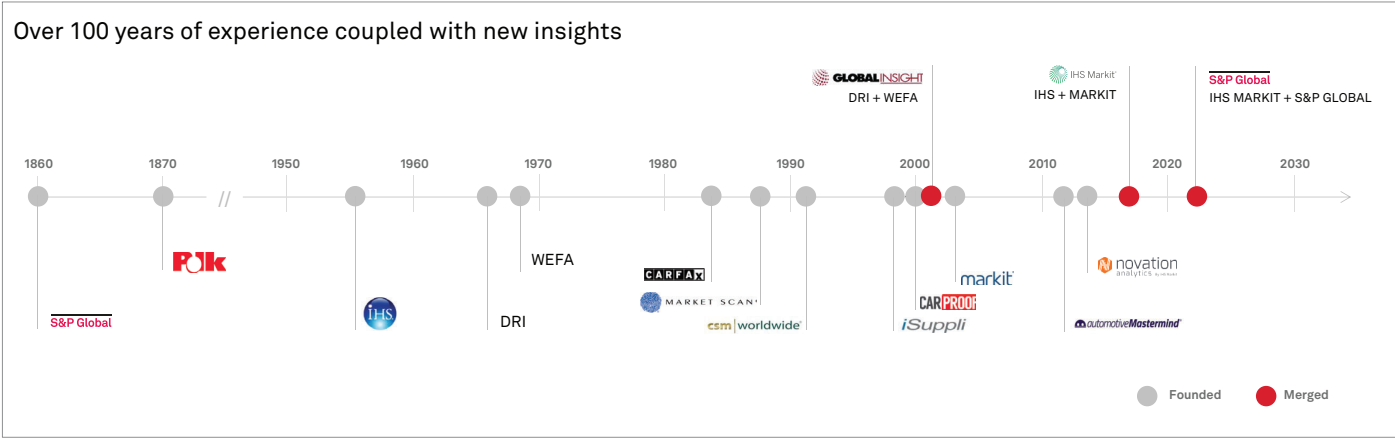


S&P Global Mobility

We provide market-wide insight, expertise, and advanced planning solutions for the automotive industry. With a legacy dating back to the 1920s when R. L. Polk published the first vehicle registration reports, we now deliver next-generation insights and solutions to help customers improve operational efficiency and inform confident strategic decisions. Our expertise spans every major market and the entire automotive value chain—from product planning to marketing, sales and the aftermarket. With a reputation of enabling better decisions and better results, the world’s leading automakers, suppliers, and their stakeholders rely on us to power growth, improve efficiency, and drive a sustainable competitive advantage.



About S&P Global Mobility

At S&P Global Mobility, we provide invaluable insights derived from unmatched automotive data, enabling our customers to anticipate change and make decisions with conviction. Our expertise helps them to optimize their businesses, reach the right consumers, and shape the future of mobility. We open the door to automotive innovation, revealing the buying patterns of today and helping customers plan for the emerging technologies of tomorrow.

S&P Global Mobility is a division of S&P Global (NYSE: SPGI). S&P Global is the world’s foremost provider of credit ratings, benchmarks, analytics and workflow solutions in the global capital, commodity and automotive markets. With every one of our offerings, we help many of the world’s leading organizations navigate the economic landscape so they can plan for tomorrow, today. For more information, visit www.spglobal.com/mobility.

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S&P Global
Mobility

Automotive Insights

Providing data, analytics and
insights driving better decisions
and better business results.

Welcome to S&P Global Mobility



Joe LaFeir
President,
Automotive Insights
S&P Global Mobility

The automotive industry is evolving at a pace that has never been seen in the history of the industry. This shift has seen the introduction of new regulations, the creation of substantial disruptors in the market and the drive from consumers for change. There will continue to be an evolution over the years and decades to come but one thing is for certain—S&P Global Mobility will continue to provide Essential Intelligence to automotive manufacturers, suppliers, and dealers along with their financial and agency partners.

This trust is built on a history of providing industry leaders with comprehensive, timely and actionable insights across the vehicle life cycle, from forecasting & planning and sales performance & marketing, to vehicles in use.

Our services provide you with a depth of understanding throughout the automotive sector. And, with the combined intelligence of other S&P Global divisions, we can provide enhanced outlooks on the related industries and broader market conditions.

Today, we are proud of our 100+ year heritage and look to continue to provide every sector of the industry with the information and insights they need to remain competitive.

For more information or to speak to an expert, please visit spglobal.com/mobility or contact us at mobility@spglobal.com.

Our approach

Our unparalleled expertise, best-in-class data assets, and deep industry insights drive critical decisions with speed and confidence. From custom projects to ongoing support, we offer a variety of solutions that can be tailored to meet your specific needs.



Market Sizing and Forecasting

Custom forecasts and scenario planning, diving into the details behind the forecast

- Performance and luxury
- State and micro-level
- Aftermarket
- Niche segments



Market Entry and Development

Reliable intelligence on new market opportunities and a partner to help launch new products or services

- Country-specific market analysis
- Competitive benchmarking
- Barriers to entry and risk assessment
- Distribution and sales channel analysis



Strategic Support Services

Access to industry and subject matter experts, critical data and trusted analysis

- IPO Support
- M&A analysis
- CIM vetting and creation



Executive Advisory Services

Dedicated support for key initiatives built on the foundation of a deep and enduring relationship between S&P Global Mobility and your executive team

- General or focused retainers
- On demand, easy to access support
- Flexibly engaging the ideal resources quickly

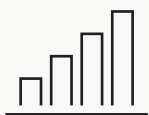
Transforming data into knowledge

Deep expertise, coupled with the largest commercial repository of automotive intelligence, can help you tackle your greatest strategic and operational challenges.

S&P Global Mobility is a world leader in critical automotive information, analytics, and expertise. We deliver next-generation insights and solutions to help customers with their greatest strategic and operational challenges. Now, as the automotive ecosystem moves from an ICE, single-owner vehicle to a connected, autonomous, shared, and electrified (CASE) computer on wheels, it has never been more important to have a window into the future and understand what it means for century-old business models. S&P Global Mobility can help you flesh out your strategic vision and test future scenarios for vehicle demand, use cases, and the viability of new technologies.

Global practice areas

Leveraging our unparalleled data and industry expertise, we can help you navigate uncertainty and make a meaningful impact on your long-term performance with custom research and analysis. Our six areas of competency include:



Market Strategy

Build and vet market strategies with in-depth analysis, custom scenario planning and insights from a trusted partner



Sustainability / EV Planning

Manage and measure CO₂ compliance and conduct global planning. Assess Net Zero competitiveness. Evaluate circular economy strategies



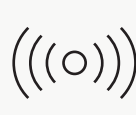
OEM Sales & Marketing

Drive market share, build loyalty and conquest strategies, leveraging expertise and analysis across diversity, customer profiles, retail transformation, and industry analysis



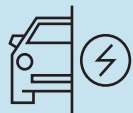
Dealer Network Planning

Optimize your retail network in an increasingly electrified and digital world with innovative methodologies and data sets, optimize territory design and dealer/market performance measurement



Auto Technology & Connected Car

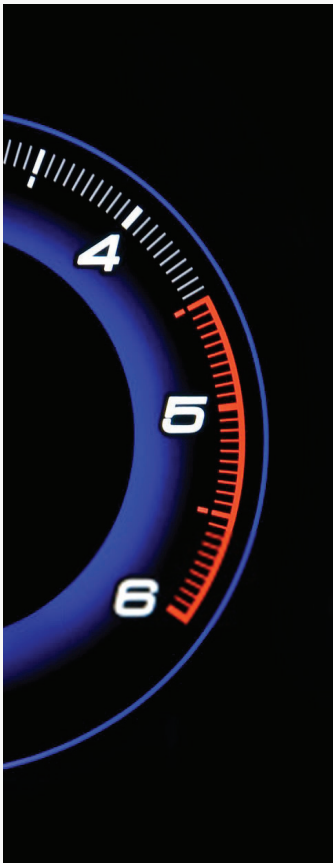
Prioritize, plan and measure connected vehicle technologies, SaaS and the enabling technologies and solutions



EV Charging Infrastructure

Plan ideal charging infrastructure volumes and optimal locations with the most robust micro-level forecast and comprehensive insights available

Table of contents: Every curve, covered



Forecasting & Planning

Helping you to understand the current market demand and what to expect in the future with a focus on vehicles, components, new disruptive technologies and the continued drivers for sustainability

Vehicle Demand	Page 5
Vehicle Production	Page 6
Technology	Page 7
Sustainable Mobility	Page 8

Sales Performance & Marketing

With our Polk data and advertising solutions amongst others we help customers to target the right audience, optimize sales channels and evaluate recent vehicle registrations

Marketing Activation	Page 10
Sales Optimization	Page 11
Industry Performance	Page 12

Vehicle in Use

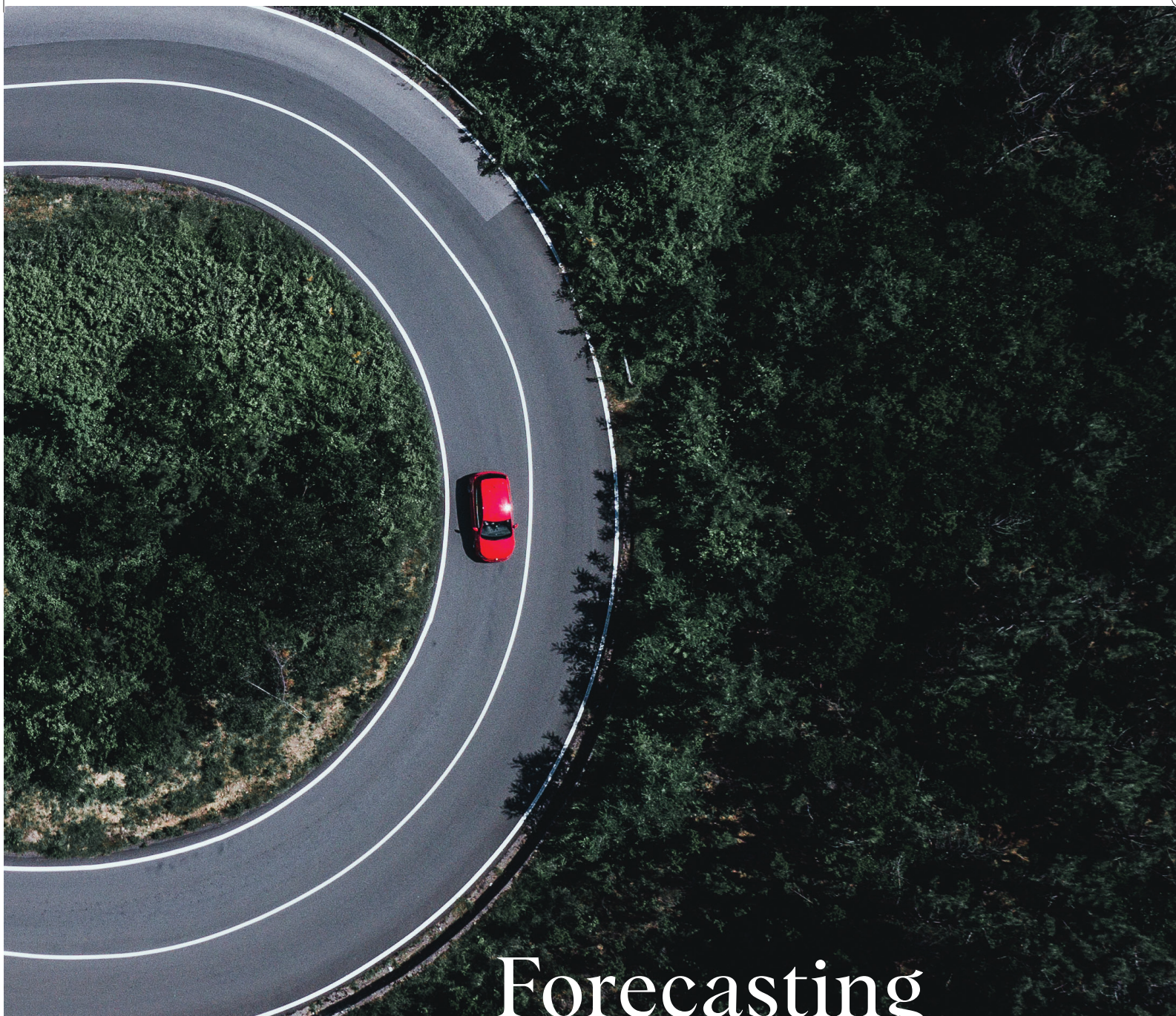
Better determine future parts demand, identify owners to facilitate recall or class action notifications, and decode VINs to understand vehicle specifications

Parts Demand & Fitment	Page 14
Owner Notification	Page 15
Vehicle Identification	Page 16

Automotive Consulting

Transform data into knowledge. Deep expertise, coupled with the largest commercial repository of automotive intelligence, can help you tackle your greatest strategic and operational challenges

Global Practice Areas	Page 18
Our Approach	Page 19



Forecasting & Planning

- Vehicle Demand
- Vehicle Production
- Technology
- Sustainable Mobility



Consulting Services

- Global Practice Areas
- Our Approach

Vehicle Identification

Correctly identify individual vehicle specifications including make, year, model, trim, engine, color, price and over 600 other vehicle data elements.

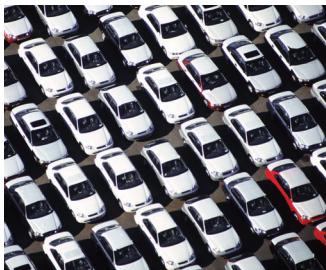
These services help car manufacturers, insurance companies and governments properly verify vehicles and drivers. S&P Global Mobility leverages its comprehensive vehicle registration database with industry-leading expertise, helping you identify exact vehicle specifications using VIN or license plate, accurately assess risk and speed up the insurance quoting process, reduce trade in fraud, incentive fraud or dealer fraud, discover damage that reduces resell value, and leverage fleet management or recovery services.

United States, Canada, Australia, Mexico



VINtelligence

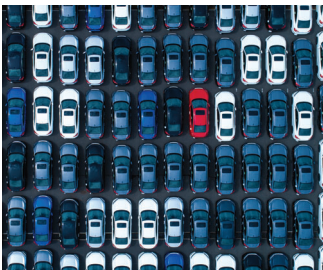
Correctly identify individual vehicle specifications including make, year, model, trim, engine, color, price and over 600 other vehicle data elements including insurance rating symbols, pre-1981 decoding, ACES (Aftermarket Catalog Enhanced Standard) and RV decoding. VINtelligence combines multiple data sources including decode specifications and OEM build data to provide great coverage, accuracy, and standardization for vehicles on the road



ACES VIN Specific

The automotive space has evolved over the past several years with new technologies, capabilities, and configurations. These changes have created challenges in accurately identifying vehicle specifications using historic VIN decoding methodologies. To address this, S&P Global Mobility has curated a set of VIN Specific (Build data, Window Sticker data) that is now mapped to the ACES standard.

United States



Vehicle Identification System

Obtain detailed information about US vehicles and their ownership. The system provides alternative methods of matching vehicle information against state vehicle records using a variety of different input options ranging from license plate or VIN to name and address



VIN Trace

Verify the sale of a vehicle (car, truck, motorcycle) in the United States that has been reported by a dealer through state title and registration records



FleetFind

Locate vehicles based on Vehicle Identification Numbers (VINs) including owners of fleet and leased vehicles with detailed US state registration information, including expiration dates and license plate numbers



Recover

Match (US) license plates to allow parking enforcement divisions to quickly identify the names and current addresses of people with outstanding parking and toll violations



Branded Title

Identify vehicles in the United States that have suffered damage that could significantly reduce the value of the vehicle, including categories for:

- Dismantled
- Flood
- Junk and Salvage
- Rebuilt
- Reconstructed
- Not Actual Mileage
- Exceeds Mechanical Limits



Incentive Verification Service

Validate and/or qualify incentive-program use at a (US) dealership which can reduce incentive fraud and automate the incentive verification process at the OEM

Vehicle Demand

Get insight on future market demand, segment growth, and competitive dynamics

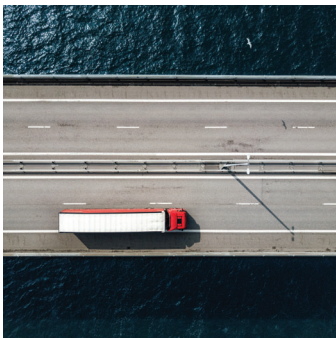
Understand demand for vehicles and vehicle 'ownership' tomorrow and three decades from now. Covering light, medium and heavy vehicles, we provide a range of sales forecasts to help you monitor competitive products, segment trends and anticipate future demand. We also bring clarity to future mobility trends including whether people will 'own' cars in the decades to come or if there will be a transition to a subscription or car share model? S&P Global Mobility enables you to anticipate future trends and ensure you have the inventory to increase your share of the market.



Light Vehicle Sales Forecast

Get insight on future market demand, segment growth, and competitive dynamics for vehicles under six tons

- Model Sales Forecast
- Sales-Based Powertrain Forecast



Medium- and Heavy-Commercial Vehicle Forecast

Access brand and model-family sales forecasts in over 90 and 70 countries respectively for vehicles over six tons

- Brand-Level Forecast
- Model-Family-Level Forecast
- Sales-Based Powertrain Forecast



Future Mobility Research

The automobile is on the precipice of change with electrification, connectivity, autonomy and ride-sharing challenging long established technologies and business models. Are you ready?

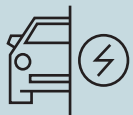
- Mobility and Energy Future
- Future Mobility Trends



Other Services

Competitive intelligence, strategic insights and forward-looking advice to give you an edge in today's ever-changing automotive landscape

- Headline Analysis and Topical Reports
- Demand Simulation Tool
- Consulting Services



Electrification Offerings: Access forecasts for alternative propulsions and understand new EV player

Vehicle Production

Identify new opportunities, defend against competitors, and optimize current programs, capacity and business performance

Essential intelligence to drive future product volume and planning strategies while mitigating risk due to industry disruption. Covering light, medium and heavy vehicles, we provide a range of forecasts for brand, model and powertrain production. These services enable you to understand projected volumes, future vehicle cycle plans, plant capacity utilization, and the rapidly changing share of powertrain options due to electrification and hydrogen technologies. Vehicle Production Forecasts from S&P Global Mobility are the industry standard for strategic planning and business management. This intelligence is essential for suppliers that provide the raw materials and the individual components that become part of the finished car or truck.



Light Vehicle Forecast

Covering 95% of the entire global automotive industry, our global automotive forecasting team provides reliable and independent understanding of future supply and demand for vehicles

- Model Production Forecast
- Engine Forecast
- Transmission Forecast
- Alternative Propulsion Forecast



Medium- and Heavy-Commercial Vehicle Forecast

Access brand and model production forecasts in over 50 countries for vehicles over six tons

- Brand-Level Forecast
- Model-Level Forecast
- Plant Capacity Forecast
- Engine Forecast
- Alternative Propulsion Forecast



Other Services

Competitive intelligence, strategic insights and forward-looking advice to give you an edge in today's ever-changing automotive landscape

- Headline Analysis and Topical Reports
- Consulting Services

Owner Notification

The most accurate source of current and historical vehicle ownership within the United States in order to implement and manage a successful vehicle recall campaign and address class action audiences.

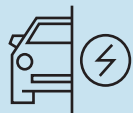


US Recall Services

This suite of services helps you implement and manage a successful vehicle recall campaign by providing access to a daily updated VIN database of more than eleven billion automotive, truck, trailer, bus, RV and motorcycle owner records in the United States. Includes access to enhanced data for sales and lease/lien records, email addresses and phone numbers, out of transit reporting including branded title coding, dealerization and data disaster recovery as well as add-on services

US Class Action and Litigation

When a class action lawsuit arises, it is paramount that the defendants and plaintiffs have access to accurate, comprehensive vehicle and owner data to properly analyze and define the size and value of the class to assist in supporting the litigation process. Once the class action settles, it is important to be able to identify the current and historical owners included in the class to support quick, accurate notification. S&P Global Mobility's Class Action and Litigation Services provides the most accurate and trusted owner information for each motor vehicle affected by a class action lawsuit



Electrification Offerings: Understand production-based alternative propulsion forecasts

Parts Demand & Fitment

Enables automotive professionals to maximize market share, identify emerging market trends, and optimize inventory and product management.

S&P Global Mobility provides a single global source of aftermarket insight enabling automotive professionals to drive increased parts revenue and reduced cost with a more comprehensive, accurate, and timely view of vehicles in operation, OE parts research, aftermarket parts cataloging and VIO forecasts. Our data-driven solutions help you maximize market share, identify emerging market trends, and optimize inventory and product management – locally, globally or somewhere in between.



AftermarketInsight

A business intelligence platform supporting aftermarket strategic planning, based on vehicles in operation forecasts and other key factors that drive the industry



Vehicle Miles Traveled

The most complete, consistent and detailed view of vehicle mileage for nearly one billion vehicles around the world



Technology VIO

Gain a deeper understanding of how electrification, autonomy and connectivity are propagating over time through VIO creating visibility into which competing technologies might emerge and win in the marketplace with hundreds of technology attributes added to current and forecast VIO



US Commercial Vehicle Aftermarket Parts Demand

Accurately analyze component demand and identify new market opportunities with the United States



Electrification Offerings: Access the E-mobility Technology VIO forecast to understand technology coverage across 69 countries/territories with hundreds of attributes to identify new markets.

Technology

A wealth of original thought leadership, data, forecasts and analysis for components, technologies and the vehicle ecosystem

S&P Global Mobility provides the ability to access a wealth of recognized thought leadership, data, and analysis on a broad spectrum of industry topics and sectors. Our solutions provide automakers and suppliers with unique insights on over a dozen domains, 150+ components and three hundred technologies that make up the car along with new trends such as data monetization and autonomous driving.

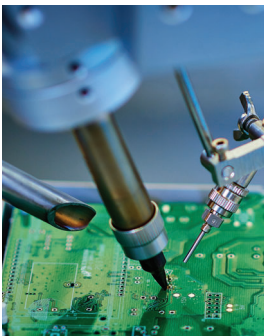


AutoTechInsight

A business intelligence platform providing access to component and technology research, thought leadership and analysis. AutoTechInsight offers a lens into more than a dozen vehicle domains featuring news and insights, reports, profiles, podcasts and much more.

AutoTechInsight domains covered:

- | | | |
|---------------------|-----------------------|----------------------|
| - Autonomy | - E/E & Semiconductor | - Propulsion |
| - Battery | - Interior Comfort | - Software |
| - Chassis | - and Passive Safety | - Thermal Management |
| - Charging | - Lighting | - User Interface |
| - Connected Car | - Materials | - and Experience |
| - Consumer Insights | - OEM Strategy | |



Component Forecasts

Forecasts and analytics for over 150 components at an OEM level and 90 components at a model level



Features and Technology Benchmarking

Unprecedented ability to compare automotive technologies and specifications



Autonomy Forecasts

Model-level Autonomy Forecasts that provide access to detailed technology specifications and clarify how different autonomy levels are delivered from a hardware perspective (sensors)



Consumer Insights

Gain car buyers' opinions about e-mobility, connected cars, user experience and autonomous driving



Technology VIO

Gain a deeper understanding of how electrification, autonomy and connectivity are propagating over time through VIO creating visibility into which competing technologies might emerge and win in the marketplace with hundreds of technology attributes added to current and forecast VIO



Electrification Offerings: Access Battery and Charging forecasts and understand consumer sentiments for electric vehicles. Compare EV features and technologies and analyze forecasts for individual EV components including battery raw materials.

Sustainable Mobility

Navigate the risk, identify opportunity and evaluate impacts during the transition to an electrified, de-carbonized future.

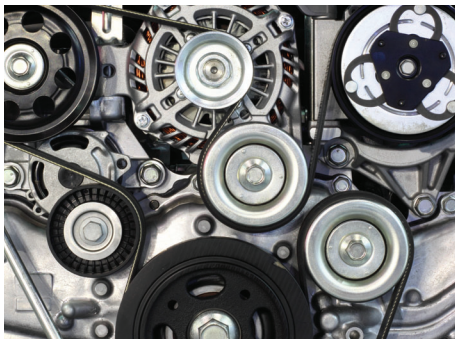
Our Sustainable Mobility services help Suppliers and OEMs understand supply chain physical risk, evaluate the full supply chain emissions & carbon pricing, and finally looking at the trajectory to net-zero plans across the industry. S&P Global Mobility provides suppliers, OEMs, governments, and the finance industry with products and solutions to help navigate the risk, identify opportunity and evaluate impacts during the transition to an electrified, de-carbonized future.

Our vehicle level energy consumption & GHG emissions products, and subsequent fleet level regulatory compliance forecasts support a range of decision making from competitive benchmarking of future energy consumption and EV ranges, to sourcing opportunity targeting, through to cost of compliance with regional emissions regulation.



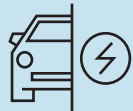
Vehicle Performance and Compliance

Balance risk with reward in the pursuit of regulatory compliance and vehicle performance

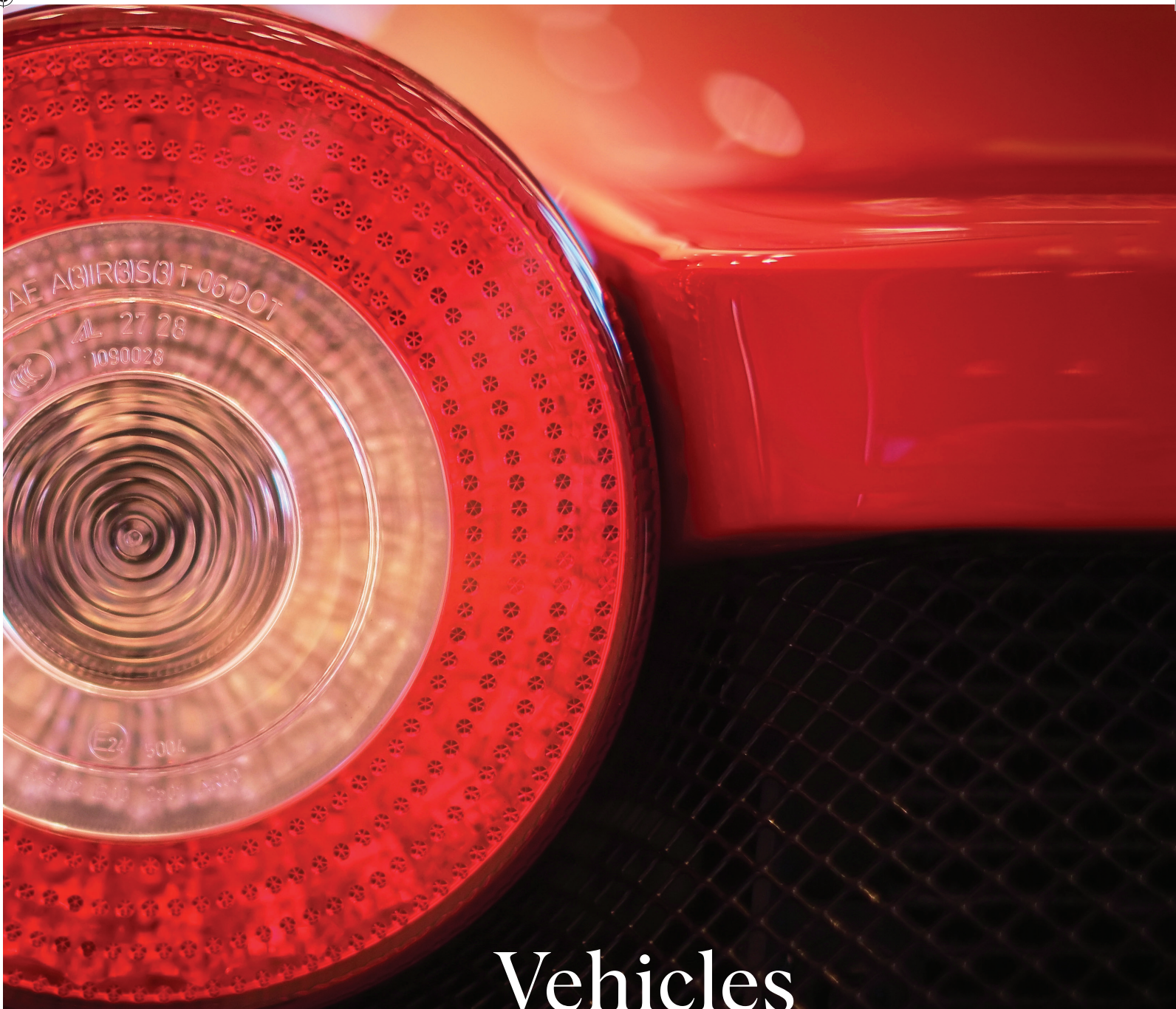


Vehicle Technical Intelligence

Get the most comprehensive tool for planning in-production fleets in the United States



Electrification Offerings: In addition to the above, we provide Sustainability / EV Planning consulting services.



Vehicles In Use

- Parts Demand & Fitment
- Owner Notification
- Vehicle Identification

Industry Performance

Access several-hundred million new and used vehicle registration, vehicles-in-operation, and owner demographics and accurately assess market share and benchmark against competitors.

Automotive OEMs, national sales companies, and their dealers need accurate vehicle market data to gauge their success and benchmark against competitors. Our automotive market reporting solutions provide several hundred million new and used vehicle registrations, vehicles-in-operation (VIO), and owner demographics in a web-based platform so you can easily assess your market share anywhere in the world.

Global



Vehicle Market Analysis

Measure your market performance with registered vehicles and vehicles-in-operation data

- New Registrations
- Used Registrations
- Vehicles in Operation
- Vehicle Price and Spec

North America



Loyalty

Which models and makes are pulling away your customers/ Who should you target with your conquest campaigns



Custom Market Reports and Data Feeds

Customized statistical reports and data feeds to meet your specific business needs



Diversity

Tap into the purchasing power of specific US ethnic and demographic consumer groups



Powersports & Recreation Vehicles

Tap into the purchasing power: what's selling, who is likely to be in market, and what they are likely to buy



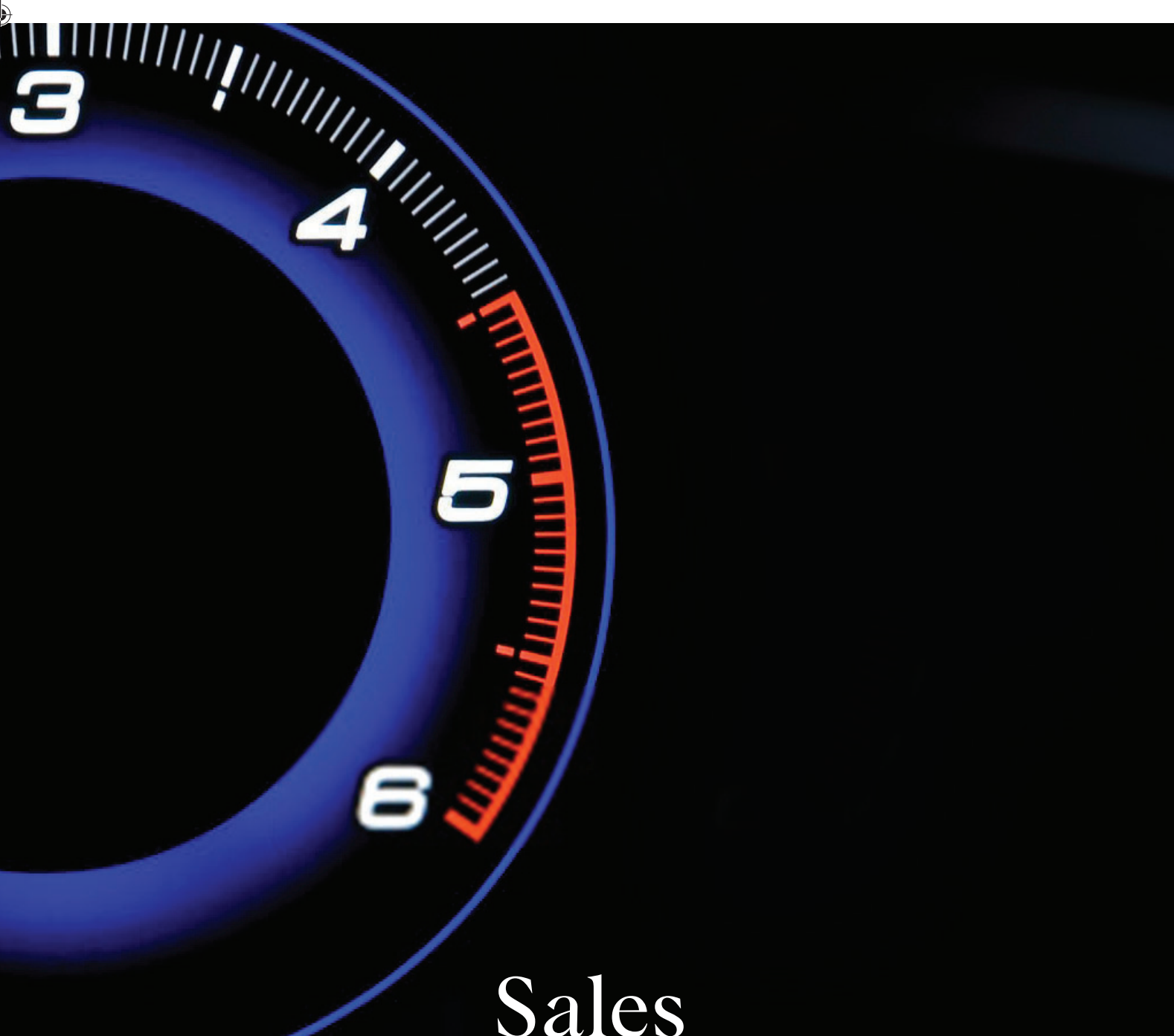
North American Commercial Vehicles

Vehicles in operation and new truck registrations data in all weight segments in the United States (42 states) and Canada



Auto Credit Insights

Comprehensive, accurate and timely vehicle registration and loyalty data with automotive loan origination activity



Sales Performance & Marketing

- Marketing Activation
- Sales Optimization
- Industry Performance



Electrification Offerings: Filter our Market Analysis solutions by EV to determine current EV adoption rates.

Marketing Activation

Industry-leading audiences and measurement solutions to activate marketing initiatives across the entire car-buying lifecycle.

Our marketing activation portfolio provides industry leading solutions to better target in-market buyers. Available within the United States, our Polk Automotive Solutions deliver your best audiences and insights for light vehicles across the entire vehicle buying cycle, and our Fleet Audiences identify your best commercial vehicle prospects.



Marketing (Polk Automotive Solutions)

The Polk Automotive Solutions portfolio is built from the core data sets of Polk Audiences utilized for marketing activation; Polk Signals, used for measurement and insights; and Polk Data Services which helps fortify and augment first-party data assets



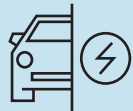
US Fleet Audiences

S&P Global Mobility enables you to improve efficiency and increase ROI by more accurately targeting fleet audiences



Powersports & Recreation Vehicles

What's selling, who is likely to be in market, and what they are likely to buy



Electrification Offerings: Access US audiences likely to purchase electric vehicles

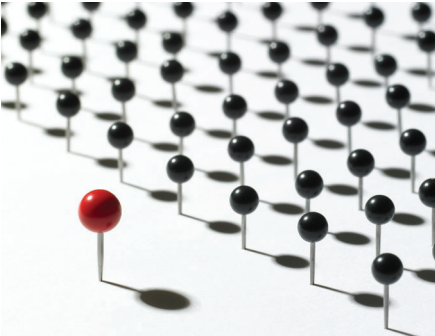
Sales Optimization

Ensure success by optimizing your dealer network and allocating the right level of incentives to specific customers.

Increasing your share of the market requires careful optimization of your dealer locations and incentive offerings. Demand may be high for your vehicles, but that may not be reflected in actual sales if your dealership is far away from the consumer or too close to a competitor. And even when dealerships are in the optimal location, some customers may need an extra incentive to buy.

S&P Global Mobility provides automotive OEMs with the tools they need to optimize sales. From making sure their dealer showrooms are in the best locations to attract the right customers, to identifying the optimal incentive amount for an individual based on their unique behavior drivers, vehicle preferences, and price sensitivity, S&P Global Mobility has the tools you need to make and exceed your sales targets. With our sales optimization tools you can evaluate your retail network strategies and provide relevant private offers to support your strategic goals.

Global



Dealer Network Planning

Optimize your retail network in an increasingly electrified and digital world with innovative methodologies and data sets, optimize territory design and dealer/ market performance measurement

United States



Private Offer Studio

Deploy smart incentive campaigns directly to your customers, helping you increase brand loyalty while supporting profitability



Market Scan Automotive Payments as a Service™

Generate a Scientifically Perfect Payment Solution™ for any conceivable automotive transaction