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# ESG Expectations and Automakers

Carla Bailo, President & CEO, CAR



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for more information.



# Upcoming events

## Webinars (\*Affiliate Webinar)

- Paintline Operating Efficiencies with PPG OPTIMA SOLUTIONS™ | **September 22, 2021\***

## Affiliate Meetings

- CAR Fall Affiliates Dinner and Briefing | **October 6, 2021** | *American Center for Mobility & Live - Stream*
- Joint SEMI-CAR event | **October 27, 2021** | *Online*

## CALM Meetings

- CALM Q3 Meeting – **October 2021**
- CALM Q4 Meeting – **November/December 2021**

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# ESG Expectations and Automakers

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# MISSION:

to produce independent research, convene stakeholders, and analyze critical issues facing the mobility industry and its impact on the economy and society.

# THE CENTER FOR AUTOMOTIVE RESEARCH (CAR)

Automotive industry contract research and service organization (non-profit ) with more than 30 years experience forecasting industry trends, advising on public policy, and sponsoring multi-stakeholder communication forums.



## RESEARCH

Independent research and analysis on critical issues facing the industry.



## EVENTS

Industry-driven events and conferences that deliver content, context, and connections.



## CONNECT

Consortia that bring together industry stakeholders to participate in working groups, networking opportunities, and access to CAR staff.



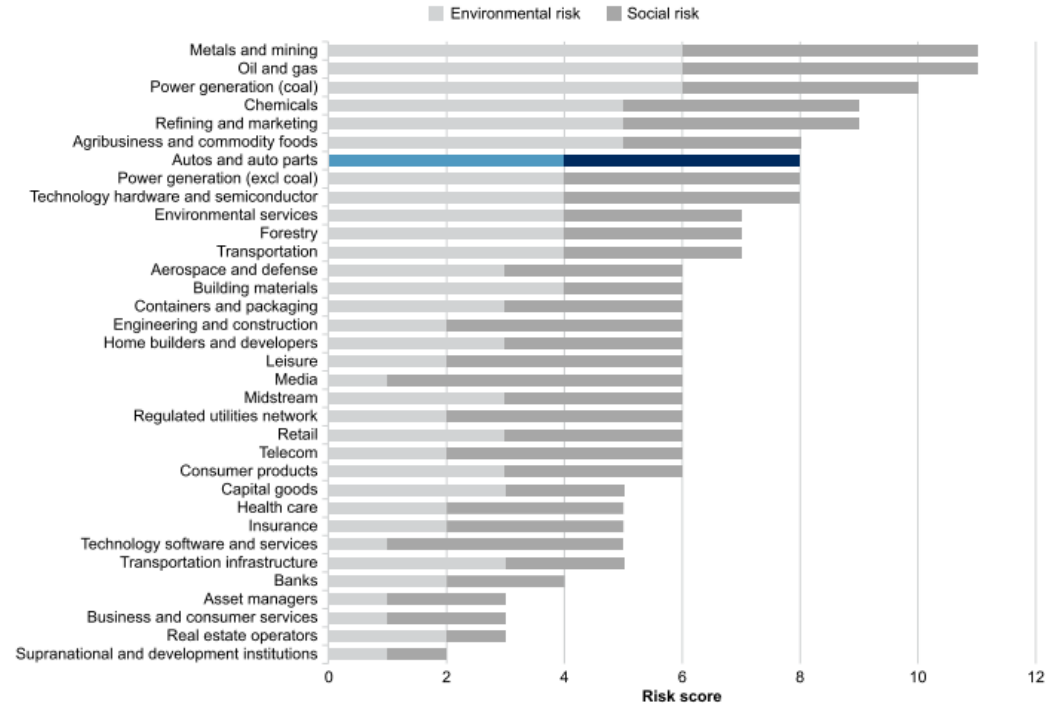
# Environment, Social, and Governance (ESG)

## ESG is having a moment. Why now?

- A perfect storm of drivers
  - The public is increasingly concerned about the environmental impact of their purchases and lifestyle decisions
  - Transportation has surpassed power generation as the highest polluting industry in the U.S.
    - As the power generation industry has replaced coal with renewables, the pressure on other industries to make comparable adjustments is growing
    - In personal transportation, public transportation remains a more environmentally option in terms of pollution per person per distance traveled, putting additional pressure on the automotive industry to make personal transportation cleaner
  - It's not just the environment
    - Factors ranging from the Black Lives Matter movement to the Me Too movement and others have resulted in consumers demanding greater diversity, accountability, and transparency from businesses
    - Future sustainability relies upon a workforce that believes in your contribution to society in terms of your product, carbon footprint, and business culture.

# Much at stake: Automakers and suppliers among the highest ESG risk sectors

ESG Sector Risk Atlas



Source: S&P Global Ratings.  
Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

# ESG is an increasing priority in the automotive industry

- Environment
  - Unprecedented shift to vehicle electrification
  - Green power sources for manufacturing and other operations
  - Zero waste plants and recycling efforts
  - Focus on full automotive value chain
    - From raw material sourcing to battery and vehicle end-of-life recycling – “wheels to wells”
- Social
  - Requirements for automotive suppliers to adhere to ESG
    - Suppliers account for ~2/3 of the value of a vehicle, so their involvement is crucial
  - Green logistics for input sourcing and vehicle distribution
  - Host community involvement and volunteering support
  - Diversity initiatives both at the company and supplier level
  - Strongly related to being able to hire competent staff
- Governance
  - Adherence to accounting and financial reporting standards that are more stringent than the minimum required by law

# ESG is driving not just automotive discourse, but also industry investment decisions

- CAR's Management Briefing Seminars (MBS)
  - Overlapped with Biden Administrations 5 August 2021 executive order on zero emissions vehicle sales
  - Numerous sessions featured ESG subjects
    - Environmental initiatives were the most common focus
- CAR's Affiliate Program
  - Great interest in ESG and a variety of sustainability-related subjects
  - Development of the Sustainability Database
- CAR's Automotive Communities Partnership (ACP)
  - Investment decisions increasingly require green power sources for facilities
  - Green supply chain management taken into consideration when locating plants and their supply chains

# ESG – Growing impact on automotive suppliers

- A total value chain perspective
  - Automakers include suppliers in reporting the environmental impacts of their enterprises
  - Suppliers can expect more requirements regarding
    - Green power for facilities
    - Green supply chain and logistics practices
    - Closer scrutiny of facility location distances
    - DEI
  - Wall Street has weighed in
    - ESG and other accountability measures are considered characteristics of safer investments
    - Stock price is being rewarded for obtaining good ESG scores (ISS and others)
  - ESG and good corporate citizenship are no longer just about good PR – they are key characteristics of a company and a key factor in the company's success and sustainability/resilience



# Environment

# Why the growing focus on ESG? EVs are changing the narrative



## REGULATORY

Global regulations are quickly moving to lower-carbon transportation



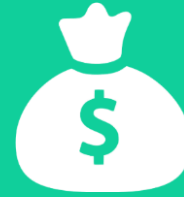
## TECHNOLOGY

Technology is more capable with longer range & lower costs



## PRODUCT

EVs will soon be available in every segment—from compacts to pickups



## FINANCE

Investors are rewarding market disruptors & sustainable companies



## MARKET

EV market share is increasing—unrelated to real gas prices



Biden Administration policies will likely be consistent with, and a driver of, ESG in mobility





*When I think of climate change, I think of — and the answers to it — I think of jobs. A key plank of our Build Back Better Recovery Plan is building a modern, resilient climate infrastructure and clean energy future that will create millions of good-paying union jobs — not 7, 8, 10, 12 dollars an hour, but prevailing wage and benefits.*

*—President Biden, [Remarks on 27 January 2021](#)*

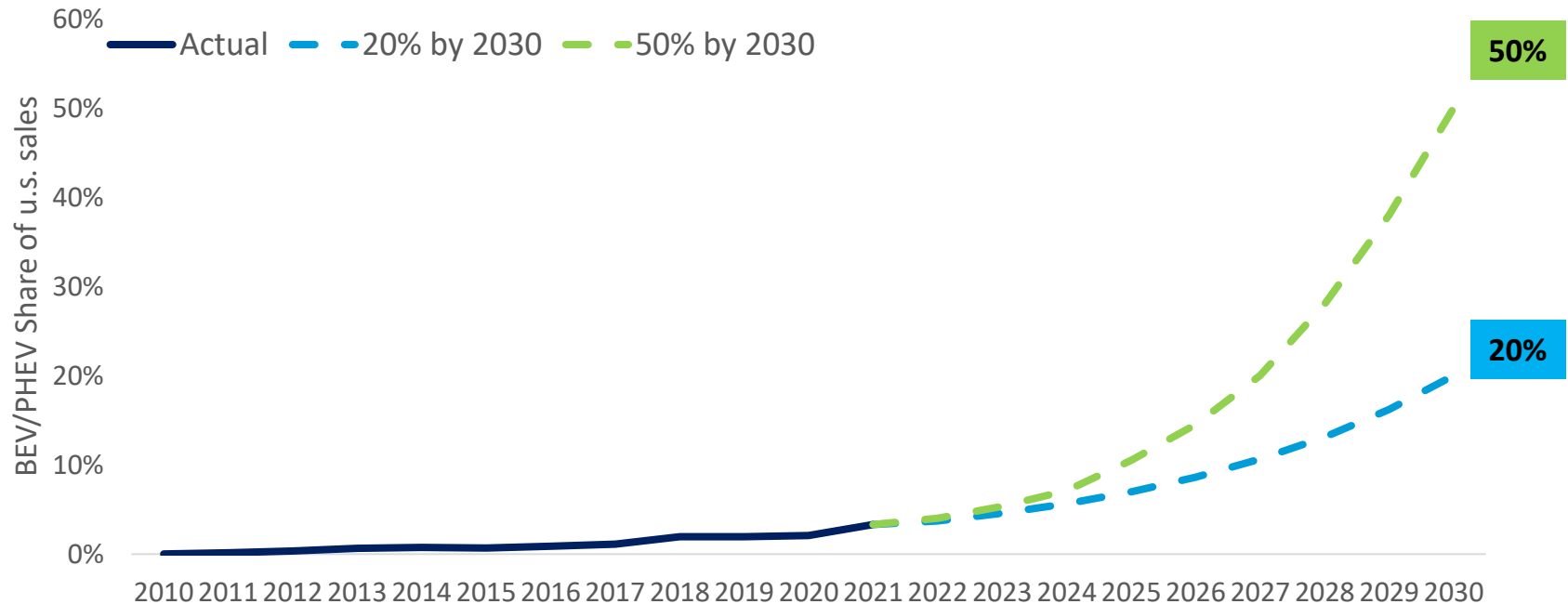
# Biden Administration Executive Order

## The path to 50%

- Announced 5 August 2021 at White House ceremony attended by representatives from General Motors, Ford, Stellantis, and UAW
- Goal of 50% sales of emissions-free vehicles by 2030
- Emissions-free vehicles defined as
  - Battery Electric Vehicles (BEV)
  - Plug-In Hybrid Electric Vehicles (PHEV)
  - Fuel Cell Electric Vehicles (FCEV)
- Automakers' pledges to meet the targets are voluntary
  - Critics point out they will not be held to the commitments
  - But prior company announcements and industry forecasts show the automakers already on a likely path to achieve compliance by 2030

# A long way to go to get to net zero by 2050

## 2010-2021 YTD actual; 2021-2030 projected

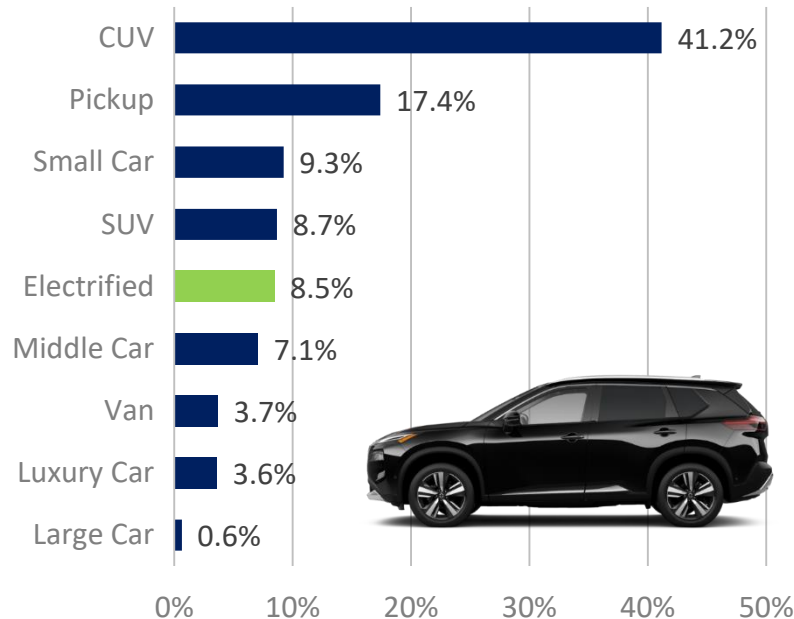


# The transition to electric power is already underway

## U.S. Light Vehicle Sales 2021 YTD Through July

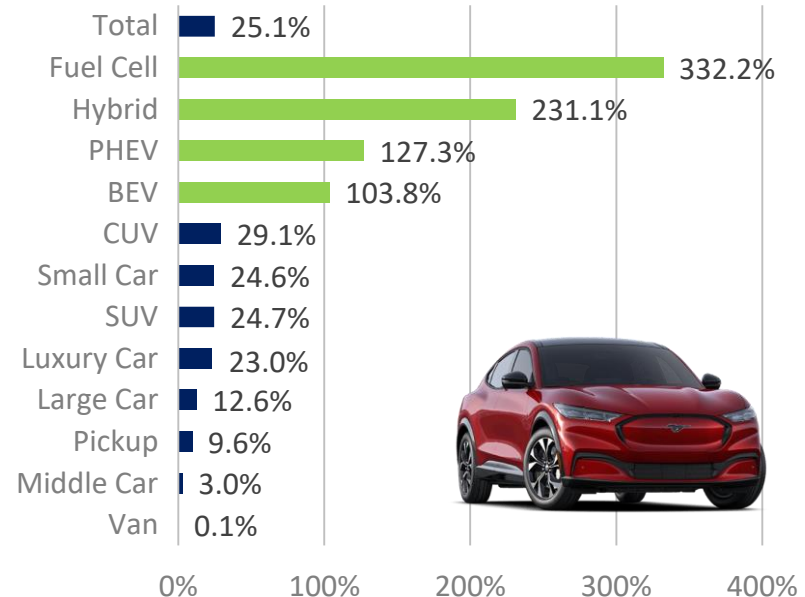
### Market Share: Segment Breakdown

U.S. Light Vehicle Sales 2021 YTD Through July



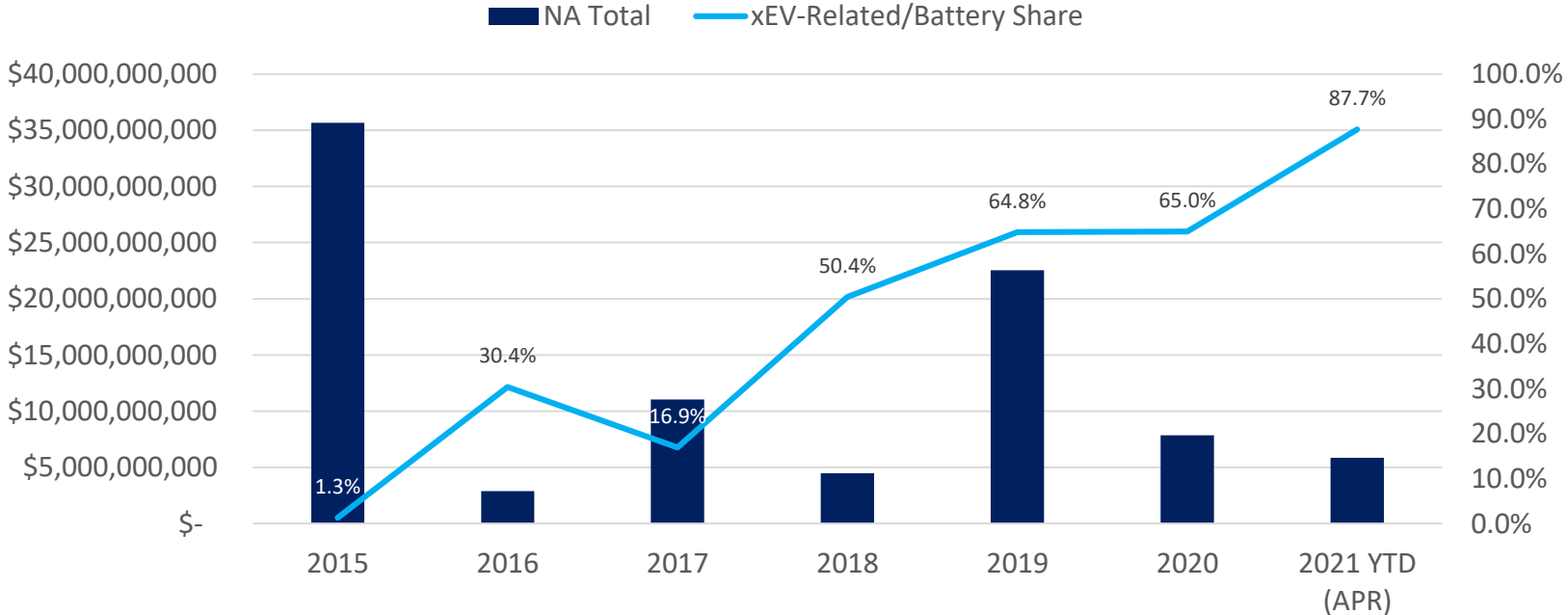
### Segment Breakdown: U.S. Light Vehicles Sales Percent Change

2021 YTD vs. 2020 YTD Through July



Note: Electrified Segment consists of BEVs, HEVs and PHEVs; all other segments are sales exclusive of Hybrid models

# Major impact of environment drivers on investment decisions: Since 2015, 34% of automaker investments announced in North America have been xEV/battery related



# 2021 Vehicle Portfolio Announcements/Expectations

- Audi – Aiming to end production of ICE vehicles by 2033 (outside of China)
- Bentley – 100% electric vehicle offerings by 2030
- BMW – Expects 15-25% hybrid or EV global sales by 2025
- Ford (Europe) – 100% electric vehicle offerings by 2030
- GM – 100% electric vehicle offerings by 2035
- Honda – 100% electric vehicle offerings by 2040
- Jaguar – 100% electric vehicle offerings by 2025
- Kia – Planning for 40% EV production by 2030
- Mazda – Plans to offer hybrid or EV variant for every nameplate by 2030
- Mitsubishi – Expects 50% hybrid or EV global sales by 2030
- Nissan (Key Markets) – 100% electric vehicle offerings by early 2030s
- Stellantis – Expects 70% (Europe) and 40% (USA) hybrid or EV by 2030
- Subaru – Expects 40% hybrid or EV global sales by 2030
- Volkswagen – 70% Europe, 50% US & China; electric vehicle offerings by 2030
- Volvo – 100% electric vehicle offerings by 2030
- Toyota – Will expand to 70 electrified models, including 15 new battery-electric models, by 2025

# Headline News

**Volkswagen has opened its first pilot plant for recycling electric car batteries.**

Salzgitter plant in Germany

Goal is industrial recovery and recycling of valuable battery contents.

“Volkswagen Group Components has achieved a further step in its sustainable end-to-end responsibility for the battery as a key component of electric mobility,”

**BMW’s Chinese factories to become carbon neutral by the end of 2021.**

BMW announced that its factories in China plan to reach carbon emissions neutrality by the end of this year.

Further plans to reduce carbon emissions in the entire Chinese region and production chain by 80% in 2030.

**Volvo committed 100% fully-electric offerings by 2030.**

The company is planning to (globally) phase out sale and production of ICE and hybrid vehicles by 2030.

2025 goal of 50% of global sales consisting of fully electric and hybrid vehicles.

**GM Committed to 100% fully-electric offerings by 2035.**

The company is planning to phase out the sale and production of ICE and hybrid vehicles by 2035.

This comes alongside GM’s commitment to be (globally) carbon-neutral by 2035.

# Much more to come: Automaker Financial Commitments

Automakers are making substantial financial commitments towards vehicle electrification and related technologies

- Announced Spending: **\$30B** (over 5 years)
- **\$12.8B** spent in 2020

Ford



- Announced Spending: **\$35B** (over 6 years)
- **\$11.5B** spent in 2020

GM



- Announced Spending: **\$46B** (over 10 years)
- **\$13.8B** spent in 2020

Mercedes-Benz



- Announced Spending: **\$34B** (over 5 years)
- **\$13B** spent in 2020

Stellantis



- Announced Spending: **\$83B** (over 5 years)
- **\$28.7B** spent in 2020

VW







# Examples of Social Initiatives and Issues

# General Motors

## 2020 Diversity Recognition

**2020 Top 50 Best  
Companies for Latinas  
to Work for in the U.S.,  
LATINA Style Inc.**

**Best Performing  
S&P 500 company in the  
2020 Equileap Gender  
Equality in the U.S. report**

**CEO Mary Barra  
Inducted into International  
Women's Forum Hall of Fame**

**Top Company  
National Organization on  
Disability 3 consecutive years**

**Top 50 DiversityInc  
5 consecutive years**

**Bloomberg Gender-Equality  
Index inclusion**

# Ford

## Diversity – Strategic Priorities

It is important that we embed our Diversity, Equity and Inclusion strategies into every part of our company to leverage our innovative workforce, compete in the marketplace and serve the community. Diversity, Equity and Inclusion is a collaborative effort across our entire enterprise. Here are just a few examples:



LEADING THE WAY



DIVERSE  
WORKFORCE



RESPECTFUL &  
INCLUSIVE  
CULTURE

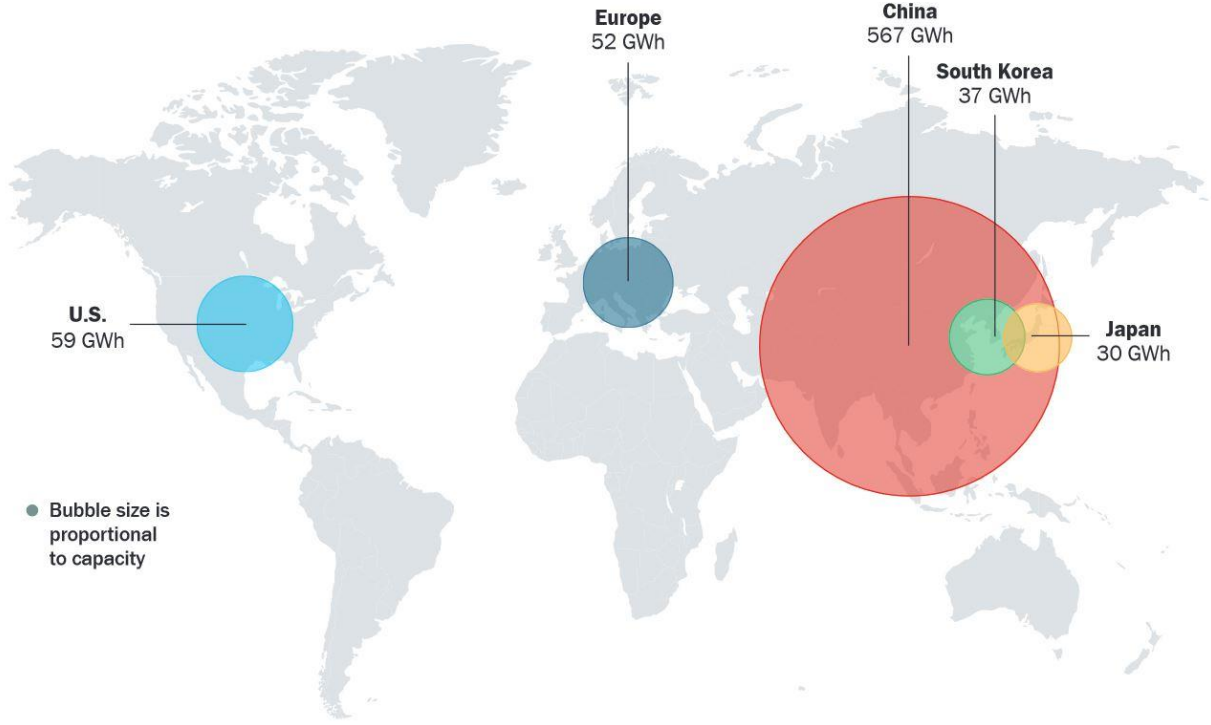
# ESG social conundrum example: Selling vehicles in China means assisting CCP with surveillance of its citizens

- All “new energy vehicles” in China now provide location data in realtime to the Chinese Communist Party (CCP) government.
- China has delegated 25 MHz of RF spectrum at 5.9 GHz, which will likely be used to expand this vehicle surveillance network to *all* new vehicles.

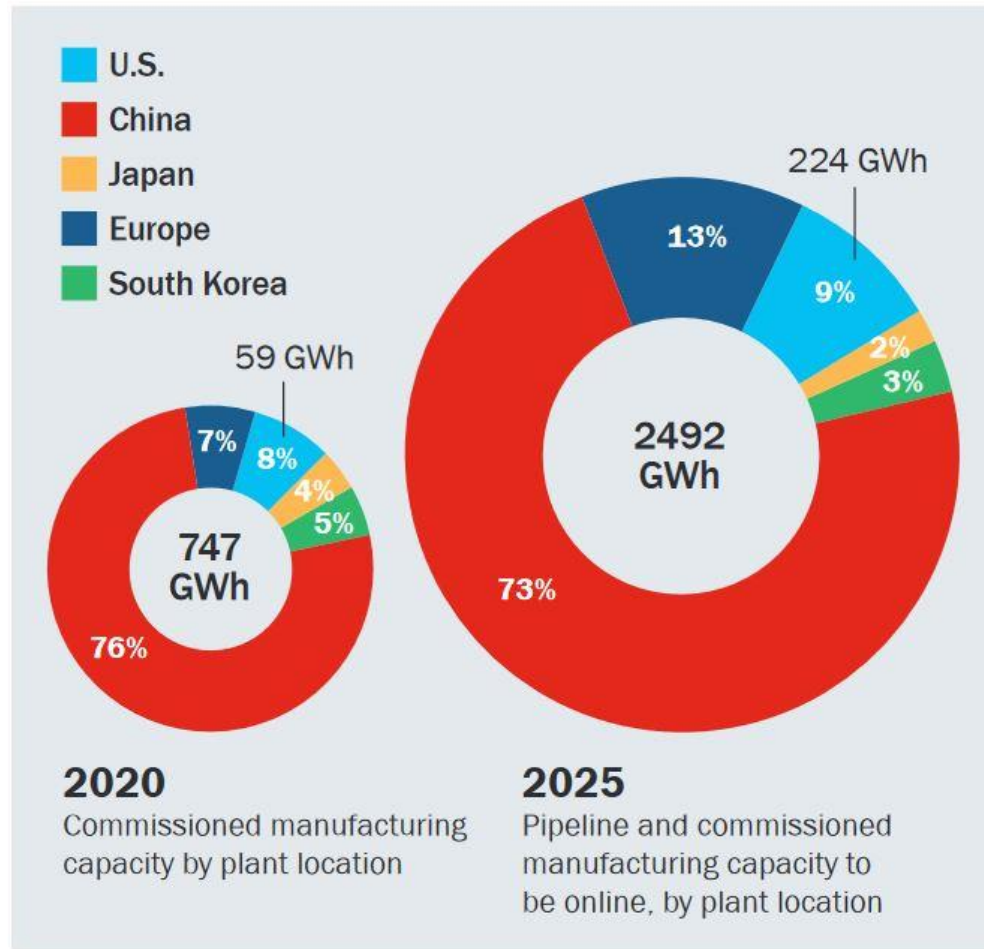


<https://qz.com/1522309/how-chinas-electric-car-surveillance-system-works/>

# Electric vehicle ESG issue: responsible battery sourcing: Lithium-Ion battery cell manufacturing capacity by region 2021



# Automotive ESG challenges will persist: Projected Growth in Lithium-Ion battery cell manufacturing capacity by region 2021



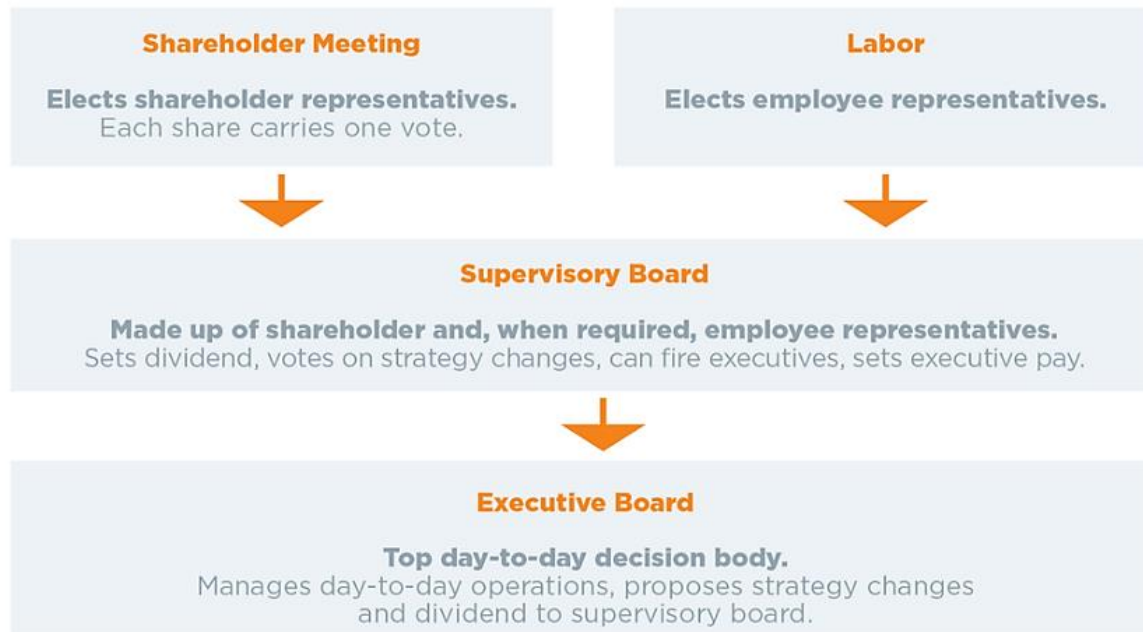
Source: Federal Consortium for Advanced Batteries, [National Blueprint for Lithium Batteries 2021-2030](#) and "Lithium-Ion Battery Megafactory Assessment," Benchmark Mineral Intelligence, March 2021.



# Examples of Governance Initiatives

# BMW Corporate Governance

In December 2020, BMW declared that all recommendations (and not just minimum requirements) of the German Corporate Governance Code will be complied with going forward.<sup>1</sup> The German system is unique in the amount of control ceded to labor and shareholders.



1. <https://report.bmwgroup.com/home/intro/>



# Ford

## Tracking Political Engagements

Ford strives to be open and transparent in how it engages and influences governmental agencies and public policy. Ford publishes an annual political engagement report to help achieve this goal.



The Ford PAC seeks to support candidates and committees that align with six principles, namely those who:

- 1** Champion manufacturing, mobility, and innovation policies of interest to Ford.
- 2** Represent districts or states with a large Ford presence.
- 3** Participate on a key committee relevant to Ford and/or its partners.
- 4** Serve in a leadership role or show potential as a future leader.
- 5** Maintain a track record of supporting Ford employees and operations.
- 6** Demonstrate public service consistent with building trust and acting with competence, integrity and serving others.



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# Thank You

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