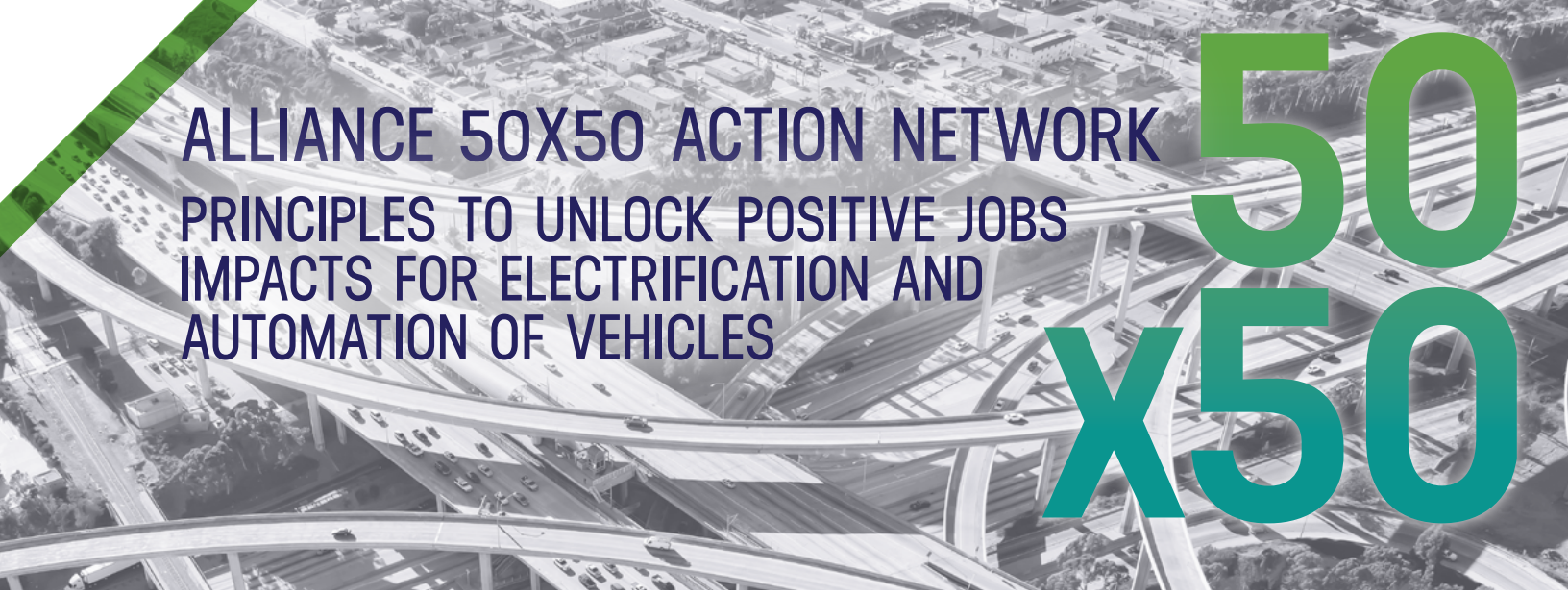

ALLIANCE 50X50 ACTION NETWORK

PRINCIPLES TO UNLOCK POSITIVE JOBS IMPACTS FOR ELECTRIFICATION AND AUTOMATION OF VEHICLES

50 X 50

The automotive industry is currently navigating a dramatic structural shift, with plunging battery costs, new opportunities for electrification, and innovative progress towards automation. It is also a jobs powerhouse, directly employing almost one million Americans and indirectly supporting several more million throughout the economy. EVs are expected to dominate the market by 2040, and while it's still hotly debated when automated vehicles will become ubiquitous, most experts agree that it is inevitable. And transportation, writ-large, directly contributes 5% to GDP.

Structural shifts present challenges and opportunities, and history shows that with disruptive technologies, the best-prepared communities – in terms of policies, training, and transitioning the existing workforce – often reap the most benefit. Unsurprisingly, China and a number of European nations are creating comprehensive industrial policies to ensure they become leaders in transportation innovation and create jobs at home. The United States cannot afford to be left behind, and should prepare for a future that advances a clean transportation sector while creating good-paying, sustainable jobs.

There is enormous uncertainty ahead regarding how markets for electrification, and especially automation, will develop; but it is possible to deploy clean transportation and create jobs in the United States, and the right policies will be critical to achieve it. While there is no one-size-fits-all policy to do this, the following principles can help guide the process:

Articulate a national commitment. The U.S. has been a historical leader in innovative new technologies and has benefited from this leadership. The U.S. also has a relatively robust EV manufacturing market. To continue this trajectory of growth, our leaders should commit to enacting policies that incentivize domestic production and manufacturing and nurture a stable environment for private investment. of public and private stakeholders including automakers, utilities, public interest groups, product manufacturers, and technology providers.

Invest in innovation. Electrification and automation create new connections to industries not traditionally considered automotive, ranging from battery manufacture to software development. It is critical to invest in technological innovation and the connections that bring those technologies to market. The U.S. spends less than 3% of its GDP on R&D, which is below other R&D intensive economies such as Korea, Japan, and Germany. We should counteract this trend by making globally competitive levels of investment.

Champion workers' rights. We not only need jobs, we need careers. The federal government's purchasing power should be used to uplift workers and communities, not facilitate a race to the bottom. Any federal investment in publicly owned infrastructure must prioritize labor standards that strengthen the construction workforce by providing career pathways through registered apprenticeship programs and the consistent application of the Davis-Bacon Act (DBA). The DBA is a law designed to protect the family-sustaining wages of blue-collar workers in the construction industry – one of the largest and industries in the U.S.

ALLIANCE TO SAVE ENERGY
using less. doing more.

The law prohibits contractors on protected federal projects from paying workers less than the local prevailing wage, preventing competition for federal construction contracts from artificially depressing local labor standards. Federal investments should also require hiring skilled, certified and licensed electricians to install EV charging infrastructure.

Prioritize equity. Even after the pandemic has passed, we cannot return to the pre-COVID status quo: it wasn't working for too many Americans, especially frontline, underserved, and rural communities. This requires a proactive strategy to advance diversity, equity, and inclusion (DEI) at all levels of transportation, for workers and consumers. For example, a diverse workforce will be critical to solving the mobility challenges of the future. The Bureau of Labor Statistics reports that around 85% of workers employed in the auto industry classify as white, compared to 60% of the population. Women also only represent about 5-20% of the industry, depending on specific occupations. We must create opportunities that allow these demographics a fair chance at accessing the industry. To ensure a diverse and representative workforce, the federal government should invest in apprenticeship programs and industry-academic partnerships to prepare underrepresented populations for entry into these positions. We should also enhance and enforce hiring and procurement policies that benefit low-income communities, people of color, and women.

Raise the next generation of transportation workers. While it's true that the next generation of vehicles will have fewer moving parts – and thus require less maintenance – historically, the demand for labor has increased as technology has advanced. Some estimate that the car of the not-so-distant future will contain an average 200 million lines of code (by comparison, Facebook's entire online infrastructure consists of 50 million lines of code). This could create upwards of 100,000 new jobs in coding and data analytics. Regardless of the exact impact on labor, our leaders need to proactively anticipate what may likely be a structural shift in employment and prepare workers accordingly. Moreover, we must ensure that the transition does not exacerbate wealth inequality. Public job training and retraining and skills programs should be established with low or no barrier to entry.

Include workers in the process. The formulation of good policy requires all stakeholders to be at the table. Policymakers should establish processes to work with labor representatives and community advocates who can help identify a strategy for achieving a just transition for an electrified and automated future to ensure that solutions produce the best outcomes for workers and their families. We are fortunate to have the opportunity to create a more efficient, cleaner, and better-serving transportation system, and reap the jobs benefits by spearheading tomorrow's automotive sector. But it requires that we be proactive, and establish strong policies, programs, and a shared vision to get us there.

ABOUT THE ALLIANCE 50X50 ACTION NETWORK

The 50x50 Action Network is a group of public and private stakeholders – including automakers, utilities, public interest groups, product manufacturers, and technology providers – committed to reducing energy use in the transportation sector by 50% by 2050. Members work to implement the detailed policy recommendations assembled by the Alliance to Save Energy's 50x50 Commission through on-the-ground advocacy, thought leadership on complex issues in the space, and building state and local synergies. This includes incorporating recommendations into Surface Transportation Reauthorization legislation, activating champions for efficient transportation, and continuing to articulate, refine, and adapt the 50x50 vision. To find out more about the Action Network, visit here.