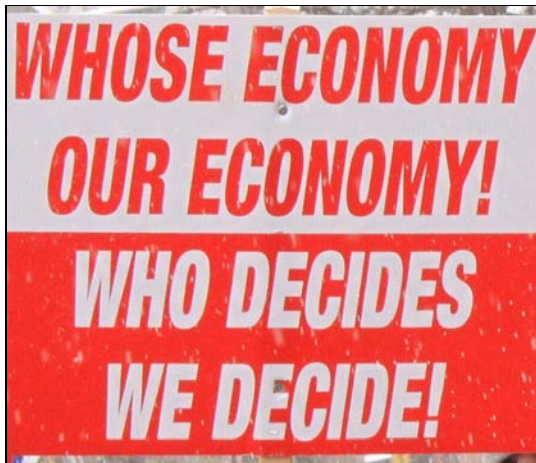


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**Communities and Society Not the Rich Must Benefit from  
Investments of State Funds**

## **Governments at All Levels Paying for Large- Scale Changes in Auto Industry**

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**Communities and Society Not the Rich Must Benefit from  
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## **Governments at All Levels Paying for Large-Scale Changes in Auto Industry**

– *Enver Villamizar* –

A matter which concerns the polity at this time is how to come to terms with the massive technological and scientific developments which are resulting in large-scale changes to the way production is organized.

An example is the speed with which the electrification of the automotive and other industries is

taking place with all levels of governments handing over large amounts of public funds to pay for it and to build the new infrastructure required. Ontario and Quebec in particular are advancing towards becoming centres for the use of electricity and critical minerals to charge electric batteries for use in electric vehicles and other technologies. On December 21, 2022 the Federal government issued regulations mandating that one-fifth of all passenger cars, SUVs and trucks sold in Canada in 2026 will need to run on electricity and that by 2035, every passenger vehicle sold in Canada will need to be electric.

Ontario is the centre of Canada's automotive industry. With well-known centres in Oshawa and Oakville and from Brampton to Windsor there is a complex ecosystem of production centres, suppliers, transportation routes and workers. In terms of automotive production, serious changes are taking place in three main areas.

Electric car motors have only a third of the parts of an internal combustion engine – some 66 per cent less parts -- and thus require less labour to assemble. They are therefore assembled much faster on the assembly line.

A second feature is that new methods of casting mean that the car frames can be cast in three parts in milliseconds from molten aluminum poured into moulds. They are then assembled, dipped in paint and then have the doors, windows and bumpers added. In the past there were many more parts that would have to be welded and then stamped to assemble.

A lot of this then relies on the use of robots and artificial intelligence (what is called mechatronics) when assembly is on a larger scale. Far fewer workers are needed. In addition, the provision of parts for the line is all automated now with self-driving drones which bring parts back and forth throughout a plant.

The third feature is that cars are becoming computers whereby updating or fixing the car is more a matter of downloading apps rather than making mechanical fixes.

All of this means that companies involved in this sector of the economy are pushing to reduce the cost of batteries and their production because then they can reap more profit as they push down wages and the price and number of parts, in addition to reducing the number of workers who make a claim on the value they produce through their wages. This is in part why the shift is taking place so swiftly to get state funds to pay for the retooling of the production lines and reducing the costs associated with the provision and development of batteries. In other words, it is a scramble to transition in order to keep their profits growing on the basis of public financing and by reducing labour's claim on the value it creates.

The public financing of electric battery production and research is also to feed the U.S. war machine which is transitioning to using weapons based on artificial intelligence. For the workers and unions how to defend the interests of the workers in the automotive sector is a whole new ball game.

An example of how this affects the economy and the life of the workers and their communities is in Ingersoll, Ontario where GM has now re-tooled the entire CAMI Assembly plant for the production of electric delivery vans, known as Brightdrop ZEVO. This re-tooling was financed in part by a handout of \$259 million from the federal government and a matching \$259 million from the Ontario government for GM operations in Ingersoll and Oshawa to transition to EV production. The plant now supplies fleets of delivery vehicles for FedEx, DHL and Walmart. The bigger the amount being assembled, the greater the reliance is on robots rather than workers for assembly. The vehicles themselves are equipped with electric pallet jacks that drive themselves, like drones. This assembly line produced the Chevrolet Equinox SUV until 2021. Unifor, the union representing the workers at CAMI, negotiated a new contract in 2021 for this new line. According to Unifor President Lana Payne, the transition to electric vehicles and the change in components required resulted in a loss of 750 jobs in and around Ingersoll.



**Photo from GM website of production line in electric-vehicle manufacturing plant in Ingersoll.**

Some 17,000 or more than 40 per cent of Unifor's members in the automotive sector work in what is called the independent auto parts sector, which supplies much of the Big 3 and others in the automotive assembly industry. In a speech on January 12 to the Federal Reserve Bank of Chicago's Annual Automotive Insights Symposium, Payne said, "Our own internal analysis shows nearly one-third of our membership in the independent parts supply sector are vulnerable in this shift to EVs." She said, "That's thousands of workers building parts that are simply non-transferable to electric vehicles."

Besides changing the way the work is done, this shift to electric vehicles also means that the entire supply chain is changing in terms of the delivery of components and materials. From a "just in time" system of delivery what is called a "just in case" system is being brought into being which, in turn, requires warehousing and the associated use of AI and driverless trucks and cheap labour. A just-in-time (JIT) inventory system is a management strategy that aligns orders from suppliers directly with production schedules. Just in case (JIC) refers to an inventory strategy where companies keep large inventories on hand in case of a large and sudden increase in demand or disruptions in supply chains, as took place during the pandemic in the case of microchips and other supplies.

All of this is accompanied by an emphasis on the issue of supply chain security because EVs are said to be subject to what are called pinch points which, in the absence of a strategy to avoid them, can lead to complete shutdowns of production in a short period of time. Communities are thus also being turned into warehousing hubs along transportation corridors. Little by little everything will be subject to the provisions of emergency legislation, such as Bill 100 passed in Ontario in response to the Freedom Convoy's blocking of the Ambassador Bridge in Windsor. In the name of national security and the economy, such measures do not permit political or workers' actions while at the same time, in the name of safeguarding the supply chains, they permit foreign armed guards to operate on Canadian soil in manufacturing facilities.

In the auto sector, negotiations in the Big 3 are set to begin in March as contracts expire in September 2023. For the first time in 20 years, the Canadian and U.S. autoworkers in Unifor and UAW are negotiating simultaneously. According to automarket analysts, "The negotiations come at a time of high inflation (the first time this will happen in decades), low volume with high company-level profits and a once-in-a-100-plus year powertrain transition to electric focus."

Reports indicate that the industry sees this in a negative light because it provides arguments for the workers to get higher compensation which, they predict, could increase by "25-30 per cent" on average total compensation. Another consideration is that there is a very marked lack of skilled

trades workers for these new industries such as electricians and millwrights. Anti-worker propaganda has already started, putting the workers' claims on the value they produce as harmful to the transition to what is called a green economy.

These negotiations are for the main assembly operations in Canada and the U.S. However, the timelines for negotiations at the GM CAMI Assembly plant in Ingersoll are now different than other operations and concluded in 2021. The speculation is that whatever model of contract negotiations was established at CAMI may become part of the bigger model for the Big 3.

In the last three rounds of negotiations since the 2008 financial crisis, autoworkers have faced major restructuring of their working conditions in the name of getting new investments and preventing companies from leaving. Major changes were made to benefits and pensions and especially work rules in terms of giving the employers much more flexibility to organize production. With this shift to EVs, the pressure on the workers is to temper their demands in order to ensure that Canada wins in the competition with plants in the U.S. for EV production. Besides the concessions they are asked to make in the name of securing new investments, any fighting stance is criminalized in the name of national security and the national economy.

Securing supply chains and keeping them running is pitted against ensuring the production workers, truckers, railway workers, lakers, construction workers and all others are provided with the living and working conditions required. Workers have become things to be disposed of and this cannot be accepted. On the contrary, the workers must establish their own vantage points in negotiations and, with this new economy that is changing all aspects of production, and not permit the Kool-Aid of the narrow private interests and their governments to set the criteria for them.

In the name of national security even discussion about what is called green energy and massive government subsidies for it is shut down and this is not permissible. The workers in the automotive sector are facing the same difficulties as everyone else in society and are in no mood to accept being told that they should temper their demands or that they should just hope and pray they are not tossed out onto the street as a result of the transition. Both the rich and the union leadership are very aware of this.



An important demand workers can raise is that money provided by state funds must benefit their communities and be in the general interests of society. The issue of this is a matter of concern for the entire community where they are taking place and the society as a whole. They require all those concerned getting involved to speak out about what they require and to demand that governments stop paying the rich at the expense of their duty to Canadians. By leading and mobilizing entire communities to affirm the rights of all, working people take the lead in opening society's path to progress and averting the dangers which lie ahead as Canada and the U.S. devote more and more resources to war production.



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## **Changes to Education to Serve Private Interests in the New Economy**

**– EmpowerYourselfNow.ca –**

St. Clair College, a community college in Windsor, has announced plans to launch an Electric Drive Vehicle Technician diploma and an Electric Drive Vehicle Fundamentals certification program, approved by the Ministry of Colleges and Universities (MCU), in response to the building

of an electric battery plant and electric car assembly plant in the area. The plant is being publicly financed in partnership with LG and Stellantis.

The battery and assembly plants have already received substantial amounts of public funds and now the provision of free research and training for the operations is a big focus. The battery plant, a partnership between LG and Stellantis, is being publicly financed by all levels of government and while the amounts have yet to be disclosed estimates put it in the range of \$500 million. The city of Windsor itself purchased the land it sits on for \$50 million and has provided a 20 year tax holiday valued at \$70 million. The re-tooling of the Stellantis' assembly plant is receiving up to \$500 million from the federal government alone.

Waseem Habash, senior vice-president of academic and college operations at St. Clair, said that the college has been preparing for this transition for several years and expressed excitement about the opportunities the new programs will offer to students. "We're really excited because this puts Windsor on the map and gives our graduates, the young generation, the next generation, the opportunity to have jobs for a long time," Habash said.

The Electric Drive Vehicle Technician program will prepare students for a career as an Electric Vehicle Technician, responsible for the maintenance, service, and repair of electric vehicles (EVs), plug-in hybrid electric vehicles (PHEVs), and hybrid electric vehicles (HEVs). The Electric Drive Vehicle Fundamentals program will introduce students to the fundamentals of EVs and provide them with a foundation for the Technician program. The program will cover topics such as Electric/Electronic fundamentals, electrified vehicle systems and components, high-voltage safety, and EV maintenance.

Tuition for a two-year program at St. Clair College currently costs around \$4,000 for domestic students and \$15,300 for international students. Domestic students are eligible for student loans, which they must repay with interest once they start earning above a certain threshold.

The University of Windsor is also planning to offer a mechatronics engineering program in 2024 with a focus on manufacturing and producing electric vehicles. Mechatronics engineering is the design of computer-controlled electromechanical systems, and it encompasses the mechanical, electrical, electronic, and computer control aspects of a system. Graduates of such programs have gone on to develop advanced prosthetics, Internet of Things (IoT) devices, autonomous vehicles, and robotics.

The University of Waterloo already offers the program, which it started developing in 2000. It currently has an enrollment of around 110 students, with annual tuition fees of \$17,100 for domestic students and \$61,300 for international students, not including the cost of books, room and board and living expenses. The program is four years and eight months long and often includes a co-op component where students work for companies in the field. While they receive payment, they must also simultaneously pay fees for the co-op program. Companies subsequently receive trained labour free of cost. Based on the length of time to get a degree, the cost of tuition alone for the full program for a domestic student would be roughly \$79,686 while for an international student it is \$285,658.

In profiles of its graduates, the University highlights two from 2015 who began a startup called Embark Trucks, focused on the problems of having self-driving trucks. The company has set up a model of charging trucking companies per-mile subscription fees for their software to allow self-driving trucks. It plans to enable carrier operations beginning in 2024. The company recently made a deal with a large company which provided it with \$614 million to fund its self-driving software for long distance freight trips.

It shows how the thrust of post-secondary education is being geared to serve the needs of the new economy which is being brought into being by providing their needs with the educated personnel they require free of cost to themselves. Private contracts are then entered into between the individuals who become the best and the brightest and the large private entities. The students and

their families fund the tuition and along with public funds, workers are tailor-made to serve the requirements of the electric vehicle (EV) industry based on artificial intelligence.

One question this raises is where the monies required to fund social programs, such as health, education, and culture, will come from? While those who make it in the new economy may be able to fund their own private health and social insurance plans, the majority of the people are being thrown under the bus. Advances in technology are the creation of the productive forces as a whole and they must benefit current and future generations. This issue is not being addressed because those in control of the direction which is being set for the economy are the very giants which have usurped state power and are wielding it to serve themselves. Despite this, the future can only come into being when the workers create it themselves. They must set the direction of the economy by empowering themselves which can be done by making sure they take up the problem of making sure the value created by these new productive forces is used for the benefit of the people, their collectives, including their communities, and the general interests of society itself.

*(Empower Yourself Now with files from the University of Waterloo News)*



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## Artificial Intelligence in Education

– *Education is a Right Podcast, February 14, 2023* –

With the release of the AI app ChatGPT and many concerned about its use in education, Education Is a Right is joined by Dr. Beyhan Farhadi, a Toronto District School Board teacher and researcher in the field of e-learning to discuss the use of this new technology. Artificial Intelligence is here to stay. How can it be used benefit students, educators and society itself is the thrust of the discussion.

You can listen by clicking on the image below.



*(Edisaright.ca)*



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