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The Center for Automotive Research is an independent non-profit that produces industry-driven research and fosters dialogue on critical issues facing the automotive industry and its impact on the U.S. economy and society. CAR researchers closely track current and future global automotive industry and technology trends and assess their impacts. CAR researchers also study international collaborations and stay abreast of changes in international trade and regulatory environments, the development of technology standards, and the deployment of new vehicle technologies.

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WHY

CAR conducts quarterly meetings with CAR Affiliates—a group of over 65 automotive stakeholders whose contributions support CAR’s research activities. Over the past 18 months, sustainability has become a key point of discussion at these meetings. The increasing focus on sustainability is even more noteworthy amidst seemingly unprecedented challenges and change. While many companies have been considering how to implement sustainable practices for years, the speed at which the topic went from being just one of many challenges to high importance is, frankly, surprising. As the automotive industry faces a seemingly unending list of challenges, creating a vision for a sustainable future is becoming ever more critical.

Sustainability is complex and challenging. At its core, sustainability contains three pillars: environmental, social, and governance, commonly referred to as ESG. The Affiliates guided CAR to focus initial efforts on the environmental pillar of sustainability. Given the enormous challenges environmental sustainability presents, it is a logical starting point. However, CAR and its Affiliates understand the social and governance pillars are critical and worthy of equal attention in the coming years.

In the fourth quarter of 2021, CAR convened two roundtable discussions with Affiliates to explore environmental sustainability challenges. Participants included representatives from material suppliers, part and component manufacturers, consulting firms, and service firms. CAR designed the roundtables to understand industry stakeholders’ most critical concerns in developing an environmental sustainability plan. The two roundtables included a total of 15 people from different companies. The participants were a diverse group with many different perspectives.

CAR researchers designed the roundtables to accomplish three main outcomes. Better understand stakeholders’ perspectives on their companies’ sustainability strategies and challenges; gather insights on their perspectives regarding their customers (the vehicle manufacturers) sustainability expectations and; the role CAR should play in supporting stakeholders’ sustainability efforts. This report summarizes the roundtable outcomes and possible next steps.
The roundtables, which took place in November of 2021, offered an introduction to environmental sustainability in the automotive industry and a discussion among stakeholders on concerns and challenges they expect to face when executing sustainability initiatives. There has been a considerable focus on sustainability in recent years, and efforts have been made to understand and implement environmentally friendly practices. The roundtables highlighted some of these practices, including increasing electric vehicle (EV) market shares, federal and industrial electrification, decarbonization commitments, and consumers’ shifting attitudes and corporate entities. The EV market experienced substantial growth in 2021 as the market share of EVs ticked up to 11.9% of the light vehicle market, demonstrating a clear acceleration of EV adoption. Furthermore, the Biden administration passed a $1 trillion infrastructure package at the end of 2021, which included a target of 50% of new car sales to be electric by 2030. The package also includes $7.5 billion toward a nationwide network of 500,000 EV charging stations by 2030 in an effort to increase consumer confidence.

The industry is witnessing the growing challenges with sustainability on the entire automotive value chain. Automakers are increasingly reporting on the environmental impact of their operations while pledging to further reduce emissions and other environmentally harmful practices. Wall Street has also begun to weigh in on the sustainability discussion. Corporate ESG practices are now considered safer investments, and stock prices are being rewarded for achieving good ESG scores. There is a belief that this is just beginning, and suppliers should expect more requirements regarding environmental initiatives, green power for facilities, and DEI.

There is a consensus among stakeholders who attended the roundtables that their organizations are unsure how to comply with some of the environmental sustainability requirements while also remaining competitive in the industry. Concerns were voiced over the lack of support and communication from customers to help them successfully implement new environmental sustainability practices. While there are many concerns around compliance and sustainability, stakeholders are also encouraged by the level of enthusiasm and questions they have received from customers and others in the industry. Many stakeholders have been inundated with questions from customers and suppliers on what sustainability steps are being taken and in what way they can partner. Suppliers are looking to understand how the industry approaches these problems and how they can collaborate to share the costs and help innovate.
WHITEBOARD EXERCISES AND DISCUSSION

Following the initial introduction and discussion, stakeholders participated in exercises designed to help drive the conversation on sustainability and gain a better understanding of where stakeholders are likely to see the most significant impacts and the greatest opportunities.

What one word describes your biggest concern when thinking about environmental sustainability?

In the first exercise, stakeholders were asked to provide one word that best describes their biggest environmental sustainability concerns. Concerns among stakeholders covered a range of issues from cost to achievability. Many stakeholders view cost as a significant obstacle. The discussion centered around understanding the cost of meeting new sustainability requirements, such as carbon-neutral standards, and how those costs will need to be passed along through products to customers who may be unwilling to cover additional price increases. While many stakeholders are concerned with cost, there is also an understanding among some that sustainability creates value and should be seen as an investment. Companies and customers will need to see the value in sustainable processes and products for them to be successful. The developments in this area will likely be a balancing act between the pressures to innovate and the need to keep costs down. Partnerships will allow companies to share the financial burden of some of these environmental sustainability practices. Still, innovation across the industry will also be key in overcoming some of these challenges.

A few stakeholders see regulations as the main driving force behind the push for sustainability, and while many companies have made bold commitments, there is a gap between policy mandates and what is actually being implemented. One stakeholder noted that corporate sustainability would involve finding a balance between people, the planet, and profit. Stakeholders also see optimization and consistency as essential factors. Optimizing resources and time to ensure that enough value is gained while receiving consistency from the US government regarding standards, regulations, and policies will help limit confusion. A few stakeholders believe that environmental sustainability is a global issue, and despite the federal government’s stance on sustainability, companies and NGOs will keep moving forward.

Other factors that draw concerns from stakeholders include accessibility and scalability. Accessibility to resources and the ability for suppliers to scale current processes to incorporate sustainable technologies along with sustainable production. Many challenges exist for manufacturers to include sustainable practices in a manufacturing process that was not designed to incorporate such practices.
What excites you about environmental sustainability?

In this exercise, stakeholders were tasked with listing what excites them most about sustainability. Responses included excitement over improving the planet for future generations with the possibility of helping to curb global climate change. There are new and exciting opportunities that environmental sustainability can offer, including the ability to differentiate from competitors along with new avenues for revenue and growth. Environmental sustainability allows companies to work towards a common goal that benefits society and offers unique research opportunities. Stakeholders are excited about forging new partnerships as companies are challenged to think outside the box and develop innovations in design and engineering. Other responses included excitement over the possibility of attracting new talent with more eco-conscious viewpoints. There is also the potential for new technologies with lower carbon footprints, greater circularity, improved performance, and being able to build a passion for sustainability within an organization.

What needs to be true for your company to achieve environmental sustainability?

When stakeholders were asked what needs to occur for their organization to achieve environmental sustainability, responses included a willingness by the company to change along with significant financial investment. Stakeholders expressed the need for commitment from customers and automakers to meet sustainability targets through shared costs, heavy investment, and precise requirements. Automakers will need to provide clear and transparent guidelines to sustainability requirements and consistent support. Collaborative partnerships between suppliers and automakers will be necessary for developing innovative green technologies to reach sustainability goals. Stakeholders are concerned that many companies make splashy announcements about environmental sustainability initiatives, but those leading the changes, such as the designers, engineers, and analysts, are often unsure how to execute the company’s vision and goals. Companies need to establish targeted and actionable objectives that make good business sense. Furthermore, there must be a focus on the entire value chain; approaching sustainability from an end-product perspective can introduce challenges and confusion for those involved. Through training, organizations can educate employees and suppliers on what sustainability means to them and how they can contribute to sustainability initiatives.

What things do your customers (VMS) need to know about helping make environmental sustainability in the supply chain?

During this exercise, stakeholders added their thoughts on what customers can do to help them be successful in integrating environmental sustainability in the supply chain. Collaboration amongst stakeholders and customers will be vital in driving the conversation forward and necessary when implementing new sustainable processes. Communication and collaboration will create momentum in the supply chain through open and honest discussions between stakeholders on short-term and long-term goals, technologies for sustainable solutions, and creating common standards across the industry.
US suppliers and customers are unsure where to begin when seeking sustainability initiatives to implement. Corporate sustainability announcements and promises need to be followed up with action and progress towards its goals, including less ambiguous objectives, clearer roles, responsibilities, and more well-defined expectations.

The message on environmental sustainability must also come from the top down. Leadership will play an essential role in guiding an organization through these changes and will need to provide a roadmap for those who are struggling. Associations and industry groups may also have a role to play in the sustainability discussion by making sure the right conversations occur with the right stakeholders. The automotive industry is a global industry and will require global action and commitment.

Creating an action plan for CAR, and CAR affiliates and stakeholders

The last exercise asked what CAR’s role should be within sustainability in the automotive industry. Some suggestions offered by stakeholders include providing a roadmap for companies to help them understand the path forward as they undertake environmental sustainability in their organization. CAR can help bring together key players at different organizations who have mutual interests with the goal of collaborating to achieve sustainable solutions collectively. CAR has the ability to find the right people within organizations to undertake sustainability engagements. Some stakeholders said CAR could have a role in offering more granular sustainability objectives along with providing a better understanding of high-level motivations and business objectives.

Furthermore, through its industry connections, CAR has the ability to bring groups together to collaborate and exchange best practices. Automakers and suppliers can collaborate to map out sustainability goals for the next 5-10 years. Utilizing relationships throughout the industry to work towards a consensus from suppliers, automakers, and regulatory bodies will allow everyone to understand each other’s pain points and goals.

Next Steps

Based on the learnings from the roundtable discussions, CAR has identified three action points to move forward. CAR proposes an inclusive project to:

**Define** a comprehensive set of industry objectives considering both the challenges and opportunities faced by automakers and suppliers. Roundtable participants clearly stated they and their companies are ready to embrace a more environmentally sustainable way of doing business. However, they also clearly described challenges. Each customer (vehicle manufacturer) provides a set of similar but different requirements. CAR will work with vehicle manufacturers, suppliers, and others to define common practices so suppliers can efficiently and effectively meet the sustainability expectations of their customers.
**ENGAGE** sustainability stakeholders from automakers, suppliers, and other industry groups: Stakeholders indicated that CAR provides a neutral ground for all stakeholders and can identify pathways for industry participants to embrace collaborative environmental sustainability models more quickly. CAR will reach out to engage with stakeholders and bring them together to work on solutions.

**FACILITATE** communication and collaboration designed to create momentum in the supply chain through open and honest discussions between stakeholders on short-term and long-term goals, technologies for sustainable solutions, and creating common standards across the industry. As such, CAR will act as a bridge between the diverse stakeholders to develop a pathway to environmental sustainability for the entire automotive manufacturing value chain.

To achieve these actions, CAR will conduct outreach to automakers, suppliers, and other stakeholders to gather support and participation.