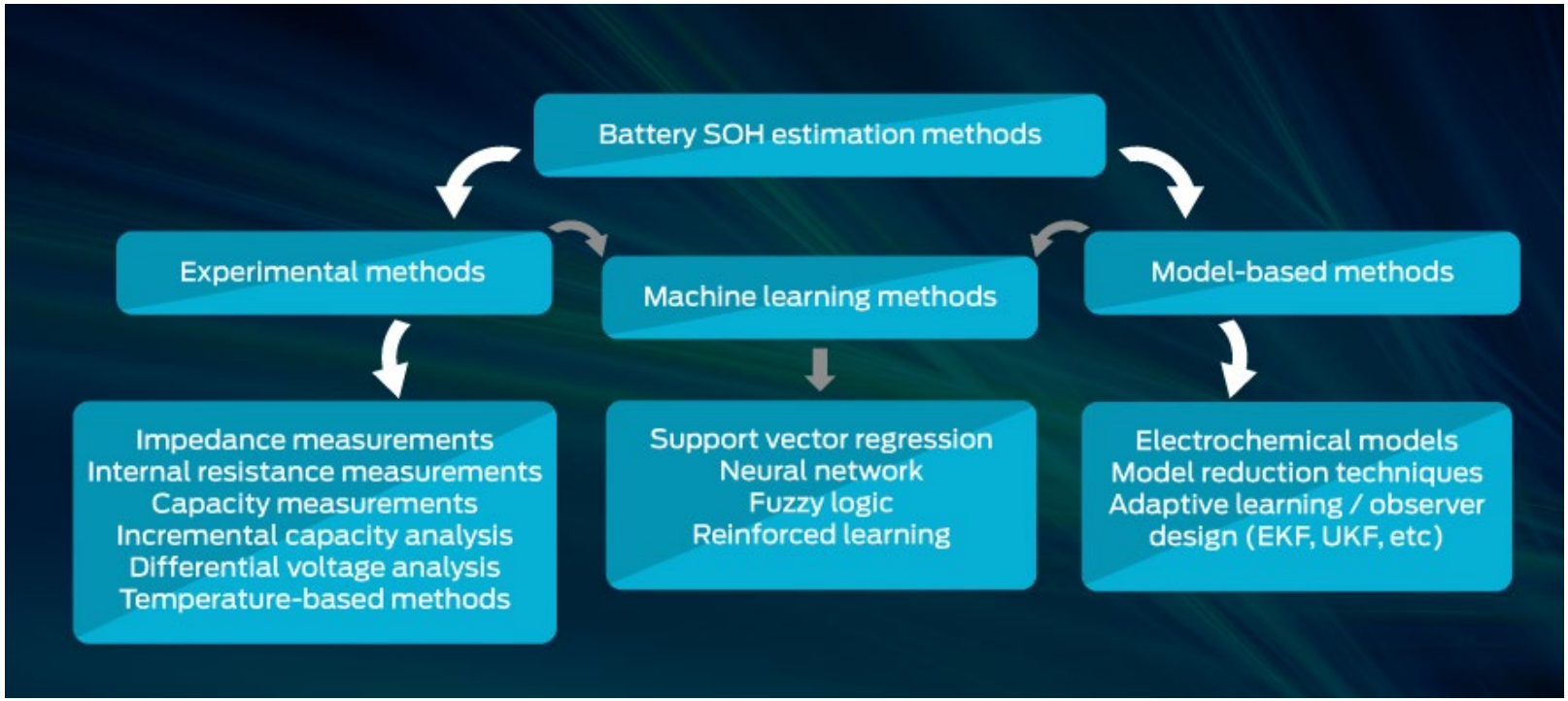


Available Measurements:
- Voltage
- Current
- Temperature
- Vehicle Speed

Pack Size:
- 200 – 7000+ Cells

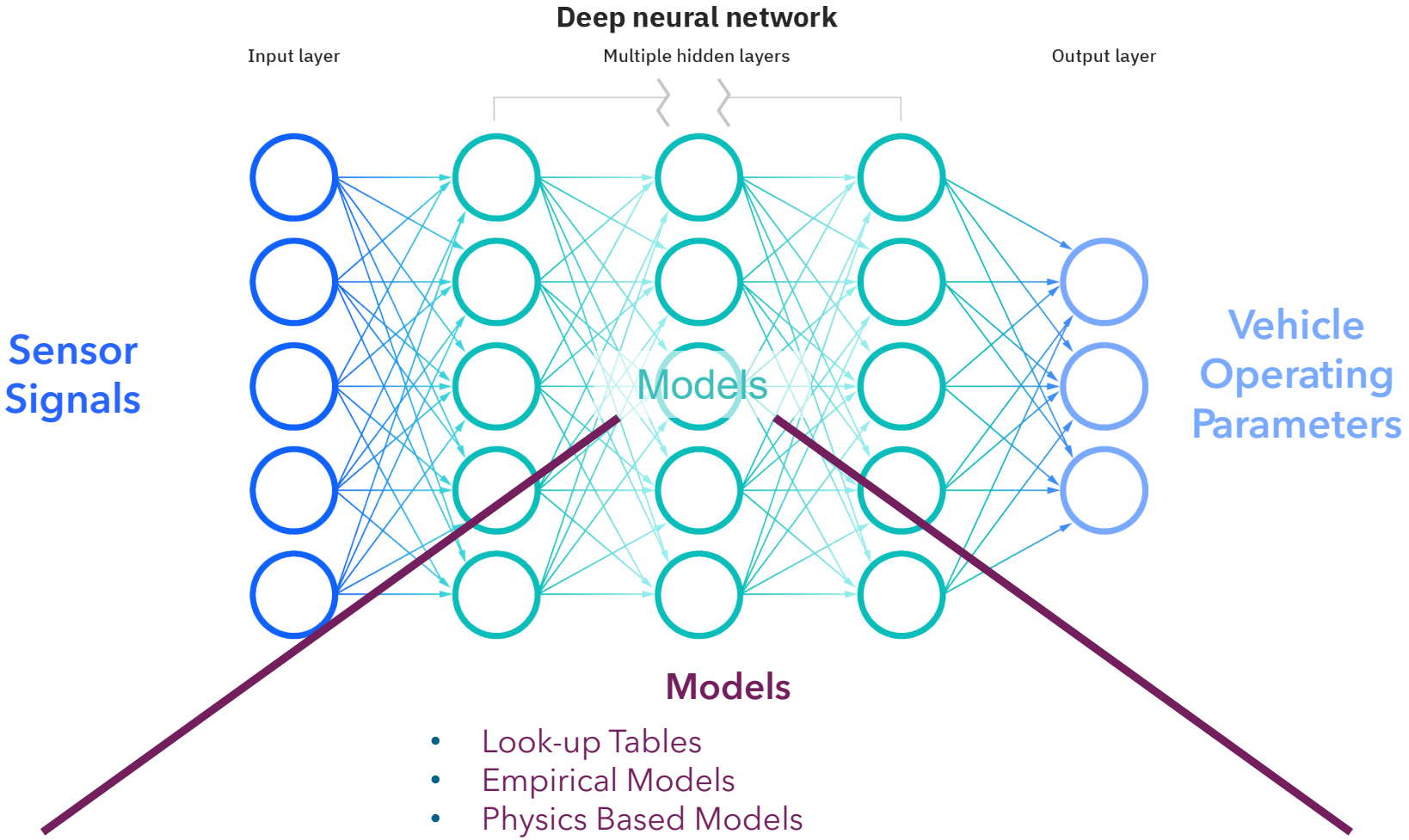
Necessary Outputs:
- State of Charge Estimation (SOC)
- Range
- State of Health Estimation (SOH)
- Power Limits
- Range
- Battery Pack Cooling/ Heating
- Balancing

State of Health (SOH) Estimation and Modeling



- SOH can be used for individual cell analysis or fed into larger modeling and simulation tools for population analysis

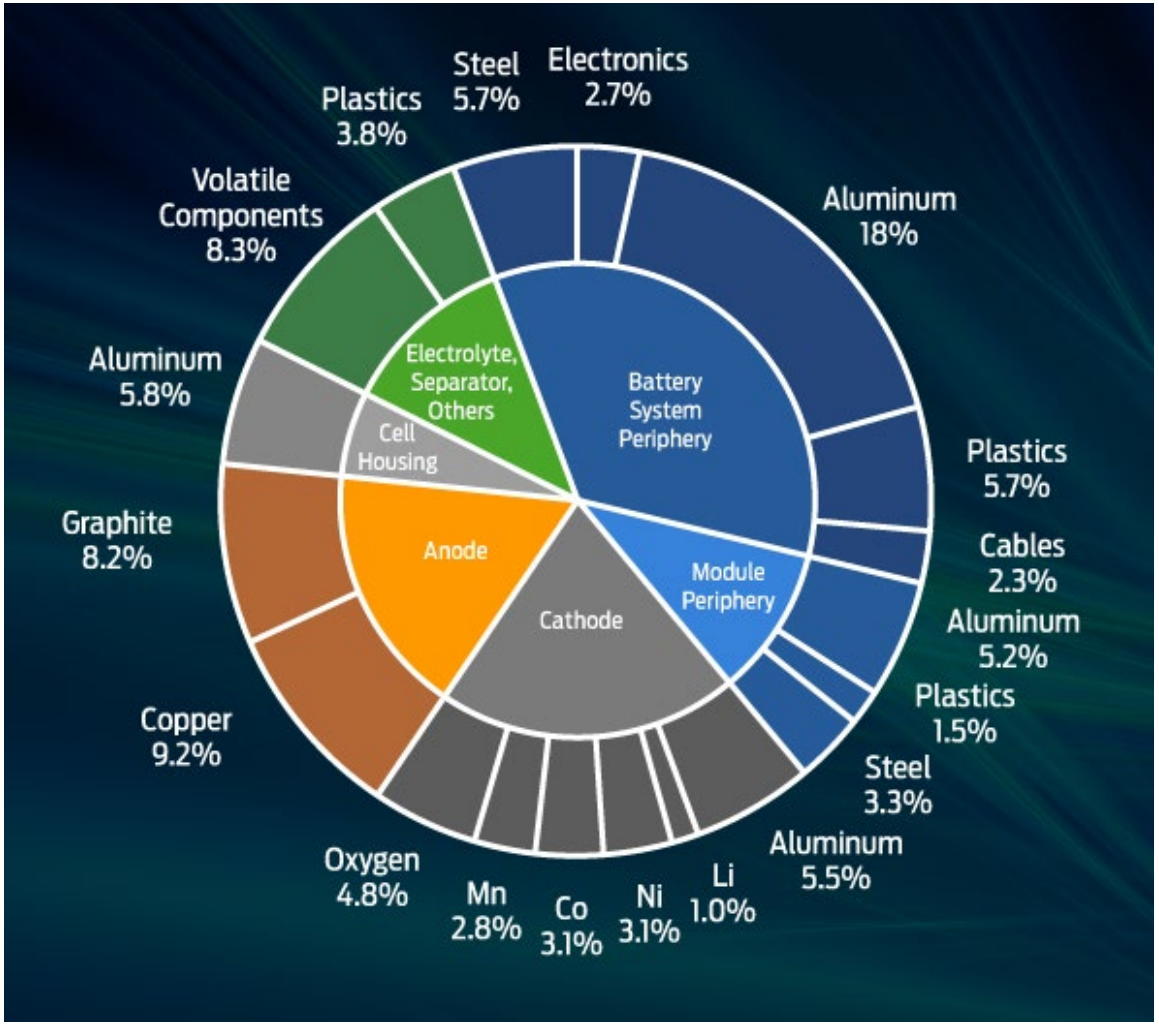
AI/ML in Batteries



Models

- Look-up Tables
- Empirical Models
- Physics Based Models
- Multi-Physics Models
- Molecular Atomistic Models
- Observers

Components in EV Batteries



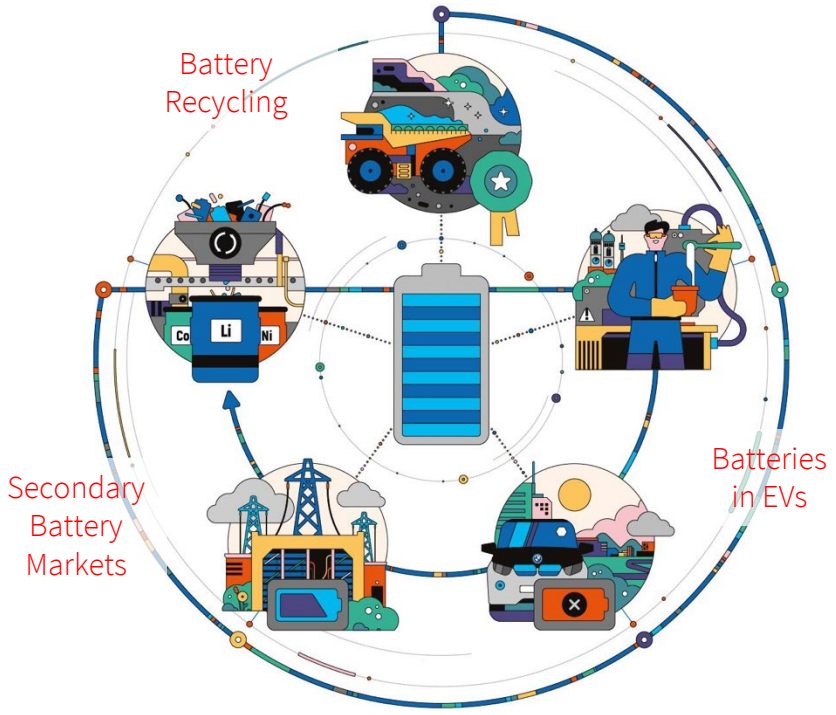
https://onlinelibrary.wiley.com/doi/full/10.1002/smtd.202000039

Recycling Lithium-ion Batteries

- An EV battery has four phases:
  - Development
  - In vehicle use
  - Second life
  - Recycling

- In an 880-lb battery pack, the plant can recover about 220 pounds of key electrode minerals like lithium, nickel, cobalt, and manganese.

- Existing methods for battery recycling require essentially melting them down in a furnace, which only recovers about 60% of the materials inside.



https://www.bmw.com/en/innovation/life-cycle-of-a-battery-cell.html

Battery Second-Life Challenges

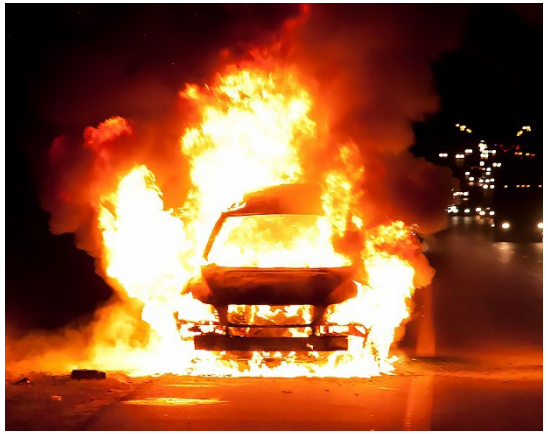
- EVs present potential challenges to existing vehicle recycling infrastructure, especially economics
- Disassembly process:
  - Different pack configurations
  - Vehicle condition (crashed or damaged)
  - High-voltage connections
  - Potential fire hazards
- Liability:
  - Who is responsible for second-life?
- Lack of battery state-of-health (SOH)
  - How much of the battery's original capacity is available?
  - What's the history of the battery?

SAFETY CONSIDERATIONS

Effects and Costs of Lithium-ion Battery Failure

Litigation

Recall



Fire, Injury

Monetary Loss

Lithium-ion Battery Failure

Performance degradation to catastrophic heating

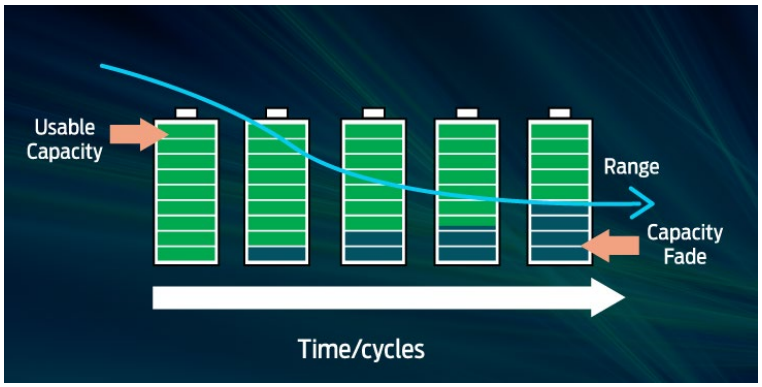
Thermal Event

Cell Swelling

Impedance Increase

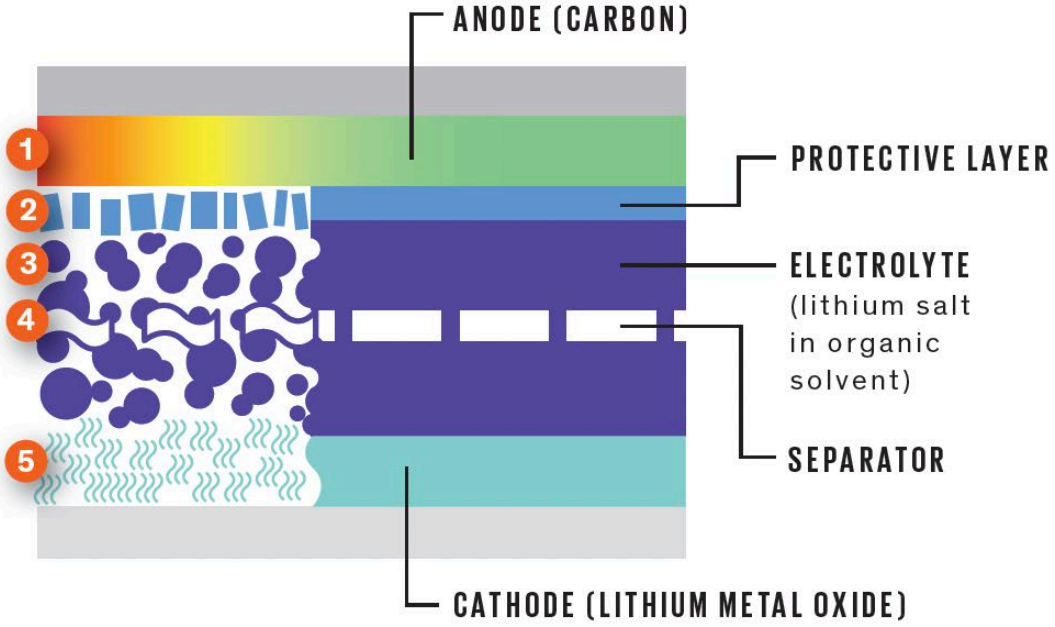
Capacity Fade

Won't Charge



What is Thermal Runaway?

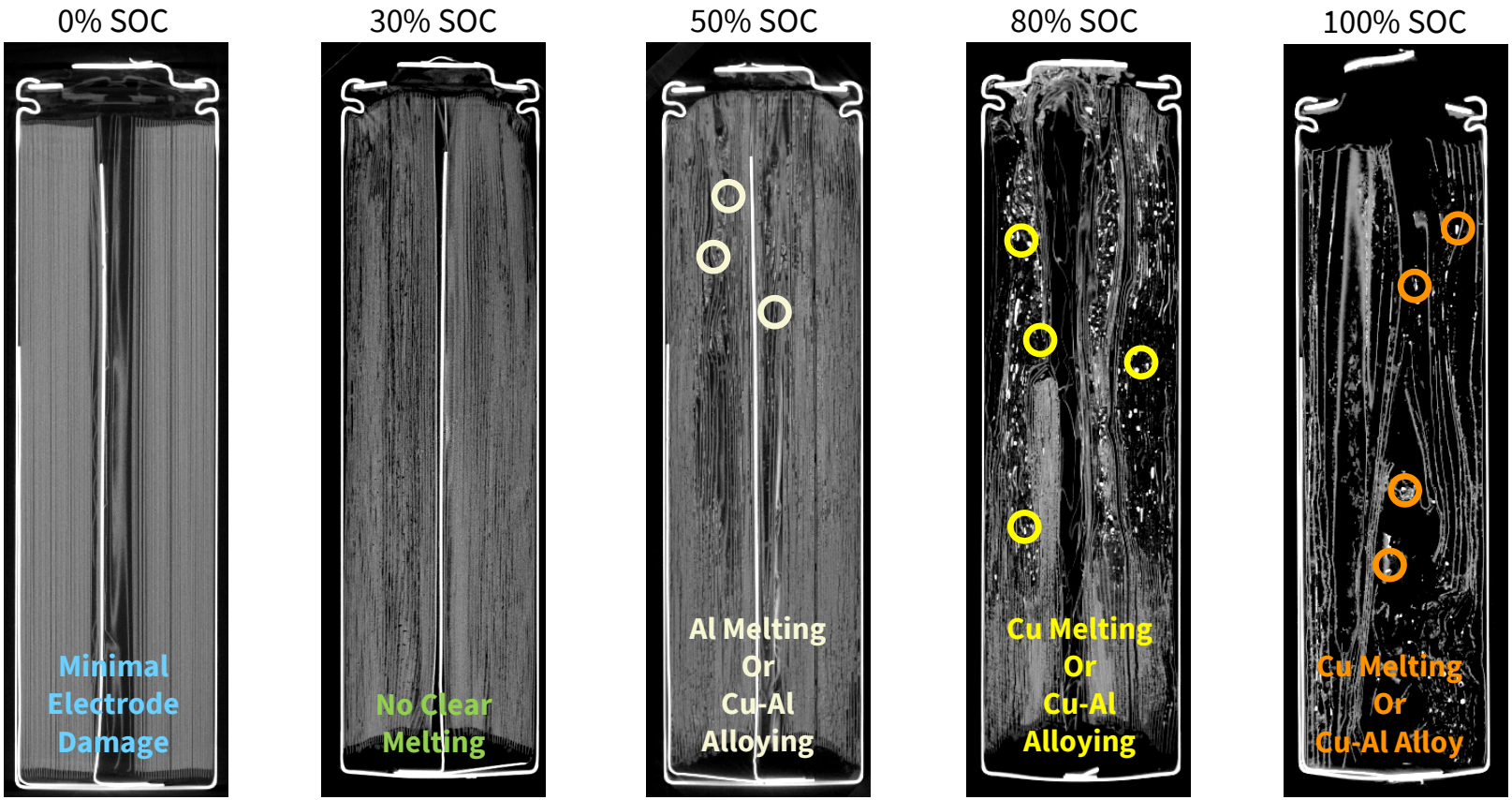
1. Heating starts.
2. Protective layer breaks down.
3. Electrolyte breaks down into flammable gases.
4. Separator melts, possibly causing a short circuit.
5. Cathode breaks down, generating oxygen.



- The electrical energy heats up the cell, making the short grow before energy can dissipate
- A malfunctioning lithium-ion battery can reach internal temperatures in excess of 660 ˚C

https://www.caas.gov.sg/docs/default-source/pdf/2---regulations-on-the-transport-of-lithium-batteies-by-air.pdf

Energy Release is Dependence on SOC



Key Takeaway Points

- Lithium-ion batteries are an evolved technology that take advantage of optimum materials for making a battery
- The economic crossover between internal combustion and battery-electric vehicles is upon us now
- Lithium-ion batteries have risks due to unintended internal release of energy
- These risks can be adequately managed through battery control and management systems

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INFLATION REDUCTION ACT

Our Speakers: Deloitte

Gary Hecimovich
Partner

Ryan Meyers
Tax Managing Director

Agenda: Inflation Reduction Act

Topic	Content
Overview of IRA	• Transportation Incentives • Manufacturing Incentives • Renewable Energy Incentives • Direct Pay and Transferability
Transportation Incentives	• §30D – Clean Vehicle Credit • §45W - Qualified Commercial Clean Vehicle Credit • §30C - Alternative Fuel Vehicle Refueling Property Credit
Manufacturing Incentives	• §45X - Advanced Manufacturing Production Credit • §48C - Qualified Advanced Energy Project Credit
Renewable Energy Incentives	• §45 – Electricity Produced From Renewable Energy (PTC) • §45Y – Clean Electricity Production Credit (PTC) • §48 - Energy Credit (ITC) • §48E – Clean Electricity Investment Credit (ITC)
Elective Payment (Direct Pay) and Transferability	• §6417 – Elective Payment (Direct Pay) to Applicable Credits • §6418 – Transfer of Certain Credits

INFLATION REDUCTION ACT OF 2022

Inflation Reduction Act of 2022

Legislation signed into law August 16, 2022

Approximately 300 of the 725 pages of the legislative text address clean energy credits and incentives proposals

- Mirrors Build Back Better Act

Most credits fit into one of the five buckets:

1. Renewable Energy
2. Manufacturing
3. Hydrogen/Carbon Capture
4. Energy Efficiency
5. Transportation and Fuel

Labor and apprenticeship requirements

Direct pay and transferability options

Inflation Reduction Act of 2022

Sustainability-related credits and incentives provisions

Clean energy incentives

- Section 45 – Renewable electricity production credit modification and extension
- Section 48 – Energy credit modification and extension
- Section 45Y – Clean electricity production credit
- Section 48E – Clean electricity investment credit
- Section 45U – Zero emission nuclear power production credit

Transportation and vehicle incentives

- Section 45W – Qualified commercial clean vehicle credit
- Section 30C – Alternative fuel refueling property credit modification and extension
- Section 25E – Previously-owned qualified clean vehicles credit
- Section 30D – Clean vehicle credit modification and extension

Fuels incentives

- Section 40B – Sustainable aviation fuel credit
- Section 45Z – Clean fuel production credit
- Sections 6426, 40(b), 40A - Alternative fuel credits extension

Manufacturing incentives

- Section 48C – Advanced energy project credit
- Section 48D – Advanced manufacturing investment credit
- Section 45X – Advanced manufacturing production credit

Carbon capture and hydrogen incentives

- Section 45Q – Carbon oxide and sequestration credit modification and extension
- Section 45V – Clean hydrogen production credit

Energy efficiency and residential incentives (modification and extension)

- Section 179D – Energy efficient commercial buildings deduction
- Section 25C – Energy efficient home improvement credit
- Section 25D – Residential clean energy credit
- Section 45L – New energy efficient home credit

Other

- Section 6417 – Limited elective payment option
- Section 6418 – Transfer of certain eligible credits
- Sections 38 and 59A – New 15% corporate AMT and general business credits utilization modifications

Note: Items in blue font are newly created

Inflation Reduction Act of 2022

Key provisions impacting battery industry and supply chain

Transportation

- **Clean Vehicle Credit (IRC § 30D)**
  - $3,750 or $7,500 credit for each new clean motor vehicle or new qualified fuel cell motor vehicle which satisfies certain requirements.
- **Qualified Commercial Clean Vehicle Credit (IRC § 45W)**
  - 15% or 30% not to exceed incremental cost for each qualified commercial clean vehicle which satisfies certain requirements (includes certain mobile machinery)
- **Alternative Fuel Vehicle Refueling Property Credit (IRC § 30C)**
  - 6% or 30% of costs for qualifying alternative fuel vehicle (QAFV) refueling property, up to $100,000 with respect to any single item of QAFV property placed in service in certain low-income census tracts or non-urban areas (including EV charging stations)

Manufacturing

- **Advanced Energy Project Credit (IRC § 48C)**
  - A project which re-equips, expands, or establishes an industrial or manufacturing facility for the production or recycling of certain specified advanced energy property including:
    - light-, medium-, or heavy duty vehicles, as well as technologies, components, or materials for such vehicles, associated charging or refueling infrastructure, and
    - hybrid vehicles with a gross vehicle weight rating of not less than 14,000 pounds, as well as technologies, components, or materials for such vehicles
  - A project which re-equips, expands, or establishes an industrial facility for the processing, refining, or recycling of critical materials
- **Advanced Manufacturing Production Tax Credit (IRC § 45X)**
  - Sum of the credit determined with respect to each eligible component produced and sold by the taxpayer including any qualifying battery component defined as: (1) electrode active materials, (2) battery cells, (3) battery modules and (4) critical minerals.

Renewable Energy

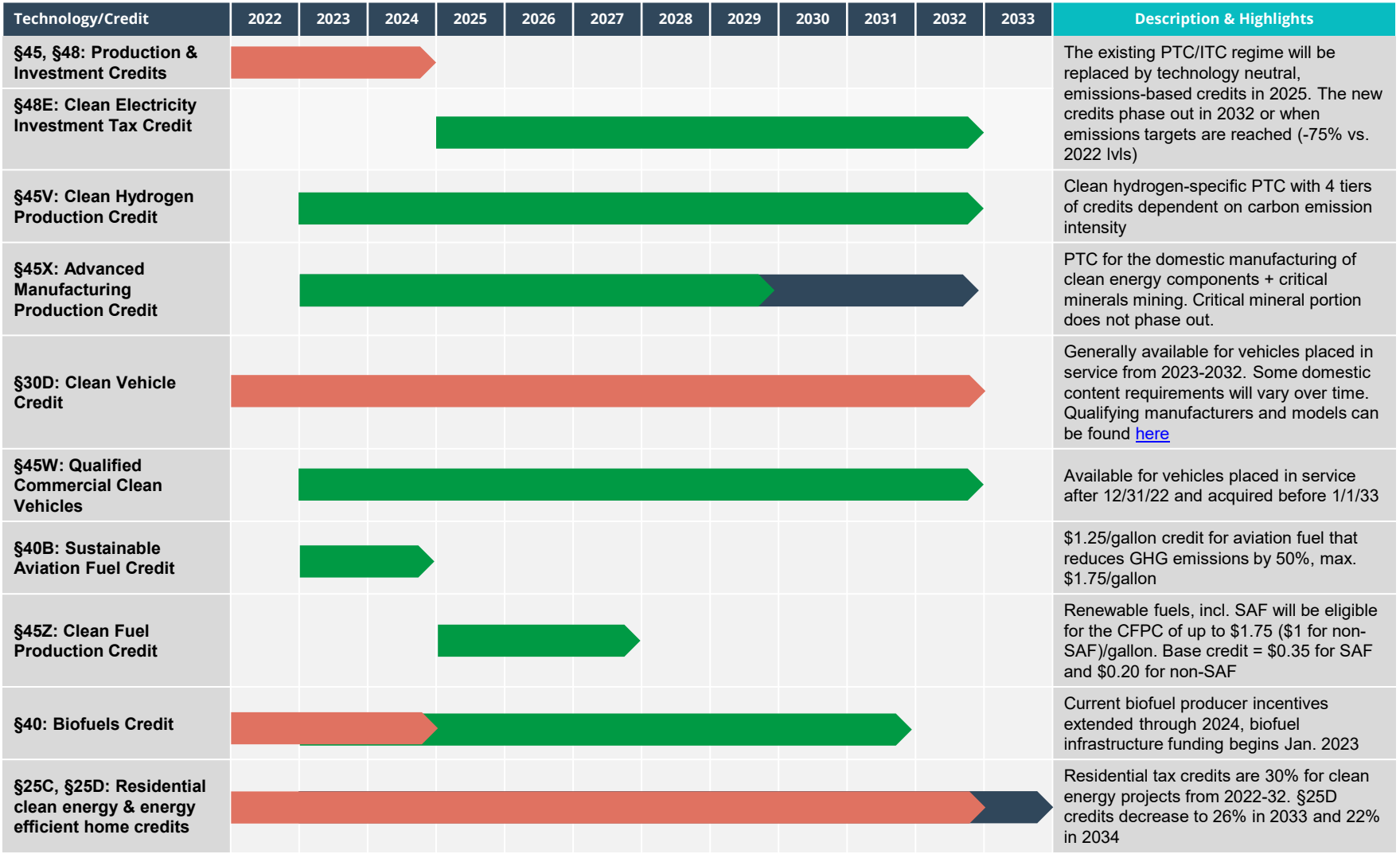
- **Energy Credit (IRC § 48)**
  - 6% or 30% of costs for energy storage technology (other than property primarily used in the transportation of goods or individuals and not for the production of electricity)
  - Adders available for domestic content (+10%) and/or energy community (+10%)
- **Clean Electricity Investment Credit (IRC § 48E)**
  - 6% or 30% of costs for energy storage technology (other than property primarily used in the transportation of goods or individuals and not for the production of electricity)
  - Adders available for domestic content (+10%) and/or energy community (+10%)

Overview of Key Incentives by Type and Value Chain Participant

Scope	Manufacturing Assets and Processes	Energy Generation and Storage	Purchase Incentives
Value Chain Participant	OEM, Supplier	OEM, Supplier	Auto FINCOs, Purchasers
Section 30D *[Passenger Vehicle Tax Credit]*			●
Section 45W *[Qualified Commercial Clean Vehicles Credit]*			●
Section 30C *[Alternative Fuel Vehicle Refueling Property Credit]*			●
Section 45X *[Advanced Manufacturing Production Credit]*	●		
Section 48C *[Qualified Advanced Energy Project Credit]*	●		
Section 45 *[Production Tax Credit]*		●	
Section 45Y *[Clean Electricity Production Credit]*		●	
Section 48 *[Investment Tax Credit]*		●	
Section 48E *[Clean Electricity Investment Credit]*		●	

Source: Inflation Reduction Act of 2022, H.R. 5376, 117th Congress. (2021-22).

The IRA is in effect through the end of 2032 with regards to programs addressing the majority of clean technologies



SIDLEY Deloitte. Exponent

TRANSPORTATION INCENTIVES

§30D: Passenger Vehicle Tax Credit Eligibility Restrictions and Impact

Summary

- Currently, **U.S. suppliers own only 10% of the global EV supply** chain and **7% of battery production capacity.***
- China has a significant market share in critical minerals, battery metals, and rare earth oxides. Hence, **China accounts for approximately 56% of global battery production, 74% of cathode material production, and 90% of anode materials.****
- **After 2024,** (1) **critical minerals** in an EV battery **cannot be extracted, processed or recycled by foreign entities of concern** (China and Russia) and (2) **after 2023, battery components cannot be manufactured or assembled by foreign entities of concern.**
- The credit **features two domestic content requirements** (each worth $3,750) that increase over time (+10% p.a.).

KEY TAKEAWAYS

- Automotive OEMs will need to rapidly gain visibility in their supply chains to demonstrate which EVs are eligible for the §30D credit.
- Potential new (foreign) market entrants will need to accelerate their localization plans and establish manufacturing capabilities in North America.
- U.S.-based lithium extraction is growing and will be further accelerated by new mining projects and supporting infrastructure.
- Graphite, an essential ingredient of EV battery anodes, is mostly produced in China and remains a barrier to tax credit eligibility in the short to mid-term.

IRC §30D Eligibility Requirements for the full $7,500 tax credit

	2023	2024	2025	2026	2027	2028	2029	2030
Minimum % of critical minerals extracted or processed in U.S. or FTA partner countries, or recycled in North America	40%	50%	60%	70%	80%	80%	80%	80%
Minimum % of battery components manufactured or assembled in North America (U.S./Mexico/Canada)	50%	60%	60%	70%	80%	90%	100%	100%

*International Energy Agency, Global Electric Vehicle Outlook 2022, 2022, p. 4, **Credit Suisse, Treeprint US Inflation Reduction Act – A tipping point in climate action, 2022, p. 35.

§30D: New Clean Vehicle Credit

Clean Vehicle Credit:

- Credit equal to sum of $3,750 for critical mineral requirement + $3,750 for battery component per vehicle if the final assembly occurs in North America.
- Maximum MSRP for vehicle of $80,000 for vans, SUVs, trucks, and $55,000 for other vehicles
- MAGI limit of $300,000 (MFJ or Surviving Spouse), $225,000 (HOH), $150,000 (Single, MFS)
- Effective for any vehicle placed in service before January 1, 2033

Final Assembly: Process by which a manufacturer produces a new clean vehicle at, or through the use of, a plant, factory, or other place from which the vehicle is delivered to a dealer or importer with all component parts necessary for the mechanical operation of the vehicle included with the vehicle, whether or not the component parts are permanently installed in or on the vehicle

Transferability: If placed in service after 2023, sec. 30D(g) allows transfer to dealer if dealer discloses the credit and pays the taxpayer for the credit

Items of Note:

- Seller must report taxpayer's name and TIN, VIN, battery capacity, verify original use, and the credit amount to the IRS
- Manufacturer must enter into an agreement with IRS to make periodic reports
- Used EV credit contained in section 25E.

§45W: Businesses that purchase qualified commercial clean vehicles or mobile machinery may be eligible for the clean vehicle tax credit of up to $40,000 per vehicle

CREDIT OVERVIEW

- **Provision Description:** Provides a tax credit for purchasers of qualified commercial clean vehicles
- **Period of Availability:** Vehicles acquired and placed in service between 1/1/23 and before 12/31/32
- **Incentive Type:** Tax credit for commercial use including lease to third parties and direct pay for tax-exempt organizations
- **New or Modified Provision:** New

Nonrefundable and Nontransferable | Not Stackable with 30D (consumer) | No Limit to # of Credits | General Business Credit Terms Apply

Credit Amount:

Vehicle Weight	Hybrid	No ICE (BEV/Fuel Cell)
<14,000 lbs. (Light Duty)	Whichever is less: • **15%** of vehicle cost, **up to $7,500** • Incremental cost of hybrid over ICE	Whichever is less: • **30%** of vehicle cost, **up to $7,500** • Incremental cost of BEV/Fuel Cell over ICE
=>14,000 lbs. (Medium & Heavy Duty)	Whichever is less: • **15%** of vehicle cost, **up to $40,000** • Incremental cost of hybrid over ICE	Whichever is less: • **30%** of vehicle cost, **up to $40,000** • Incremental cost of BEV/Fuel Cell over ICE

ELIGIBILITY REQUIREMENTS

Available January 1, 2023 through December 31, 2032

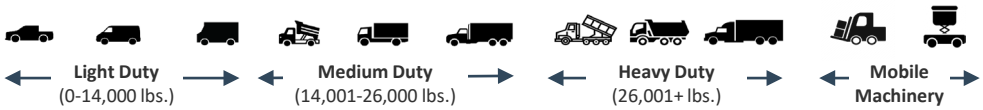
Organization Types and Usage:

- Businesses that acquire motor vehicles or mobile machinery for use or lease in the U.S.
- Tax-exempt entities that acquire motor vehicles or mobile machinery for use in the U.S.
- Must be for use in business, not for resale (includes leasing to others, e.g., car rental business)

Vehicle Types:

- Not subject to North American manufacturing and assembly requirements included in 30D
- Excludes trains
- Minimum of 7 and 15 kWh battery capacity for hybrids and BEVs under and over 14,000 lbs., respectively

Example eligible vehicles types (non-exhaustive):



HOW TO CLAIM THE CREDIT

- Monitor IRS website for release of relevant tax form (still finalizing form for businesses to file alongside federal tax return to claim credit and will post here when complete (IRS Forms))
- Review the IRS Guidance on assessing incremental cost and DOE study to compute the anticipated credit amount
- Collect and record vehicles' VIN along with the amount of the credit to prepare for tax forms

Sources: Deloitte Analysis, P.L. 117-119, WH IRA Guidebook, IRS Commercial Clean Vehicle Credit Overview, IRC.

§30C: Businesses that construct alternative fuel refueling infrastructure may be eligible for the clean fueling tax credit of up to $100,000 per installation

CREDIT OVERVIEW

- **Provision Description:** Provides a tax credit for the installation of alternative fuel vehicle refueling and charging property by businesses, tax-exempt entities, and individual taxpayers in the U.S.
- **Period of Availability:** Infrastructure placed in service between 1/1/23 and 12/31/32
- **Incentive Type:** Tax credit for personal and commercial installation
- **New or Modified Provision:** Modified and timeframe extended

Transferable | Direct Pay for Tax-exempt Organizations | No Limit to # of Credits | General Business Credit Terms Apply

Credit Amount for Individuals: 30% of costs, capped at $1,000 (excluding permitting and inspection)

Credit Amount for Businesses:

Prevailing Wage and Apprenticeship Requirements	Credit Amount (capped at $100K)
Meets requirements	30% of costs, excluding permitting and inspection
Does not meet requirements	6% of costs, excluding permitting and inspection

ELIGIBILITY REQUIREMENTS

Available January 1, 2023 through December 31, 2032

Organization Types and Usage:

- Businesses and tax-exempt entities that install a qualified refueling property placed in service in the eligibility timeframe. Fueling station owners who install qualified equipment at multiple sites are allowed to use the credit toward each single item in each location.
- Individuals who install a qualified refueling property at their principal residence.

Geographic Location:

Property must be placed in an eligible census tract as defined in under Sec. 45D(e), being either:

a) Low-Income Community with certain poverty rate and median income requirements; or

b) Non-urban area as defined by the Census Bureau

Source: CDFI Fund Mapping Tool

HOW TO CLAIM THE CREDIT

- File IRS form 8911 alongside their federal tax return to claim the credit (IRS Forms).
- Explore combining with State Grants for Highway Corridor Charging, State Rebates/Vouchers for Charging Purchases and Utility Make Ready (installation costs), and/or Rebate Programs to further lower upfront costs as well as grants that cover operations and maintenance.
- Evaluate stacking 30C with 48/48E for on-site electricity generation and storage.

Sources: Deloitte Analysis, P.L. 117-119, WH IRA Guidebook, IRC.

MANUFACTURING INCENTIVES

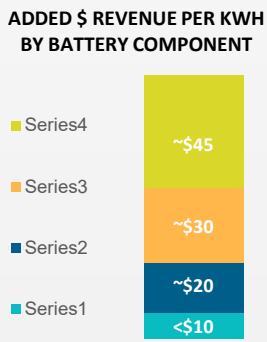
§45X: The advanced manufacturing production tax credit covers a wide scope of clean technology manufacturing activities and is one of the most impactful IRA provisions

CREDIT OVERVIEW

- **Provision Description:** Provides a production tax credit for domestic manufacturing of components for solar and wind energy, inverters, battery components, and critical minerals
- **Period of Availability:** Permanent for critical minerals. For other items, the full credit is available between 2023-2029 and phases down over 2030-2032.
- **Incentive Type:** Production tax credit. Permanent direct pay for tax-exempt entities. five-year direct pay for businesses until 2032.
- **New or Modified Provision:** New

Transferable | Direct Pay (for tax-exempt) | Not Stackable with 48 ITC for same project | No Limit to # of Credits

Tax Credit Amount (EV battery example):



Notes

- Bar chart is scaled to $100/kWh excl. module and pack manufacturing.
- §45X includes additional per kWh-based incentives for battery cell assembly into combined modules of approx. $10/kWh.
- Credit amounts vary by each type of eligible component. In the case of an eligible component sold during 2030, 2031, and 2032, the phase out percentages are 75%, 50%, and 25%, respectively.

ELIGIBILITY REQUIREMENTS

Available January 1, 2023 through December 31, 2032 for most components

Organization Types and Usage:

- Domestic manufacturers of eligible components

Eligible Components:

Solar Energy Components | Wind Energy Components | Inverters | Qualifying Battery Components | Critical Minerals

Eligible Activities:

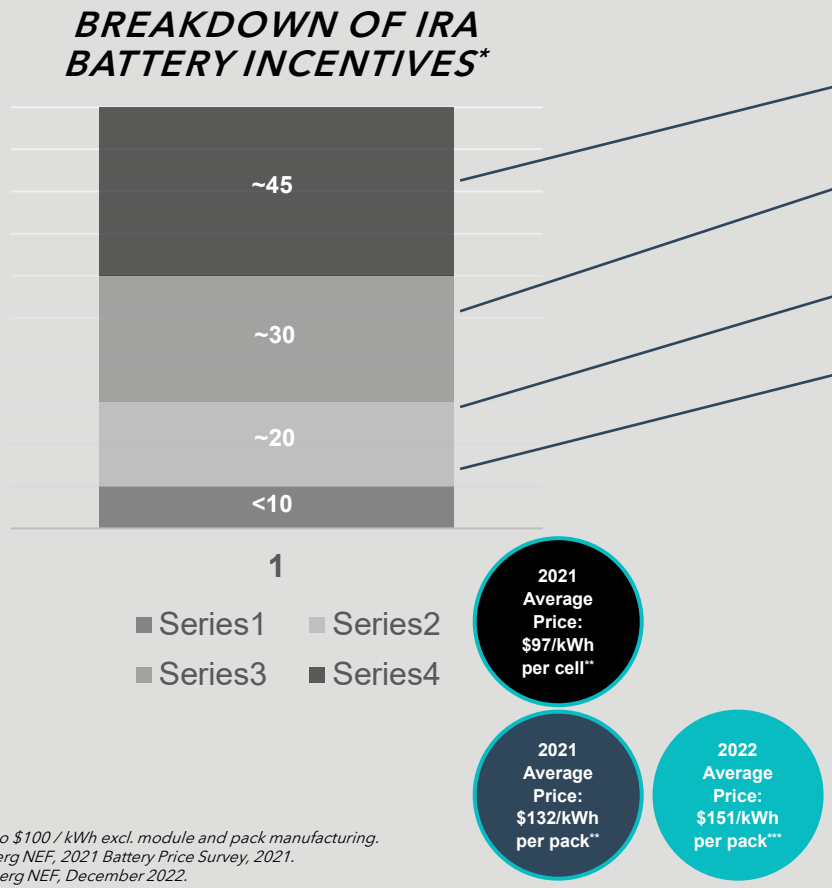
- Each value chain participant may stack the credit for every discrete manufacturing, integration, incorporation, or assembly step of eligible components

Activity	Materials Purifying & Processing	Active Materials Mfg.	Cell & Inactive Materials Mfg.	Assembly
Examples	Intermediate materials and purified aluminum, graphite etc.	Materials that contribute to electric conductivity (cathode, anode, electrolyte salts)	Materials incl. separators, housing	Battery module production

HOW TO CLAIM THE CREDIT

- Complete IRS Form 7207 to claim the Advanced Manufacturing Production Credit
- Follow the Instructions for Form 7207 released by the IRS when completing the form
- Reference additional information regarding the Advanced Manufacturing Production Credit

§45X: Improved Battery Economics and Stringent Domestic Content Requirements



*Indexed to $100 / kWh excl. module and pack manufacturing.
**Bloomberg NEF, 2021 Battery Price Survey, 2021.
***Bloomberg NEF, December 2022.

Up to $45 / kWh per battery cell + module produced

Cell Manufacturing and Inactive Material
Inactive materials includes separators, housing, etc.

Active Materials
Materials that contributed to electric conductivity such as anode and cathode powders as well as electrolytes.

Materials Processing
Intermediate materials such as lithium carbonate

Mining
Materials such as Lithium, Nickel, Cobalt and Graphite ore

KEY TAKEAWAYS

- The IRA proposes 50% of battery components to be manufactured in North America starting in 2023, increasing to 100% by 2029. The definition of 'North America' includes the U.S.-Mexico-Canada (USMCA) Trade Agreement participants.
- It also requires 40% of battery minerals to be from the U.S. or Free Trade Agreement (FTA) partners or recycled in North America, increasing by 10% p.a. until reaching 80% after 2026.
- The U.S. has FTAs with 20 countries including Canada, Mexico, Australia, Chile, and South Korea among others. This list does not include countries such as Japan, Indonesia, and Argentina which are critical to the battery supply chains.
- IRC §45X includes additional per kWh-based incentives for battery cell assembly into combined modules. The credit begins phasing down for components in 2030 until no credit sold in 2033 or after. The critical minerals component does not expire.

§45X: Advanced Manufacturing Production Credit
Battery Components and Credit

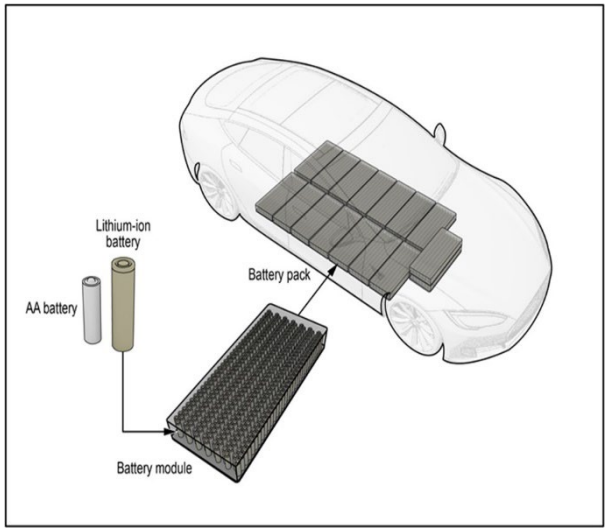


Image Source: Risks to Emergency Responders from High-Voltage, Lithium-Ion Battery Fires Addressed in Safety Report, https://www.ntsb.gov/news/press-releases/Pages/NR20210113.aspx, Date accessed October 18, 2022

45X Credit Example

Battery Cell	
Battery Cell Density	100
Cell Density ≥ 100 watt-hours per liter?	Yes
Battery Cell Watt-Hour Storage	12
Storage ≥ 12 Watt-Hour?	Yes
Number of Cells Produced	20,000,000
Kilo-Watt Hour	0.50
Credit Amount	$35
Total Credit	**$ 350,000,000**

Battery Cell – means an electrochemical cell—

- **(I) comprised of 1 or more positive electrodes and 1 or more negative electrodes,**
- **(II) with an energy density of not less than 100 watt-hours per liter, and**
- **(III) capable of storing at least 12 watt-hours of energy.**

Battery Module – means a module

- **in the case of a module using battery cells, with two or more battery cells which are configured electrically, in series or parallel, to create voltage or current, as appropriate, to a specified end use, or**
- **with no battery cells, and**
- **with an aggregate capacity of not less than seven kilowatt-hours (or, in the case of a module for a hydrogen fuel cell vehicle, not less than 1 kilowatt-hour). A module consists of several cells generally connected in either series or parallel.**

Battery Cells and Modules have limitations under 45X(b)(4) that capacity shall not exceed capacity-to-power ratio of 100:1.

"Cell, modules, and packs – Hybrid and electric vehicles have a high voltage battery pack that consists of individual modules and cells organized in series and parallel."

-- A Guide to Understanding Battery Specifications MIT Electric Vehicle Team, December 2008, http://web.mit.edu/evt/summary_battery_specifications.pdf, accessed October 18, 2022.

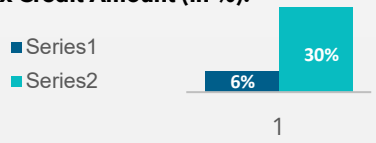
ELECTRODE ACTIVE MATERIAL - The term 'electrode active material' means cathode materials, anode materials, anode foils, and electrochemically active materials including solvents, additives, and electrolyte salts that contribute to the electrochemical processes necessary for energy storage.

§48C: The Advanced Energy Project Credit provides funding for clean technology manufacturing and investments in energy efficiency and GHG reduction in industrial facilities

CREDIT OVERVIEW

- **Provision Description:** Provides a tax credit for investments in manufacturing capacity for clean energy technologies (including production and recycling), projects to reduce industrial GHG emissions and energy consumption, and critical minerals processing and recycling facilities
- **Period of Availability:** Round 1 applications begin May 31, 2023, and funding is available until first round of credits is allocated ($4 billion, ~$1.6 billion earmarked for energy communities). Round 2 applications will likely begin when first round of funding is exhausted.
- **Incentive Type:** Allocated investment credit. Provides $10 billion of allocations, at least $4 billion of which must be allocated to energy communities.
- **New or Modified Provision:** Modified and extended. §48C was enacted in 2009 and fully allocated in 2013. IRA provides $10 billion of new allocations, directs a minimum share to energy communities, and expands eligibility to new types of projects.

Tax Credit Amount (in %):



Bonus Credit is awarded for meeting Prevailing Wage & Apprenticeship requirements (5x bonus multiplier times the base)

ELIGIBILITY REQUIREMENTS

Concept papers due July 31, 2023 for Round 1: Funds available until exhausted

Organization Types and Usage:

Manufacturing facilities for renewables equipment/components, grid modernization, CCUS, low carbon fuels, energy conservation, and EV/fuel cell vehicles, among other technologies.

Qualifying Facilities:

1) Re-equip, expand, or establish an industrial or manufacturing facility for the production or recycling of eligible components;
2) Re-equip an industrial or manufacturing facility with equipment to reduce GHG emissions by 20% through the installation of low-carbon heat systems, CCUS, energy efficiency and reduction in waste, or any other eligible industrial technology to reduce GHG emissions; or
3) Re-equip, expand, or establish a facility for processing, refining, or recycling critical minerals

Selection Criteria:

HOW TO CLAIM THE CREDIT

- Submit project concept papers to the Department of Energy (DOE) via the eXCHANGE portal by July 31, 2023. Following submission of a concept paper, DOE will encourage or discourage taxpayers from submitting a joint application for DOE recommendation and for IRS §48C cert.
- An applicant who receives a certification has two years from the date of issuance of the certification to place the project in service and notify the DOE Secretary through the eXCHANGE portal. The taxpayer can then claim the credit on its income tax return for the taxable year in which the project was placed in service.
- Review the initial IRS guidance on prevailing wage and apprenticeship requirements
- Submit IRS Form 3468 in taxable year that project was placed in service

§48C: Advanced Energy Project Credit
General Considerations

First enacted as part of the American Recovery and Reinvestment Act of 2009 ("ARRA"), the stated goal of the 48C program is to incentivize manufacturing of advanced energy property designed to reduce greenhouse gas emissions. The 48C program is administered by the Internal Revenue Service ("IRS"), in consultation with the Department of Energy ("DOE").

The Inflation Reduction Act of 2022 ("IRA") funds the 48C program with an additional $10 billion allocation in credits.

Through a rigorous and competitive application process, a **credit of up to 30%** of a qualifying advanced energy project's eligible property may be available. Funding will be made available via at least two application rounds, with the **first-round opening May 31, 2023,** and totaling $4 billion of the available credits.

Certain **wage and apprenticeship requirements** must be met for a project to be eligible for the 30% alternative rate. Otherwise, a 6% base rate is used to calculate the credit.

Direct Pay Option available for certain tax-exempts

Initial program guidance was released on February 13, 2023, and **additional guidance is expected by May 31, 2023**

First round of Concept Papers are **due by July 31, 2023**.

$4 billion is set aside for projects located in a specific subset of energy communities - census tracts (and adjoining census tracts) in which after 1999, a coal mine closed or after 2009, coal-fired units closed, and in which no project previously received a 48C certification.

Transferability Option available for taxable entities

No double benefit on any qualified investment or facility for which credits are claimed under sections 48, 48A, 48B, 48E, 45Q, 45V, and 45X.

Note: Taxpayers may not claim section 45X for any component which is produced at a facility and the basis of any property included in such facility is taken into account for section 48C.

RENEWABLE ENERGY INCENTIVES

§45: The extended and increased PTC increases renewable electricity projects' rate of return, particularly for solar and wind

CREDIT OVERVIEW

- **Provision Description:** Provides a tax credit for production of electricity from renewable sources
- **Period of Availability:** Projects beginning construction before 1/1/25
- **Incentive Type:** Production tax credit
- **New or Modified Provision:** Modified and extended. Extended for projects beginning construction before 1/1/25. Modified to tie value of credit to meeting prevailing wage and apprenticeship requirements.

Transferable | Direct Pay (for tax-exempt) | Not Stackable with 48 ITC for same project | No Limit to # of Credits | General Business Credit Terms Apply

Credit Amount:

Rate	Multiplier	Construction Start Date 2023-2024 (cents/kWh)
Base Rate (labor requirements not met)	Base Credit	0.5 cents
	Domestic Content Bonus	0.1 cents
	Energy Community Bonus	0.1 cents
Full Rate (labor requirements met)	Base Credit	2.6 cents
	Domestic Content Bonus	0.3 cents
	Energy Community Bonus	0.3 cents

ELIGIBILITY REQUIREMENTS

Available for construction start dates before January 1, 2025

Organization Types and Usage:

- Businesses that own or develop renewable energy projects
- Tax-exempt entities that fall under subtitle F of the IRC, Indian Tribal governments, rural electricity co-ops among others that own or develop renewable energy projects

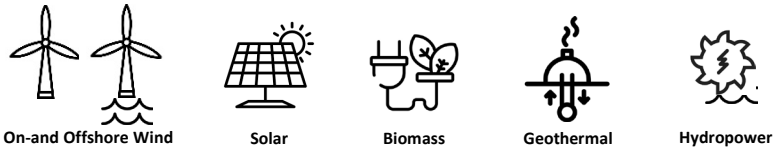
Project Types:

- Electricity generation from wind, solar, biomass, geothermal, small irrigation, landfill and trash, hydropower, and marine and hydrokinetic sources

Construction Start Date:

- Construction start date dictates eligibility for PTC and rate; however, PTC is claimed in the tax year that the facility is placed in service (see IRS Guidance on construction start date)

Example project types (non-exhaustive):



HOW TO CLAIM THE CREDIT

- Fill out and file IRS Form 8835 or IRS Form 3800 to claim the PTC
- Review the initial IRS guidance on prevailing wage and apprenticeship requirements
- Look up additional information regarding the PTC in the Database of State Incentives for Renewables & Efficiency (DSIRE)

Sources: Deloitte Analysis, H.R.5376 - Inflation Reduction Act of 2022, WH IRA Guidebook, DoE Solar Energy Technologies Office, IRC.

§45Y: The clean electricity PTC comes online in 2025 and features a high threshold for phase-out, likely extending its availability beyond 2032

CREDIT OVERVIEW

- **Provision Description:** Provides a technology-neutral tax credit for production of clean electricity. Replaces the PTC for electricity generated from renewable sources which is available until 12/31/24.
- **Period of Availability:** Facilities placed in service after 12/31/24. Phase-out starts the later of a) 2032 or b) when U.S. GHG emissions from electricity are 25% of 2022 emissions or lower.
- **Incentive Type:** Production tax credit
- **New or Modified Provision:** New

Credit Amount (only full rate shown below):

Rate	Multiplier	Construction Start Date			
		2025-33 (cents/kWh)	2 Years after applicable year	3 Years after applicable year	4 years after applicable year
Full Rate (labor requirements met)	Base Credit	2.6 cents	2.0 cents	1.3 cents	0.0 cents
	Domestic Content Bonus	0.3 cents	0.2 cents	0.1 cents	0.0 cents
	Energy Community Bonus	0.3 cents	0.2 cents	0.1 cents	0.0 cents

ELIGIBILITY REQUIREMENTS

Available for facilities placed in service between January 1, 2025 and likely 2032 and beyond

Organization Types and Usage:

- Businesses that own or develop renewable energy projects
- Tax-exempt entities that fall under subtitle F of the IRC, Indian Tribal governments, rural electricity co-ops among others that own or develop renewable energy projects

Project Types:

- Applies to generation facilities that have an anticipated GHG emissions rate of zero

Construction Start Date & Phase-Out:

- Construction start date dictates eligibility for PTC and rate; however, PTC is claimed in the tax year that the facility is placed in service (see IRS Guidance on construction start date)
- The credit will be phased out as the U.S. meets its GHG emissions reduction targets. (Facilities can claim 100% of credit in the first year after reaching the target, 75% in Year 2, 50% in Year 3, and 0% in Year 4)

Notes: The term "applicable year" is defined as the later of a) 2032 or b) the year the Treasury determines that the electric power sector emits 75% less carbon than 2022 levels.
Sources: Deloitte Analysis, H.R.5376 - Inflation Reduction Act of 2022, WH IRA Guidebook, DoE Solar Energy Technologies Office, IRC.

HOW TO CLAIM THE CREDIT

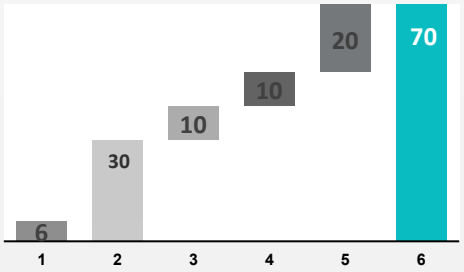
- Fill out and file IRS Form 8835 or IRS Form 3800 to claim the PTC
- Review the initial IRS guidance on prevailing wage and apprenticeship requirements to assess opportunities for credit adders
- Look up additional information regarding the PTC in the Database of State Incentives for Renewables & Efficiency (DSIRE)

§48: The extended and increased ITC increases renewable energy generation projects' rate of return and creates new opportunities for generation coupled with battery storage

CREDIT OVERVIEW

- **Provision Description:** Provides a tax credit for investment in renewable energy projects
- **Period of Availability:** Projects beginning construction before 1/1/25
- **Incentive Type:** Investment tax credit
- **New or Modified Provision:** Modified and extended to include standalone energy storage with capacity of at least 5 kWh, biogas, microgrid controllers (20MW or less), and interconnection property for projects with 5MW or less

Credit Amount (in % of investment cost):



- **Prevailing Wage & Apprenticeship Bonus** qualifies projects for 5x bonus multiplier times the base
- **Domestic content bonus** provides additional 10 ppt
- **Energy community bonus** and **low-income bonus** provide an additional 10 ppt and 20 ppt credit, respectively

ELIGIBILITY REQUIREMENTS

Available for construction start dates between January 1, 2023 and December 31, 2024

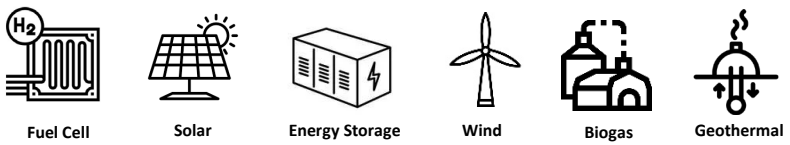
Organization Types and Usage:

- Businesses that own or develop renewable energy projects
- Tax-exempt entities that fall under subtitle F of the IRC, Indian Tribal governments, rural electricity co-ops among others that own or develop renewable energy projects

Project Types:

- Fuel cell, solar, geothermal, small wind, standalone energy storage, biogas, microgrid controllers, and combined heat and power properties. It includes solar powered heating and cooling as well as equipment that uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight or electrochromic glass

Example project types (non-exhaustive):



HOW TO CLAIM THE CREDIT

- Fill out and file IRS Form 3468 or IRS Form 3800 to claim the ITC
- Review the initial IRS guidance on prevailing wage and apprenticeship requirements and the Environmental Justice Solar and Wind Capacity Limitation to assess opportunities for credit adders
- Review additional information regarding the ITC which can be found online using the Database of State Incentives for Renewables & Efficiency (DSIRE)

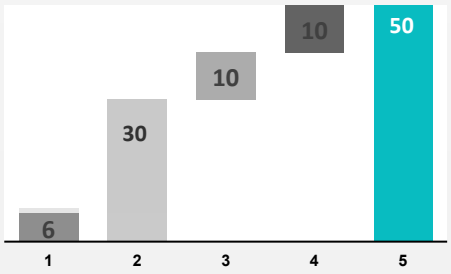
§48E: The clean electricity ITC becomes available in 2025 and features a high threshold for phase-out, likely extending its availability beyond 2032

CREDIT OVERVIEW

- **Provision Description:** Provides a technology-neutral tax credit for investment in facilities that generate clean electricity. Replaces the ITC for facilities generating electricity from renewable sources
- **Period of Availability:** Facilities placed in service after 12/31/24. Phase-out starts the later of a) 2032 or b) when U.S. GHG emissions from electricity are 25% of 2022 emissions or lower
- **Incentive Type:** Investment tax credit
- **New or Modified Provision:** New

Transferable | Direct Pay (for tax-exempt) | Not Stackable with 48 ITC for same project | No Limit to # of Credits | General Business Credit Terms Apply

Credit Amount (in % of investment cost):



- **Prevailing Wage & Apprenticeship Bonus** qualifies projects for 5x bonus multiplier times the base
- **Domestic content bonus** provides additional 10 ppt
- **Energy community bonus** provide an additional 10 ppt credit

ELIGIBILITY REQUIREMENTS

Available for facilities placed in service between January 1, 2025 and likely 2032 and beyond

Organization Types and Usage:

- Businesses that own or develop renewable energy projects
- Tax-exempt entities that fall under subtitle F of the IRC, Indian Tribal governments, rural electricity co-ops among others that own or develop renewable energy projects

Project Types:

- Facilities that generate electricity with a GHG emissions rate that is no greater than zero and qualified energy storage technologies

Construction Start Date & Phase-Out:

- Construction start date dictates eligibility for ITC. However, ITC is claimed in the tax year that the facility is placed in service (IRS Guidance on construction start date)
- The credit will be phased out as the U.S. meets its GHG emissions reduction targets. (Facilities can claim 100% of credit in the first year after reaching the target, 75% in Year 2, 50% in Year 3, and 0% in Year 4)

HOW TO CLAIM THE CREDIT

- Fill out and file IRS Form 3468 or IRS Form 3800 to claim the ITC
- Review the initial IRS guidance on prevailing wage and apprenticeship requirements to assess opportunities for credit adders
- Review additional information regarding the ITC which can be found online using the Database of State Incentives for Renewables & Efficiency (DSIRE)

Sources: Deloitte Analysis, P.L. 117-119, WH IRA Guidebook, IRC.

ELECTIVE PAYMENT (DIRECT PAY) AND TRANSFERABILITY (IRC SECTIONS 6417 AND 6418)

Elective Payment (Direct Pay)

Elective Payment – Adds section 6417 which allows an *applicable entity* or *electing taxpayer** to elect to be treated as having made a payment of tax equal to 100% of the value of the *applicable credit determined* for the taxable year. This provision applies to the following tax credits:

Direct Pay Election: Applicable Credits
Section 30C Alternative fuel vehicle refueling property credit
Section 45 Renewable electricity production tax credit
Section 45Q Carbon oxide sequestration credit*
Section 45U Zero-emission nuclear power production credit
Section 45V Clean hydrogen production credit*
Section 45W Qualified commercial vehicles (tax-exempt entity)
Section 45X Advanced manufacturing production credit*
Section 45Y Electricity production credit
Section 45Z Clean fuel production credit
Section 48 Energy investment tax credit
Section 48C Qualifying advanced energy project credit
Section 48E Clean electricity investment credit

***Electing taxpayer –** For the section 45V clean hydrogen production credit and the section 45Q carbon oxide sequestration credit, any taxpayer can elect direct pay for the first five years of the credit period. For the section 45X advanced manufacturing credit, any taxpayer can elect direct pay for any consecutive five years within the credit period. During these periods the taxpayer ("electing taxpayer") engaged in these tax credit qualified activities is treated as an applicable entity.

Timing – Generally, the election must be made by the applicable entity no later than the due date of the tax return for the taxable year for which the election is made (including extensions), but in no event earlier than February 13, 2023. The payment is generally treated as made on the later of (1) the due date (determined without regard to extensions) of the tax return, or (2) the date that the tax return is filed.

Elective Payment (Direct Pay)

Proposed regulations – definitions of applicable entity and electing taxpayer

Who can make a direct pay election?

- An "applicable entity" or "electing taxpayer."
- Election must be made with respect to each "applicable credit property" determined with respect to the "applicable entity" or "electing taxpayer."

What is an "applicable entity"?

- Includes, but is not limited to, section 501(a) tax-exempt organizations, governments of any U.S. territory, state, the District of Columbia, Indian tribal governments, or any political subdivision, agency or instrumentality thereof, and rural electric cooperatives, Alaska Native Corporations, and the Tennessee Value Authority.
  - All organizations described in sections 501(c) and 501(d), including public charities, private foundations, social welfare organizations, labor unions, business leagues, and religious or apostolic organizations.
  - Cities, counties, and other political subdivisions, including water districts, school districts, economic development agencies, and public universities and hospitals that are agencies and instrumentalities of states or political subdivisions.
- Agencies and instrumentalities of the United States are not defined as applicable entities.
- Co-owners of an undivided interest in applicable credit property, including an arrangement treated as a tenancy in common, or pursuant to a joint operating arrangement that has properly elected out of subchapter K under section 761.
- Partnerships and S corporations are not "applicable entities," even if some or all of their owners are applicable entities.

Elective Payment (Direct Pay)

Proposed regulations – the applicable credit property and determining the applicable credit

What is the "applicable credit property"?

- A ***property-by-property*** or ***facility-by-facility*** election except in the case of energy property described in section 48, where an applicable entity or electing taxpayer may choose to make the direct-pay election with respect to ***an energy project***.

How to determine the "applicable credit"?

- Special rules apply for tax exempt organizations and governmental entities allowing the amount of any applicable credit to be determined without regard to certain governmental and tax-exempt use restrictions under sections 50(b)(3) and (b)(4)(A)(i) and by treating any property as used in a trade or business of the applicable entity.
  - Allows for the determination of an applicable credit outside the unrelated business context.
  - Allows the use of accelerated depreciation for applicable credit property used in a trade or business.
  - Requires the application of the at risk rules (section 49) in the context of investment credit property and the passive activity rules (section 469) for all applicable credits when engaged in a trade or business.

Transferability

Transferability Election – Adds section 6418 which allows **an *eligible taxpayer*** to elect to transfer all (or any portion specified in the election) of an ***eligible credit determined*** to an unrelated taxpayer (within the meaning of section 267(b) or 707(b)(1)) for cash consideration. Such consideration is not includible in gross income of the transferor and is not deductible by the transferee. The transferee is not able to transfer the credit. This provision applies to the following eligible credits:

Transferability Election: Eligible Credits
Section 30C Alternative fuel vehicle refueling property credit
Section 45 Renewable electricity production tax credit
Section 45Q Carbon oxide sequestration credit
Section 45U Zero-emission nuclear power production credit
Section 45V Clean hydrogen production credit
Section 45X Advanced manufacturing production credit
Section 45Y Electricity production credit
Section 45Z Clean fuel production credit
Section 48 Energy investment tax credit
Section 48C Qualifying advanced energy project credit
Section 48E Clean electricity investment credit

Partnerships or S Corporations – With respect to a transferor that is a partnership or S corporation, any amount received as consideration is treated as tax-exempt income for purposes of sections 705 and 1366. Each partner's distributive share of such tax-exempt income is based on such partner's distributive share of the otherwise eligible credit for each taxable year. Similar rules apply in the case of S corporations and their shareholders.

Timing – Elections to transfer the credit must be made not later than the due date (including extensions) for the tax return for the taxable year for which the credit is determined, but in no event earlier than February 13, 2023. The credit is taken into account in the first taxable year of the transferee taxpayer ending with, or after, the taxable year of the transferor with respect to which the credit was determined.

Transferability

Proposed regulations – definitions of eligible taxpayer

Who can make a transfer election?

- Only an "eligible taxpayer" that is not an "applicable entity" or "electing taxpayer" otherwise eligible for the direct pay election.
- Election must be made with respect to each "eligible credit property" determined with respect to the "eligible taxpayer."

What is an "eligible taxpayer"?

- Any taxpayer that is not an applicable entity under section 6417(d)(1)(A).
- Partnership, S corporation, sole owner of a disregarded entity.
- Co-owners of an undivided interest in eligible credit property including an arrangement treated as a tenancy in common, or pursuant to a joint operating arrangement that has properly elected out of subchapter K under section 761.
- Member of a consolidated group.

What is the "eligible credit property"?

- A ***property-by-property*** or ***facility-by-facility*** election except in the case of energy property described in section 48, where an eligible taxpayer may choose to make the transfer election with respect to ***an energy project***.
  - Comments requested whether other groupings should be allowed.

Transferability

Proposed regulations – the eligible credit property and determining the eligible credit

Limitations on the "eligible credits" that can be transferred

- Once an eligible credit is transferred with respect to eligible credit property, the eligible credits cannot be transferred again (no second transfer rule).
  - As a result, while brokerage arrangements are allowed to facilitate transfers, dealer arrangements are not.
- An eligible taxpayer may also elect to transfer specified portions of an eligible credit to one or multiple transferees, but the same credit cannot be sold to different parties or double counted in any way.
- Determination of the eligible credit must be ***direct***.
  - An eligible taxpayer must directly own the underlying property or conduct activities giving rise to the underlying eligible credit or the transfer election cannot be made (i.e., the recipient of an election pursuant to section 45Q(f)(3)(B), and the lessee in a lease passthrough election under section 50(d)(5) and Treas. Reg. 1.48-4 cannot make the election).

How to determine the "eligible credit"?

- All federal income tax rules apply to determine the eligible credit amount including certain governmental and tax-exempt use restrictions under sections 50(b)(3) and (b)(4)(A)(i), and when applicable, the section 49 at risk rules.
- In contrast, taxpayer-specific utilization rules DO NOT apply when determining the eligible credit amount (e.g., limitations imposed under sections 38(b), 38(c) and section 469).
- Special rules apply for REITs (or partnerships with REIT partners) allowing the amount of any eligible credit to be determined without regard to the former section 46(e).

SIDLEY Deloitte. Exponent

LEGAL AND POLICY ROUNDTABLE

Our Speakers: Sidley

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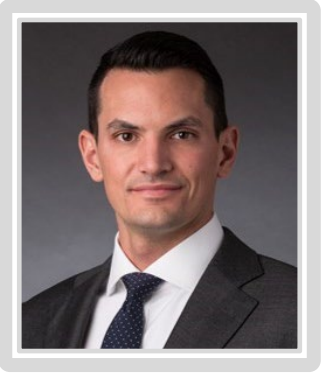
Sidley

Nicolas J.S. Lockhart
Partner
Sidley

Ted Murphy
Partner
Sidley

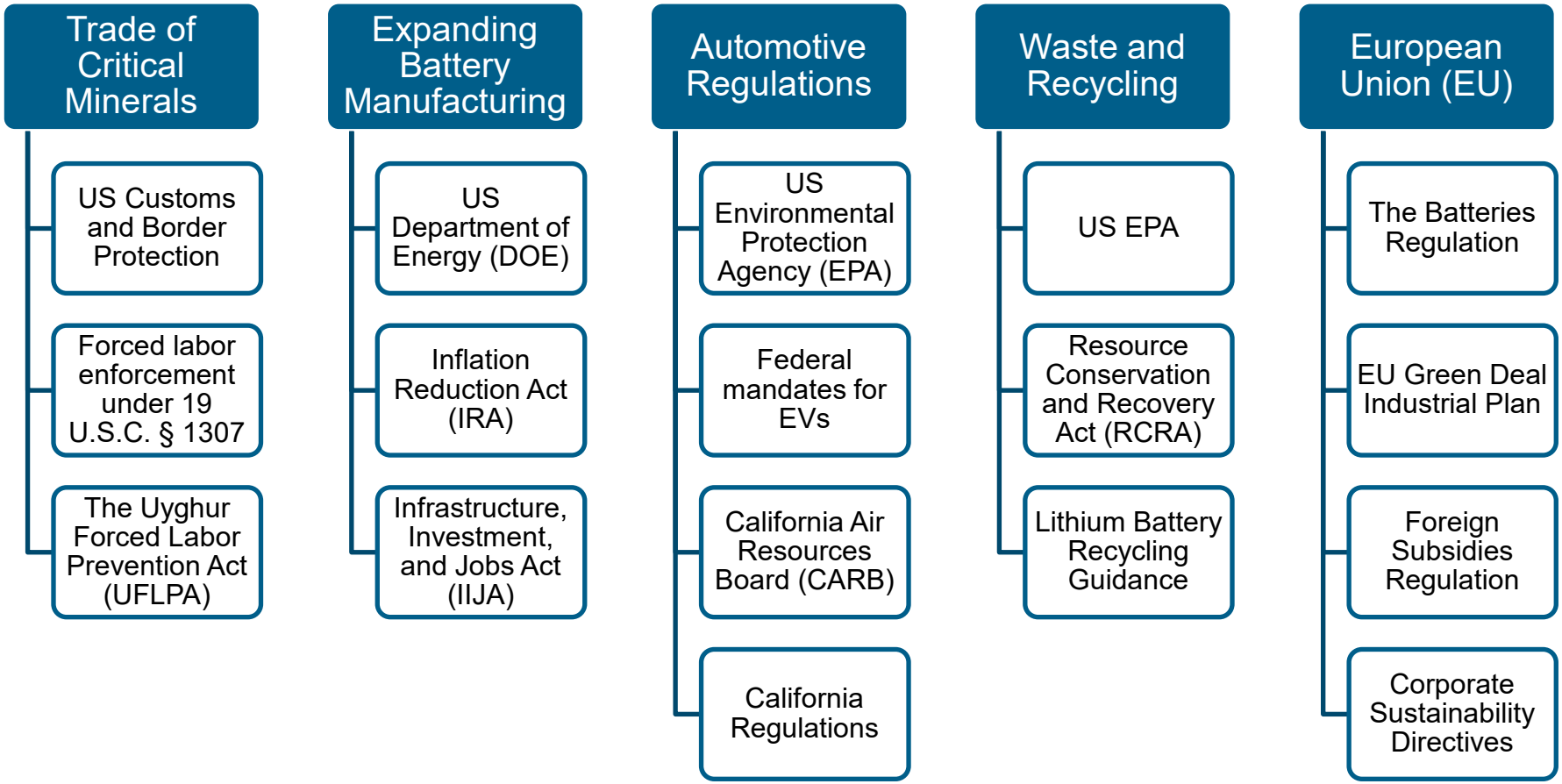
Justin A. Savage
Partner
Sidley

Brittany A. Bolen
Counsel
Sidley



Marshall R. Morales
Senior Managing Associate
Sidley

Legal and Policy Roundtable



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