In the fast lane: how alternative fuel vehicles are driving a talent revolution









Foreword

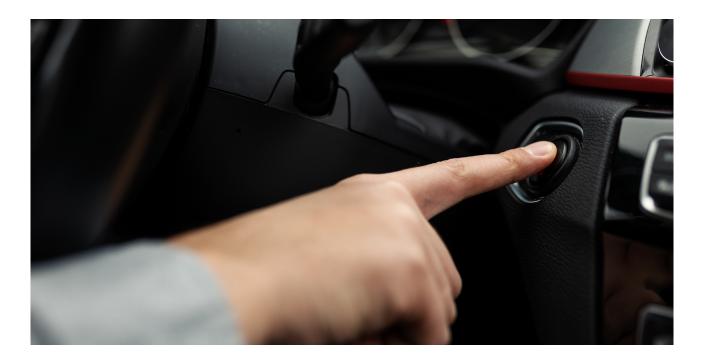
Henry Ford famously said, "If I had asked people what they wanted, they would have said faster horses". Unlike in the era preceding the production of the first motor vehicles, the evolution of consumer demand is arguably ahead of the industry. One in four Americans recently polled indicate that their next vehicle purchase will be an electric vehicle¹. Electric Vehicles (EVs) are also continuing to gain overall market share across the European Union and in China. The surge in demand for alternatively powered vehicles is palpable.

Alternative fuel cars hold the promise of a more sustainable form of mobility that is supported by policymakers and consumers alike. Original Equipment Manufacturers (OEMs) and tier-1 producers should take steps now to redefine their talent strategy and make it fit for future. The verticalization of the business, the change in consumer perception and the redefinition of the automotive industry around "connected"² products require a broader shift of culture within companies. A new way of working, a new way of making decisions, and a new way of managing relationships between leaders and the workforce. This is not an easy task- traditional players in the industry must meet production demand for existing products while simultaneously developing entirely new productsall this in the context of rapid brand redefinition.

Indeed, in many ways the industry is still asking for "faster horses," its talent strategy not yet aligning with imminent needs. Already struggling to recruit and retain skilled workers to meet the demand for internal combustion engine (ICE) vehicles, how can this rapidly transforming industry simultaneously recruit and develop the new skills needed to meet production deadlines for a totally different type of product?³

Faris Becirovic Global Industry Lead, Mobility The Adecco Group







Executive Summary

This paper explores the impact of the alternative powered vehicles revolution on talent and strategic workforce solutions. We will look at three dimensions of the human capital lifecycle – recruit, develop, and transition – to understand the talent solutions that companies need to implement if they are to stay competitive in a highly disruptive environment.

What are the skills needed for today and tomorrow, and what is the best way to train workers? What are the profiles to recruit and retain, and how do automotive companies need to adjust their recruitment tactics to attract these workers? How can companies support the talent that need or want to transition to other industries or professional alternatives?

The zero-emission trajectory of vehicles implies a total transformation of the workforce, as well as of all aspects of the business – from the supply chain, to marketing, to after-market sales. If businesses have struggled to keep up from a product development perspective, planning in terms of human resources is even more challenging.

The unparalleled, concomitant acceleration of regulation, consumer demand, public spending, and company targets that is driving an industry-wide re-evaluation has turned from a marathon to a sprint. The EU's CO2 emission standards regulation introduced in 2019 for new passenger cars and light commercial vehicles sets reduction targets of 15% for 2025, increases the 2030 target to 55%, and introduces a new 100% target for 2035⁴ with the aim to ban the sale of petrol and diesel cars from 2035. Together with electric passenger vehicles dominating demand, the development of hydrogen fuel-cell vehicles is now playing a key role in the automotive decarbonisation efforts due to the current scarce access to critical raw materials for electric mobility. Furthermore, with manufacturing costs expected to decrease with scale, and infrastructure expected to increase with adoption, companies continue to invest heavily in fuel cell technology. The impact on talent and workforce strategies is tremendous.

According to our research "<u>Global Workforce of the Future</u>" conducted in 2022, 51% of workers in the Mobility and Automotive sector worry that transition to a green economy will impact their job in the future, compared to 36% globally

- 63% of workers in the Mobility and Automotive industry worry that the transition to a green economy will make them lose their job
- 67% of them worry that the transition to a green economy will make their skill set less relevant to the job market
- 73% of workers in this sector think the transition to a green economy will force them to learn new skills⁵





Alternative powered vehicle growth: Key industry data

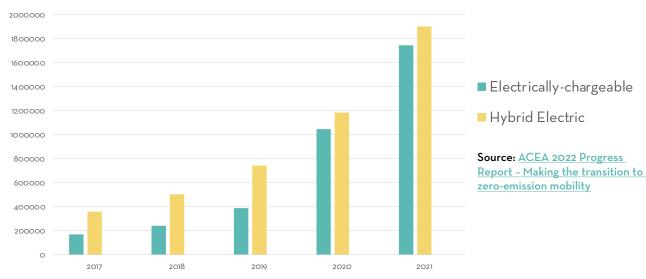
While electric and alternative powered vehicles remain in the minority, the expansion of their sales, registration and production has skyrocketed throughout the world in just the past few years - despite the pandemic, supply shortages, and geopolitical events. Indeed, in terms of sales, consumer appetite has increased across all important markets, more than doubling in China.

In the EU, electrically chargeable cars (battery electric and plug-in hybrids combined) increased by a total

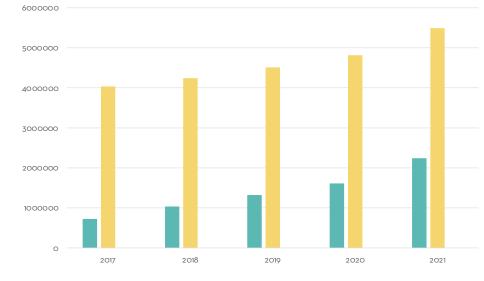
of almost 1.6 million units (to 1.7 million cars) over a five-year period. This represents more than a 10-fold increase.⁶ In the US, the sale of alternative fuel vehicles increased in 2021 by three million compared to 2020, with Electric Vehicle (EV) sales at a record breaking 607.000 in 2021. This is an approximate increase of 83% over 2018.

Market uptake

New Alternative Fuel Car Registrations in the EU, By Fuel Type* Trends over time in the EU (in units, 2017 – 2021)



New Alternative Fuel Car Registrations in the USA, By Fuel Type* Trends over time in the USA (in units, 2017 – 2021)



Electrically-chargeable

Hybrid Electric

Source: US Department of Energy Alternative Fuels Data Center

*excluding hydrogen/fuel cell, which represent a small but growing number of alternative fuel vehicles



Nearly all the major players in automobile production have made significant commitments towards the development and manufacturing of electric vehicles in the next few years, with some already announcing the sunset of combustion engines. For example, Honda has pledged to be all-electric by 2040, Lexus to be allelectric by 2030, and Volvo to produce only all-electric vehicles by 2030.⁷

In the United States, these production targets will be bolstered by infrastructure, battery production, and electric vehicle manufacturing investments announced by the Biden administration. The transition is arguably accelerating even quicker in Europe, where on top of consumer demand, regulatory pressure is driving producers to meet ambitious targets.⁸ Public spending in China and European countries towards electric car production, in the form of tax waivers and purchase subsidies, has increased significantly in the past few years, particularly in 2021. Governments in Japan and Korea – both major EV vehicle producing countries – have similarly significantly increased public spending for EV purchases. While behind Europe and Asia, public spending has similarly increased in the U.S.⁹.

The skills race - building a car while driving it

With accelerating demand for alternative powered vehicles, the critical question is whether automotive manufacturers will have the *right* people at the *right* time with the *right* skills to produce the *right* products. This is a clear case where the strategic priorities of the business and the priorities of HR will – or should – be aligned.

At the same time, the automotive sector will require green skills to fulfil its transformation promise. Green skills are influencing nearly every level of the workforce, from emerging jobs at mid-skill levels, such as those related to the use and maintenance of existing equipment and vehicles, to high-skill levels, such as R&D related to designing green transport systems and associated mechanics. However, as the automotive industry moves from combustion engine to alternative fuel powered vehicles, it is similarly shifting away from low to medium-skilled trade jobs to highskilled technical jobs such as engineers, researchers, and information and communications technology (ICT) specialists. In Europe, it is forecasted that these higher skilled jobs will make up 90% of forecasted job growth from 2020 to 2030 in the automotive industry.¹⁰

Upskilling and reskilling this workforce across all levels will accelerate the transition and create myriad new opportunities. This can only be fully seized by ensuring coordination between the investments of OEMs and Tier-1s, and regional policy, in addition to investments in reskilling and upskilling for greening the existing and newly born talent of the sector. Creating a smooth road to green skills will be the only way to drive the industry to the next level.



1. Develop - The reskilling and upskilling imperative

Certain types of jobs in the automotive sector are likely to disappear in the medium term while, at the same time, the sector needs to recruit and develop qualified people for emerging jobs with completely new skill sets.

The **new skills** are linked to the production of batteries and fuel cells needed to operate alternative powered vehicles, as well as to the internal systems distributing this power in the vehicle. In addition, there are many developments in the digital domain, such as more complex in-vehicle software, the use of artificial intelligence, the deployment of "mobility as a service solution" and the shift to online sales of vehicles. To summarize the new set of skills employees should gain and retain to facilitate the transition of the automotive sector are mainly related to electric driving, thermodynamics, electrochemistry of batteries, power electronics, energy management, hydrogen technology and materials knowledge. Training and academies need to concentrate on these topics along with edge computing, big data, cyber security and cognitive IHM (Human Machine Interface)."

In this respect, there is a **huge skills gap** to bridge between the emerging needs of the auto industry and the current workforce. Ensuring that the labour force rapidly acquires the necessary skills will secure the global competitiveness of the automotive industry.

Compared to vehicles with conventional engines, both the production and maintenance of battery electric vehicles are much less labour-intensive, given that they are mechanically less complex and can contain fewer parts. Although new jobs are expected to be created in charging infrastructure deployment, battery production, and recycling, for instance, these jobs will largely require skills which those who are working in manufacturing today are unlikely to have.

According to our research "<u>Global Workforce of the Future</u>" conducted in 2022:

- 57% of workers in this sector say their company is investing effectively in developing their skills, compared to 49% globally
- 59% of workers in this sector think they have technical skills gaps $^{\scriptscriptstyle 13}$
- OEMs and the entire automotive value chain need to invest in massive training and learning processes, as this represents the only way to keep pace with the transformation. To acquire the new set of skills which will prepare the labour force for the jobs of the future in the automotive space, large-scale reskilling and upskilling programs will need to be launched.
- The need for upskilling should not be limited to hard technical skills. Indeed, new behavioural competencies are needed to accompany the broader cultural change within automotive

companies. A special role in the skills transformation is played by **agile methodology and coaching**, which allows automotive manufacturers and suppliers to react flexibly to significant fluctuating market conditions. Most of all, acquiring an agile culture means enabling innovation, collaboration, and value creation at unprecedented speed, scale, and impact. Experience has proven that agile organisations can develop products five times faster, make decisions three times faster, and reallocate resources adroitly and quickly.¹²



It is important to highlight that for the transition to be successful, the development of human resources in the automotive industry needs to be closely linked to robust labour market policies, effective social dialogue with all partners, investments in training and education, and the creation of specific redevelopment plans for regions in which the industry operates.

In the EU for example, the auto industry accounts for 11.5% of EU manufacturing employment today, or some 3.7 million jobs in total. However, in various regions in the Czech Republic, Germany, Italy, Slovakia, Hungary, Romania and Sweden, the automotive sector provides more than 20% of total manufacturing employment. This means that one in five manufacturing jobs in those regions directly depends on automobile production, which explains **the need for tailored regional plans on skills and redevelopment**.¹⁴

Likewise, in order to establish a truly global labour market for the automotive sector, a system for different geographical areas that recognizes skills and relevant knowledge is needed, including definitions of skills and job functions that are mutually accepted by the different states and national authorities. As the automotive transformation approaches at speed, OEMS and the whole value chain must use all suitable instruments at their disposal to future-proof their workforce.

The need to upskill and reskill workers is not simply a business imperative, but an important factor in employee engagement and retention. Many workers are acutely aware that their employability in this industry will depend on their professional development. **Providing training is necessary but insufficient**. Given the sense of insecurity around the impact of the green transition, there is a critical role businesses and stakeholders in this industry must play in **helping employees reimagine their futures**.



2. Transition - The human impact of decarbonisation

How can companies support the talent that need or want to transition to other industries or professional alternatives?

The experience of massive supply chain disruption and subsequent material shortages from 2021 through 2022 could be a warning on the effects of a human supply chain shortage, should the industry fail to sufficiently build a talent pipeline capable of contributing to the production of alternative fuel vehicles.

On the flip side, the obsolescence of combustion vehicles is having a profound impact on the existing workforce. For example, electric vehicles require 30% less labour than gas-powered cars to produce, according to automakers.¹⁵ And in the United States, new jobs that produce batteries may or may not be unionised, and therefore will not have the same conditions as the jobs they ostensibly replace, notably in terms of pay.¹⁶ Even if workers in low-skilled manufacturing jobs are able to make the transition, they may not want to stay in those roles.

Corporate social responsibility has a role to play here, as automakers will not be spared by the critical gaze of 24/7 social media surveillance, not to mention that of political actors. If for their brand image alone, companies have an interest in mitigating the impact of job destruction, notably among vulnerable populations (such as older and lowerskilled workers) and in underserved communities, where the closure of a plant would additionally negatively impact the entire ecosystem of local businesses and the people they employ.



One proactive step that stakeholders can take is to conduct a **strategic analysis of the workforce** along several possible scenarios. While not being completely predictive, this can help to understand the range of impacts and help companies anticipate change management processes and support systems to put in place in terms of training, reskilling, and transition. Furthermore, by communicating about this early, often, and transparently with employees, leaders can help create the culture of transformation needed to sustain the organisation.

Where site closures or mass layoffs are unavoidable, there are ways that companies can mitigate the near-term and downstream effects. For example, by actively searching for a buyer for the site, and even contributing financially to its conversion, companies can **play a role in optimising the re-employment of their workers** in a similar industry in which their skills will be transferable. In parallel, they can partner with investors, non-profits, and local government to help bring in new businesses in the area impacted by the closure, thereby supporting its revitalisation in a more proactive way. One example would be investing in the building of battery gigafactories of the installation of EV charging stations, working with utilities companies also willing to invest, and governments allocating funding specifically for infrastructure projects. This could be a win-win for automakers and workers: such infrastructure investments will create jobs as well as ensure charging capacity for electric vehicles brought to market, particularly in more remote locations, where scarcity of charging stations may discourage consumers from purchasing these cars.



Finally, companies cannot ignore the fact that certain workers may not only be losing their jobs, but their vision of their career prospects after decades of service within an industry that has dramatically changed. Here, a simple severance payment will not suffice. Companies should provide **career transition support** in the form of outplacement, provided by specialised firms that equip workers for the job search, to help them bridge their skills and experience to other industries. For beneficiaries of pension plans, companies can offer early retirement as a voluntary alternative to redundancy. They can also provide funding to former employees for retraining and other vocational programs to qualify them for in-demand jobs where they live. Partnering with local government and non-profit organisations may bolster these initiatives and demonstrate corporate social responsibility in a tangible way. This is where an upstream analysis of the skills of employees and how they might transfer to jobs in demand in their region will best enable companies to transition employees and, in turn, empower employees to take ownership of their professional futures.





When having to move production to other regions or countries, automobile manufacturers would do themselves no favours by completely disinvesting from their legacy production sites. After all, today's ex-production worker is tomorrow's EV purchaser, and the communities in which they live are also potential customers, particularly as these vehicles become more accessible to consumers.

Leaders in this industry must often make critical decisions around what blend of reskilling, reducing the workforce, and hiring new employees they should invest in.

There is no perfect solution, but, as Arne Hellmuth, Managing Director, Transformation Solutions for LHH, stresses, "companies shouldn't underestimate the costs of mass layoffs, particularly in European countries where laws favourable to protecting employees and collective bargaining agreements make these restructurings so expensive, it would actually cost less to reskill nearly the entire workforce. This can be the case even when we account for the expense of keeping employees whose legacy salaries are disproportionately higher than those of the junior roles to which they have been reskilled." Even in countries where workers do not benefit from generous packages when laid off, the additional costs for these companies to rehire, not to mention the engagement of remaining employees, the reputation of the company, and other downstream costs should all be taken into account.

While reskilling may make the most sense from both a social and financial perspective, Hellmuth warns that auto companies shouldn't assume that this is a silver bullet. Indeed, he affirms, "companies sometimes fail to account for the fact that reskilling is itself a form of career transition, and not everyone is going to want to buy into it. Even though reskilled workers will have improved their employability, the trade-off is that they will essentially be starting over their careers as 'junior' employees. This means that managers and human resources must be able to have these nuanced career conversations with their workers, to help them understand the importance of learning new skills and technologies and provide support throughout the transition."

Don't underestimate culture! The importance of change advocates

Leaders and managers must be equipped with the proper change management and communication skills to coach employees through any transition, whether it be in process, technology, or organisation. This implies a major cultural shift that cannot be solely imposed in a top-down manner but will require change advocates throughout all levels of the organisation.

To that end, the democratization of coaching – once a vestige of the C-suite – cannot come at a better moment for the automotive industry. With different modalities and price ranges, coaching programmes are more accessible

than ever. For example, implementing a **coaching programme via smartphone** for high potential employees young in their careers could serve as a powerful tool for retention. Punctual **group coaching** as part of a collective skills development programme could serve to strengthen team cohesion and buy-in during a transition. Investing in the development of employee skills is not only an indispensable part of the continuity of the business – as it pertains to technical skills – but helping employees cultivate soft skills (resilience, strategic thinking, growth mindset) is also a win-win.



3. Recruit - Boost your employer branding and increase recruiting intelligence

What do automotive companies need to do to attract the right talent when competing with industries that are more attractive to candidates?

The alternative fuel shift will require OEMs and suppliers alike to equally shift their mindset around talent attraction and recruitment strategies. Companies need to think hard about their employer branding and their talent recruitment strategy. Are they attractive and competitive enough to fight a long recruitment battle for scarce talent?

According to our research "<u>Global Workforce of the Future</u>" conducted in 2022:

- 28% of workers in this sector want to quit their job in the next 12 months, compared to 27% globally
- Of those 28% who want to quit, 35% say it's to have a better salary, 30% say it's to gain more flexibility 17

How do you attract the green talent that everyone wants?

Automotive OEMs are increasingly positioning themselves as technology companies as opposed to manufacturing companies, which means that the skillsets they are seeking out in the engineering and information technology domains begin to compete with traditional tech companies such as Apple, Meta, and Alphabet. With the increased presence of connected vehicle features and embedded software, requisite skills have become technical and digital in nature. The demand for mechanical engineers turns to software engineers and the lines between engineering and IT blur further. However, in contrast to the cultures of the firms of Silicon Valley, many automotive companies carry antiquated brand reputations.

On the flip side, within the challenging labour market that has persisted since the COVID-19 pandemic, the shift to EV and alternative powered vehicles creates an opportunity for the automotive recruiting community. Candidates can now be pulled from adjacent industries where transferrable skills previously were not as prominent. In mid-2022, a broad recruiter survey revealed a sharp increase in demand for automotive roles. The survey respondents saw the majority of the movement away from the IT industry, from which related skill sets are paramount in the evolving green talent landscape for automotive¹⁸. This signals the continued increase in demand for these newer skill sets in the industry, and stabilisation for demand in traditional sectors.

While addressing the challenge of refreshing an organisation's brand goes far beyond the human resources function, certain aspects can be emphasized to increase the perceived employer value proposition in the recruiting process. Focusing on work benefits beyond salary, such as career path opportunities or involvement in environmental, social, and governance projects, can help to increase candidate interest and attraction. With fierce competition, social impact and company vision, among other intangibles, more frequently become factors in candidate decisions.



Recruitment strategy redefined

- Beyond attracting external candidates, internal talent acquisition functions need to take a close look at existing skill profiles and augment accordingly. The recruiters previously searching for mechanical engineers will need to learn the vernacular associated with software and digital to not only be able to assess these candidates successfully, but also effectively articulate the expected responsibilities and value proposition of the role. While looking at reskilling and upskilling the broader workforce, internal recruiter profiles should not be overlooked.
- Recruiting skillsets are not the only aspect of talent acquisition that can and should be revisited. As the workforce solutions industry and associated models continue to mature, new offerings may be more effective than previously leveraged at not only filling job openings but completing entire work tasks and functions. "Build, buy, borrow"¹⁹ describes the business strategy around engaging talent and performing work functions in the most effective way possible. While balancing this equation in light of the green transition, automotive companies should consider innovative solutions available in the market.
- In complement to traditional third-party active recruitment, businesses could additionally consider the use of direct sourcing - constructing a pool for future contingent workforce needs. These talent communities can be created passively or actively based on the needs of the organisation. Candidates can quickly be matched with requisitions as they are released, via an underlying software, reducing time-to-fill and recruiting

costs. As the automotive industry transforms, green technology skillsets or experience can be targeted to create these ready-to-go talent pools to increase agility in real-time. In this way, direct sourcing can serve as an additional, more proactive means of creating candidate reserves to enhance a holistic talent acquisition strategy.

- As OEMs and suppliers construct new facilities for green technology or EV production, they may not have the in-house recruiting power to scale up the necessary workforce. Project Recruitment Process Outsourcing (RPO) is an effective option for one-time ramps in labour, where an outsourcing partner augments the organisation's existing talent acquisition function, fully taking on the brand and applicant tracking system, while providing best practices around tech stack and recruitment processes to achieve hiring targets. As opposed to the more common traditional long-term RPO engagements, providers are becoming agile to adapt to the needs of the market.
- Another strategy companies should explore as an alternative to traditional managed services or outsourcing is referred to as Build, Operate, Transfer (BOT). Businesses collaborate with an external partner who hires and creates a specialised team, fully owning the recruiting process with a co-branded approach. Training, retention programs, and performance management are also owned by the external partner during this phase of the program. A key aspect, however, is an agreed-upon transition schedule to "hand the keys over" and allow the employees, and associated operation upon completion of the collaboration.



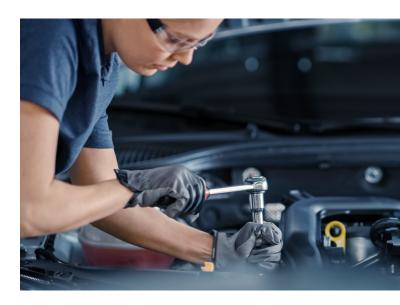
Finally, any conversation about recruitment strategy for a revolutionising automotive industry cannot overlook the enormous opportunity to employ and develop careers for workers in under-represented populations. As the skills discussed previously may need to be created from a limited experience foundation, or upskilled to fit the needs of the business, these investments can drive parity to populations where it previously did not exist.

First, through focused campaigns, automotive companies can contribute to narrowing the gender gap within the industry. According to one study, only 25% of auto manufacturing workers are women²⁰. Additionally, further focus can be applied when it comes to green skills. From LinkedIn's 2022 Global Green Skills report, in 2021 there were only 62 women for every 100 men considered "green" talent²¹. By specifically targeting women in the context of upskilling initiatives, the industry can make significant strides in increasing diversity, all while building up their talent pipeline. As they concomitantly seek to recruit young workers already equipped with desired green skills, they will need to focus on competitive and creative recruitment strategies.

In a similar manner, the industry can target other underserved groups to provide greater access to a skilled and stable career path: minority communities, refugee and immigrant populations, people with disabilities, and veterans, for example. By partnering with governments, universities, NGOs, and non-profit organisations, businesses may also benefit from additional incentives; including tax breaks, additional funding, and resources, creating a mutually advantageous relationship between workers, companies, and communities. A DE&I strategy is no longer enough for businesses to support their image and keep relevant in the market. Delivery on these key priorities will underpin success or failure, as organisations that are able to reap the benefits of the investment move to the forefront of the industry. If automotive businesses don't actively broaden their workforce, if they also fail to intentionally develop and retain it, they will not survive. It's a matter of business continuity.

Nate Mueller,

Vice President of Global Accounts, The Adecco Group





Conclusion

The automotive industry is at the forefront of an industrial revolution that is changing the way people live. Talent is at the intersection of this societal, organisational, and cultural transformation. Drawing on its agility and capacity to innovate, the automotive industry is well-positioned to lead this transformation in a way that secures both the sustainability of its workforce and its production. Succeeding in this transformation is both a challenge and an opportunity for the automotive industry to pave the way for the broader labour market, as new skills developed will be transferable to other industries, opening new career paths for workers and ensuring their long-term employability. Overall, for the transition to be efficient, talent development in the automotive industry needs to be matched by robust labour market policies and ensure an effective social dialogue with all partners for investments in training and education. Specific redevelopment plans for automotive regions are needed. Socially responsible companies should lay the groundwork for significant organisational change in an anticipatory manner, first by engaging stakeholders such as unions, political actors, vendors/suppliers, and the broader community as early and as transparently as possible when preparing for significant reductions in force or closures. This allows such stakeholders to participate in a solutions-oriented discourse to support employees and gives them a more nuanced understanding of the strategic direction of the company.





We see our automotive clients engaging more and more with partners who share the same philosophy and objectives in terms of sustainability, particularly on carbon neutrality, circularity, and diversity & inclusion. There is an unprecedented appetite for collaboration in the industry on

these topics.

Liana Colombelli, Vice President of Global Accounts, The Adecco Group

Key Takeaways

- Automotive OEMs and the whole automotive ecosystem need to actively contribute to the development of new skills for their workforce if they want to be prepared for the alternative power mobility revolution and deliver on regulatory expectations. The harmonisation of the learning & development path in the sector is key in that context.
- When site closures or layoffs are unavoidable, the industry should collaborate with partners and other industries for an equitable solution that supports the lifelong employability of their staff. Moreover, organisations should not underestimate the importance of change management and equipping key influencers and managers with the support they need if they are to be credible advocates of the change.

- Automotive employers are faced with a new challenge as they reinvent themselves in line with the green transition – attracting higher skilled talent away from traditional tech companies with historically more attractive value propositions. They should use the shift to green technologies and the inherent focus on sustainability to their advantage as they reinvent their value proposition.
- As candidate pools or skillsets may need to be developed from scratch, or upskilled from a foundation, an opportunity is presented for employers to invest in underrepresented populations in line with DE&I goals.
- To recruit key talent in a highly competitive market, companies need to work with partners and be creative about the strategies they need to deploy to optimise their results.

The successful transformation of the automotive industry will also depend on the choices of other stakeholders in its ecosystem. Of course, this will vary widely by country and the maturity of the bureaucratic system and market in which companies operate. Armed with its renowned spirit of innovation, the industry can enable human capital stakeholders in other industries to take greater ownership of this decarbonisation revolution, to the benefit of companies, workers, and society at large.





Editorial Team

Laura Andronache

Senior Communication Manager, Global Sales & Marketing



Liana Colombelli Vice President of Global Accounts



Nate Mueller Vice President of Global Accounts



Stephanie Ryan Global Customer Success Manager







References

1 https://www.bloomberg.com/news/articles/2022-07-13/a-quarter-of-americans-say-their-next-car-will-be-an-ev 2 https://www.forbes.com/sites/jamesmorris/2022/03/12/connected-cars-are-just-as-revolutionary-as-electric-vehicles/?sh=64d09d0941d6

3 including ECVs (Electric chargeable vehicles), FCEV (Fuel Cells Electric Vehicles), HEV (Hybrid Electric Vehicles) and NGV (Natural Gas Vehicles)

4 AACEA 2022 Progress Report - Making the Transition to Zero Emission Mobility https://www.acea.auto/ publication/2022-progress-report-making-the-transition-to-zero-emission-mobility/

5 Global Workforce of the Future Report, 2022, The Adecco Group https://www.adeccogroup.com/global-workforceof-the-future-research/

6 ACEA 2022 Progress Report - Making the Transition to Zero Emission Mobility https://www.acea.auto/ publication/2022-progress-report-making-the-transition-to-zero-emission-mobility/

7 https://www.consumerreports.org/hybrids-evs/why-electric-cars-may-soon-flood-the-us-market-a9006292675/ 8 https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/why-the-automotive-future-is-electric 9 Global Electric Vehicle Outlook 2022. International Energy Agency.

10 ACEA 2022 Progress Report - Making the transition to zero-emission mobility https://www.acea.auto/publication/ 2022-progress-report-making-the-transition-to-zero-emission-mobility

11 "Competences rares et d'avenir pour l'industrie Automobile" - SIA (Société des Ingenieurs de l'Automobile),

12 Leading agile transformation: The new capabilities leaders need to build 21st-century organizations - McKinsey 13 Global Workforce of the Future Report, 2022, The Adecco Group https://www.adeccogroup.com/globalworkforce-of-the-future-research/

14 https://www.acea.auto/figure/employment-trends-in-eu-automotive-sector/

15 "What Will It Take for Electric Vehicles to Create Jobs, Not Cut Them?" The New York Times https://www.nytimes. com/2021/09/22/business/economy/electric-vehicles-jobs.html

16 https://time.com/6084144/green-auto-industry-workers/

17 Global Workforce of the Future Report, 2022, The Adecco Group https://www.adeccogroup.com/global-workforce-of-the-future-research/

18 https://blog.recruiter.com/recruiter-index-july-2022

19 Where "build" indicates investing in full-time internal resources, "buy" involves acquiring resources externally or outsourcing, and "borrow" means procuring temporary labour or services

20 https://www2.deloitte.com/us/en/pages/manufacturing/articles/diversity-women-in-the-automotive-industry.html 21 LinkedIn Global Green Skills Report 2022. https://economicgraph.linkedin.com/research/global-green-skills-report







THE ADECCO GROUP