United States House of Representatives
Select Committee on the Climate Crisis

Hearing on July 29, 2021
"Financing Climate Solutions and Job Creation"

Questions for the Record

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The Honorable Kathy Castor

1. **Ms. Lipman, we know zero-emission vehicles are cleaner and cost less over a vehicle's lifetime than vehicles with internal combustion engines. Could you please explain how incentives for consumers to buy zero-emission vehicles and incentives for automakers to build zero-emission vehicles in America could be helpful?**

Sufficient and targeted consumer incentives that expand and speed uptake of cleaner vehicles are important to transitioning the nationwide vehicle fleet to electric vehicles at the pace needed to achieve climate goals. At the same time, we must urgently support increased domestic manufacturing in meeting this quickening demand for EVs. Our competitors worldwide are also moving fast to capture the economic gains from this shift. If the U.S. is going to successfully meet our climate, jobs or economic goals, we will need both a supply- and demand-side approach. We will need to use a coordinated set of tools to support the domestic manufacture and deployment of cleaner vehicles, and to ensure that the shift to electric vehicles protects and creates good jobs in communities across America – together these actions are key to enabling a rapid, equitable and sustainable transition to clean transportation.[i]

Consumer incentives stand to play a significant role in shaping the shift to electric vehicles, as well as the manufacturing, jobs, and community impacts of that transition. Specifically, the 30D consumer tax credit for electric vehicles should be updated (such as described in Sen. Stabenow's amendment to The Clean Energy for America Act (S.1298)) to incentivize strong manufacturing labor standards and support domestically manufactured EVs.

By incentivizing vehicles assembled in the U.S. with greater domestic content, and vehicles built in union facilities, the consumer EV tax credit can help retain and grow the next generation of high-skill, high-wage, family-supporting jobs in the United States, while accelerating the domestic electric vehicle production and supply chain investment and growth necessary to secure long-term U.S. competitiveness in the automotive sector. To maximize the equitable deployment of EVs, the credit should be made refundable, or ideally, available at the point of sale.

Additionally, Congress should establish a tax credit to incentivize the purchase of used EVs, which could improve access to EVs for low- and moderate-income consumers, and Congress should ensure that such a credit is similarly refundable and targeted. Similar criteria for domestic manufacturing, labor standards, and addressing equity should be applied to the 30B credit for other advanced technology vehicles.

We also support the ongoing work to expand the 30C tax credit for charging infrastructure. as Robust proliferation of easily accessible charging will be essential to the success of EV adoption. Incentives for charging infrastructure should ensure availability for all communities, with a priority on filling gaps in low income, rural, and deindustrialized communities and communities of color, and availability for residents of multi-family housing, and be refundable. These incentives should also require certified training for installation of electric vehicle supply equipment (such as the Electric Vehicle Infrastructure Training Program, or EVITP) and the domestic manufacture of charging stations.

On the manufacturing side, incentives to expand and retool the domestic factories building the clean vehicle fleet of the future, and to establish and grow the domestic EV technology supply chain in the U.S. are essential to secure the economic and jobs benefits accompanying this major sector transformation. Key incentives include:

- The 48C Advanced Manufacturing Tax Credit Program.
- New production and investment tax credits for facilities in the EV supply chain.
- Enhanced funding and expansion of DOE advanced automotive loan and grant programs, including the Advanced Technology Vehicle Manufacturing (ATVM) loan program and manufacturing conversion grant programs.

48C Advanced Manufacturing Tax Credit Program: The always-oversubscribed 48C tax credit program has provided funding to over 180 facilities—predominantly in small- and medium-sized manufacturing—to establish or expand domestic production of a wide range of clean energy and industrial products, including EV components and materials.[ii] By increasing funding for the tax credits (and/or comparable grants) Congress can provide the necessary funds to establish or retool facilities manufacturing batteries and battery materials, semiconductors, inverters, motors, and facilities that process and recycle critical minerals. These tax credits should prioritize investment in economically distressed communities, deindustrialized, and disadvantaged communities.

New manufacturing production and investment tax credits: The recent global semiconductor technology shortage, and its impacts on the domestic auto sector, illustrate how our reliance on a limited number of foreign suppliers for critical components can threaten our economic security. For the growing EV market, the challenge is even greater; the U.S. lags behind its competitors in producing key propulsion system technologies. Through a new manufacturing investment tax credit (ITC) designed to fill economically critical supply chain gaps, Congress can provide key support to speed investment in establishing landmark production facilities, while a production tax credit (PTC) can aid in supporting the domestic scale-up of novel technology

production. These investments will facilitate the national transition to EVs, protect and create high-quality jobs, build resilience and stability into the domestic EV supply chain, and ward off or reverse the offshoring of good jobs throughout the automotive supply chain.

ATVM: The ATVM plays a key role in spurring major auto and component manufacturers to locate their advanced vehicle and technology facilities in the US, rather than abroad, reducing risk as technology and markets shift. The ATVM has supported the establishment, retooling or expansion of domestic auto manufacturing facilities in eight states to build clean, fuel-efficient, and electric vehicles. The policy has sustained or created at least 35,000 direct jobs, and 200,000 indirect jobs. As the market accelerates toward EVs, the ATVM can again provide essential support for auto and manufacturing jobs throughout the supply chain, while facilitating vehicle emission reductions.

Manufacturing Conversion Grants: Conversion and retooling grants can play a key role in bringing new technology into existing facilities, and maintaining supplier networks and workforces. This allows for expansion of the domestic EV manufacturing sector and enhancement of local jobs and community benefits, while avoiding—and in some cases, redressing—the harms of poor industrial policies of the past. These grants are key to an EV transition that puts workers and communities first.

We discuss these programs in more detail below.

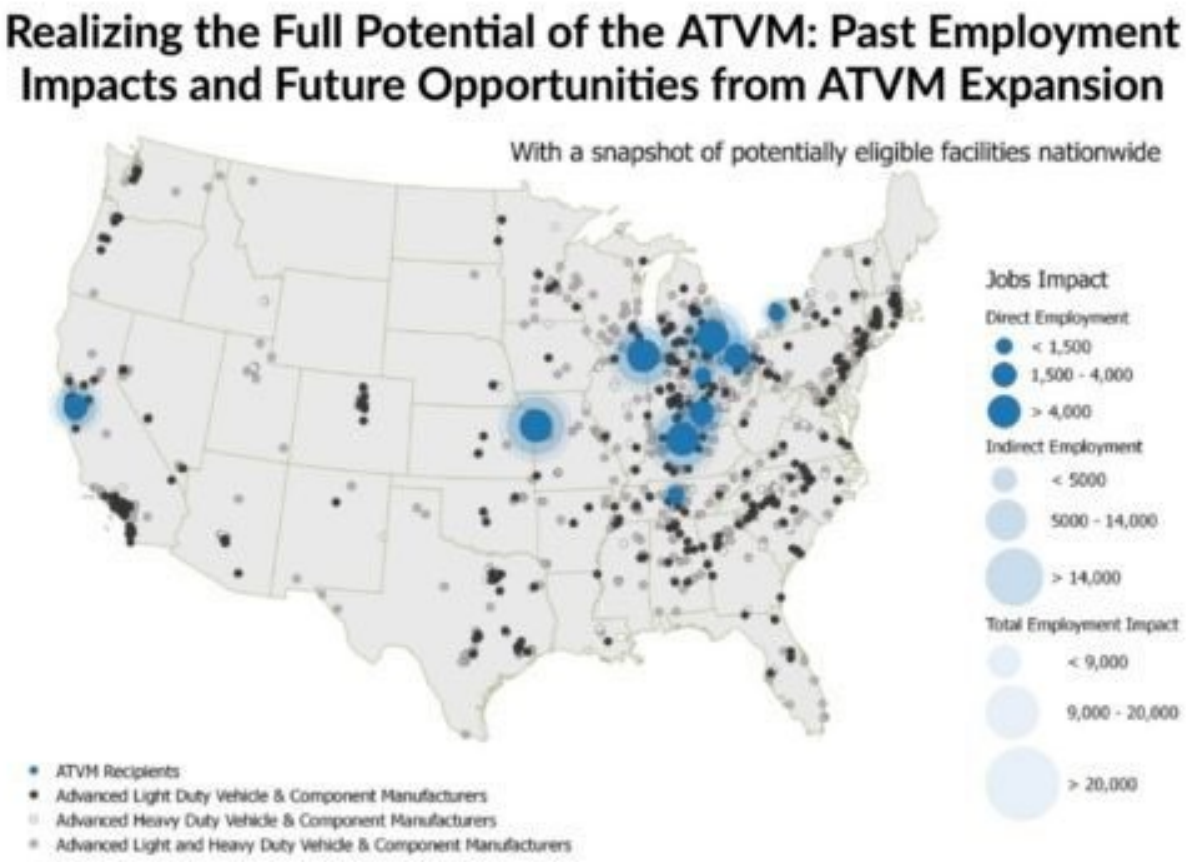
2. **Could you please describe the types of policies and investments that could help expand, retool, and convert U.S. automotive and component manufacturing facilities to build advanced vehicles?**

There are five principal mechanisms by which Congress can support manufacturing and good jobs all throughout the domestic automotive supply chain: the Advanced Technology Vehicle Manufacturing loan program (ATVM); conversion & retooling grants for recently-closed or at-risk facilities; the 48C Advanced Manufacturing tax credit program; production and investment tax credits for critical components in the EV supply chain; and labor standards, domestic content requirements, and equity provisions in EV deployment incentives. These mechanisms are described in detail below:

Fund the Advanced Technology Vehicle Manufacturing (ATVM) loan program at the Department of Energy to restore rescinded funds and expand existing authority to additional technologies, including medium- and heavy-duty vehicles, electric vehicle subcomponents, charging infrastructure, and other economically critical materials and technologies.

The ATVM plays a key role in spurring major auto and component manufacturers to locate their advanced vehicle and technology facilities in the US, rather than abroad, reducing risk as technology and markets shift. The ATVM has supported the establishment, retooling or expansion of domestic auto manufacturing facilities in eight states to build clean, fuel-efficient, and electric vehicles. The policy has sustained or created at least 35,000 direct jobs, and over

200,000 indirect jobs[iii]. As the market accelerates toward EVs, the ATVM can again provide essential support for auto and manufacturing jobs throughout the supply chain, while facilitating vehicle emission reductions. Congress should at minimum replace the portion of ATVM funding rescinded in 2020, and increase funding to cover expanded program scope that includes medium & heavy duty vehicles and components manufacture, related electric charging & hydrogen fueling equipment, and other critical materials and technologies, which represent the key frontiers of advanced vehicle innovation. The ATVM is a high-impact program that, with comparatively modest additional federal investment, can enable tens of billions in manufacturing loans. The program demonstrates how centering manufacturing as an integral part of the nationwide vehicle transition can yield wins for jobs and the climate. With additional funding, the program could be utilized to spur investment across even more of the advanced transportation market and value chain. The broad impacts of past—and potentially, future—use of the program are illustrated below[iv].



Invest in Manufacturing Conversion & Industrial Retooling Grants to leverage the facilities and expertise we have today to build the clean vehicle fleet of the future.

The closure of manufacturing facilities can have widespread and lasting economic impacts on manufacturing communities, while undermining valuable manufacturing capacity, networks, and workforce capabilities. Manufacturing conversion and industrial retooling grants (such as

authorized in Section 132 of the 2007 Energy Independence and Security Act) mitigate against this community devastation and costly economic disruption by directing investment to refurbish and retool recently-closed or at-risk facilities in the auto manufacturing sector. Conversion and retooling grants can play a key role in bringing new technology into existing facilities, and maintaining supplier networks and workforces. This allows for expansion of the domestic EV manufacturing sector and enhancement of local jobs and community benefits, while avoiding—and in some cases, redressing—the harms of poor industrial policies of the past. These grants are key to an EV transition that puts workers and communities first.

Robustly fund the 48C Advanced Manufacturing Tax Credit Program to support small- and medium-sized manufacturers that largely comprise the automotive supply chain.

The highly successful 48C tax credit program has a proven track record of enabling predominantly small- and medium-sized manufacturers to establish or expand domestic production of a wide range of clean energy and industrial products, including EV components and materials. With major increases in funding for these tax credits (and/or comparable grants) Congress can provide the necessary funds to establish or retool facilities manufacturing batteries, semiconductors, inverters, motors, and facilities that recycle critical minerals. 48C tax credits are also essential to spur manufacturing expansion in other critical clean technology sectors. These tax credits should prioritize distressed communities, including those that have traditionally relied on the fossil fuel economy for their livelihoods.

Fill domestic EV supply chain gaps through strategic manufacturing investment and production tax credits, among other potential measures.

The recent global semiconductor technology shortage, and its impacts on the domestic auto sector, illustrate how our reliance on a limited number of foreign suppliers for critical components can threaten our economic security. For the growing EV market, the challenge is even greater; the U.S. lags behind its competitors in producing central EV propulsion system technologies. Through a new manufacturing investment tax credit (ITC) designed to fill economically critical supply chain gaps, Congress can provide key support to speed investment in establishing landmark production facilities, while a production tax credit (PTC) can aid in supporting the domestic scale-up of novel technology production. These investments will facilitate the national transition to EVs, protect and create high-quality jobs, build resilience and stability into the domestic EV supply chain, and ward off or reverse the offshoring of good jobs throughout the automotive supply chain.

Update and extend the 30D tax credit (as described in the Stabenow amendment) to incentivize strong manufacturing labor standards and support domestically manufactured EVs, and extend the 30B and 30C tax credits with labor standards and domestic manufacturing safeguards.

Ensuring our clean energy deployment tax credits are also updated to include labor and domestic content standards is also key to support and complement the protection and growth of domestic manufacturing and jobs.

By incentivizing vehicles assembled in the U.S. with greater domestic content, and vehicles built in union facilities, the consumer EV tax credit can help retain and grow the next generation of high-skill, high-wage, family-supporting jobs in the United States, while accelerating the domestic electric vehicle production and supply chain investment and growth necessary to secure long-term U.S. competitiveness in the automotive sector.

To maximize the equitable deployment of EVs, the credit should be made refundable, or ideally, available at the point of sale, and include an appropriate MSRP cap. Additionally, we should expand the reach of the EV tax credit to more consumers – particularly those who may not otherwise have been able to purchase and EV through the addition of a used EV credit.

Spurring domestic demand for EVs can and should boost American innovation, American manufacturing, and family-supporting, union jobs. Congress has the power to help ensure that American communities and workers can access the opportunities arising from this industry transformation, rather than facilitating the flight of good jobs to Asia and Europe, where key elements of the EV value chain are currently concentrated, and where policymakers are taking stronger actions to spur the production of key technologies[v]. Our consumer incentives should reward increased investment in U.S. manufacturing and workers and the creation of good jobs with high labor standards in communities across America.

Endnotes/ References Page

[i] BlueGreen Alliance, *EVs Are Coming. Will They Be Made in the USA?*, April 2021. Available online: https://www.bluegreenalliance.org/resources/backgrounder-evs-are-coming-will-they-be-made-in-the-usa/ .

[ii] Department of Energy, *Fact Sheet: 48C Manufacturing Tax Credits*, February 2013. Available online: https://www.energy.gov/downloads/fact-sheet-48c-manufacturing-tax-credits.

[iii] BlueGreen Alliance, *Advanced Technology Vehicles Manufacturing Loans: Employment Impacts*, November 2016. Available online: https://www.bluegreenalliance.org/wp-content/uploads/2016/11/ATVM-employment-impacts-and-potential-FINAL.pdf

[iv] Ibid. Chart and data, BGA. From above report.

[v] Ibid. BGA, *EVs Are Coming. Will They Be Made in the USA?*,