

Legislative Analysis



MBT CREDIT FOR ELECTRIC VEHICLE CHARGING STATIONS

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House Bill 6435 (Substitute H-1)
Sponsor: Rep. Ed Clemente
Committee: Energy and Technology

First Analysis (9-28-10)

BRIEF SUMMARY: The bill would amend the Michigan Business Tax (MBT) Act to allow a business taxpayer to claim a non-refundable tax credit equal to 30 percent of the cost of installing one or more level 2 charging stations for plug-in electric vehicles, up to a limit of \$20,000 per taxpayer, similar to the credit currently available to service station owners for installing or converting a pump to dispense E85 or a qualified diesel blend. The total of all credits claimed for electric vehicle charging stations, E85 pumps, and biodiesel pumps could not exceed \$1 million per calendar year, with not more than \$800,000 of this amount available for electric vehicle charging station credits and \$200,000 reserved for E85 and biodiesel credits. The charging station tax credit would be available only for a tax year that begins after December 31, 2010, and ends before January 1, 2012. (MCL 280.460)

FISCAL IMPACT: As written, the bill does not change the \$1.0 million cap on the sum of all credits claimed in any tax year. To the extent that more taxpayers are able to qualify for a credit, the bill would decrease MBT revenue by an unknown, but likely negligible, amount. The reduction in revenue would come from the General Fund.

THE APPARENT PROBLEM:

Many countries around the world, including the United States, are promoting the development and use of "greener" motor vehicles, including "plug-in" electric vehicles, as a way to reduce dependence on imported oil and reduce greenhouse gas emissions. Michigan is positioning itself as a leader in the manufacture of plug-in electric vehicles and the advanced batteries used in them. The federal government has assisted this effort by providing over \$1.2 billion of grants relating to electric vehicles and advanced batteries to Michigan businesses and universities under the American Recovery and Reinvestment Act (ARRA). According to the U.S. Department of Energy, Michigan received more ARRA grants of this type than any other state. In addition, Michigan was one of nine states selected to receive hundreds of free public and residential charging stations by October 11, 2011, under a \$37 million Department of Energy program called ChargePoint America. A charging station installed at the NextEnergy headquarters in Detroit on September 2, 2010, was the first in Michigan under this program.

State tax policy has also supported the development of advanced batteries and electric vehicles: for example, Public Act 580 of 2008, and subsequent amendments to that act,

created refundable tax credits for certain business expenses relating to advanced battery and electric vehicles.

Several different types of plug-in electric vehicles will come on the market in late 2010 and 2011. Some electric vehicles, including the Nissan Leaf, will run entirely on battery-stored electricity. Others, including the Chevrolet Volt, sometimes referred to as "extended range electric vehicles," will run exclusively on battery-stored electricity for a certain number of miles and then continue to run on gasoline-generated electricity. Another category consists of plug-in hybrid-electric vehicles. These vehicles are plug-in versions of hybrid vehicles already on the market, but with larger batteries that can be plugged in for recharging and that allow the vehicle to get more power from its electric motor.

All electric vehicle batteries need to be recharged regularly using a standard household outlet or a special recharging station. For most electric vehicles, battery recharging is expected to take about six to eight hours using a standard 120-volt household outlet (a so-called "level 1" connection) or about two to four hours using a 240-volt or "level 2" connection. Electric-only vehicles with larger batteries take longer to charge, about eight hours even at level 2. Although slower "level 1" recharging may work for some drivers, others drivers—especially those with electric-only vehicles—will want or need faster level 2 charging. Even faster "level 3" charging, using a 480-volt connection, may allow some vehicles to be charged in as few as ten to fifteen minutes.

The first drivers of this new generation of electric vehicles will have few, if any, places to recharge them away from home, and some industry observers worry that this could discourage many people from buying electric vehicles, especially all-electric ones. Until a recharging network is available, electric vehicles may only be attractive to people with short daily commutes or limited driving needs. Even someone with a short daily commute might be reluctant to purchase an electric vehicle, especially an all-electric one, if it could never be recharged away from home, because of what is sometimes called "range anxiety"—the fear of driving beyond the battery's range and getting stranded with a dead battery and no place to recharge it. ("Range anxiety" is thought to be more of an issue for purely-electric vehicles, than for plug-in hybrids and extended range electric vehicles like the Chevy Volt that also run on gas.) Although some industry observers say that a rapid build-out of an electric vehicle charging infrastructure is necessary, many businesses will be reluctant to purchase and install public charging stations before public demand for electric vehicles has grown and become well established.

To encourage businesses to build public charging stations early on, before the level of demand for electric vehicles is well established, the bill provides a tax credit of up to \$20,000 to businesses that install one or more publicly-available Level 2 electric charging stations in 2011. Some people say that parking lots and parking garages with a lot of vehicle traffic are good places for level 2 charging stations, especially lots and garages linked to hotels, motels, movie theaters, coffee shops, and other places to which people drive, park, and then stay for at least a few hours at a time.

This bill is supported by the Public Service Commission's Plug-In Electric Vehicle Preparedness Task Force, convened in April 2010 to plan for and facilitate the introduction and acceptance of plug-in electric vehicles in Michigan.

THE CONTENT OF THE BILL:

Under Section 460 of the Michigan Business Tax (MBT) Act (MCL 208.1460), a service station owner may claim a non-refundable tax credit of up to \$20,000 against its liability under the MBT, equal to 30 percent of the cost of installing a new pump or converting an existing one to dispense E85 or a qualified biodiesel blend. This tax credit is available for the 2009, 2010, and 2011 tax years only (tax years beginning after December 31, 2008 and ending before January 1, 2012). The total amount of credits of this type claimed per calendar year cannot exceed \$1million dollars.

House Bill 6435 would amend Section 460 to provide a similar non-refundable credit to an MBT taxpayer who installed ***one or more new charging stations for charging plug-in electric motor vehicles that are available for public use***. This credit, like the one currently available for E85 or biodiesel pumps, would be equal to 30 percent of the costs incurred to purchase and install the charging station, subject to a \$20,000 limit per taxpayer per tax year. The total of all of the credits against the MBT allowed under Section 460—for E85 pumps, for biodiesel blend pumps, and for plug-in electric vehicle charging stations—could not exceed \$1 million per calendar year. Of this total, not more than \$800,000 of the available credits could be claimed for electric vehicle charging stations, with at least \$200,000 reserved for E85 or biodiesel pump credits. The charging station tax credit would be available only for a tax year that begins after December 31, 2010, and end before January 1, 2012.

Public Availability. Only charging stations available for public use would qualify for the tax credit. Under the bill, this means that the charging station must be accessible to the public for charging electric vehicles, and that use of the charging station is not limited to subscribers or members, or by any similar restriction.

Procedure for claiming E85 or biodiesel pump credit. The bill would revise the current procedure for claiming an MBT tax credit for the cost of an E85 or qualified biodiesel blend pump, specifying that the taxpayer would need a certificate from the "Bureau of Energy Systems," rather than the "Energy Office," and that this certificate would only have to disclose a grant received by the taxpayer under Section 78 of the Michigan Strategic Fund Act based on the same costs,¹ but not any other grant that the taxpayer might have received based on the same costs.

Procedure for claiming electric vehicle charging station credit. To claim a tax credit for installing an electric vehicle charging station, the taxpayer would have to attach a

¹Among other things, Section 78 of the Michigan Strategic Fund Act, MCL 125.1078, established a matching grant program to provide incentives to service station owners to convert existing fuel pumps or build new ones to dispense E85 or biodiesel.

certificate from the Bureau of Energy Systems that (1) stated that the taxpayer installed a publicly-accessible charging station on its property during the tax year for which the credit was sought; (2) specified the costs incurred by the taxpayer to purchase and install the charging station; (3) specified the amount of the credit allowed to the taxpayer for the tax year; and (3) included the taxpayer's federal or state taxpayer identification numbers.

Revocation of credit. If a taxpayer stopped using one or more publicly-accessible charging stations within three years after receiving a tax credit, the Bureau of Energy Systems could determine that the credit should be reduced or terminated, or that a percentage of the credit be added to the taxpayer's tax liability.

Definitions. The bill contains several new definitions:

"Charging station" would mean "an electric recharging location complete with electric vehicle supply equipment that is capable of providing level 2 charging for plug-in electric motor vehicles."

"Electric vehicle supply equipment" would mean "the conductors including the ungrounded, grounded, and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatuses that meet or exceed any standards, codes, and regulations set forth in R 408.30801 to R 408.30876 of the Michigan Administrative Code and the standards set forth in SAE J1772 that are installed specifically for the purpose of delivering energy from the premises wiring to a plug-in electric motor vehicle."

"Level 2 charging" would mean "providing 208-240 volt alternate current energy to an onboard charger of an electric motor vehicle in a single phase with a maximum current specified at 32 continuous amps with a branch circuit breaker rated at 40 amps and the maximum continuous input power is specified at 7.68 kilowatts."

"Plug-in electric motor vehicle" would mean "a motor vehicle which is propelled to a significant extent by an electric motor which draws electricity from a battery that is capable of being recharged from an external source of electricity."

"SAE J1772" would mean "the North American standard for electrical connectors for electric vehicles maintained by the Society of Automotive Engineers and has the formal title SAE Electric Vehicle and Plug-In Electric Vehicle Conductive Charge Coupler."

BACKGROUND INFORMATION:

For more information, see the legislative brief prepared by Jacqueline Langwith, of the Legislative Service Bureau's Research Services Division entitled "Future of Electric Vehicles in Michigan." This brief is available to legislators and staff on the LSB website:

http://lsbsource.legislature.mi.gov/online_research_reports/pdf/future_electric_vehicles_in_mi.pdf

ARGUMENTS:

For:

A network of electric vehicle charging stations needs to be built, and built over a few years, not decades, to support the new generation of plug-in electric vehicles about to come on the market. The tax credit would encourage businesses to install public charging stations during the one year it is available. The existence of these early public charging stations could, in turn, make the general public more comfortable with the idea of buying electric vehicles. Thus, this time-limited tax credit could help electric vehicles gain public acceptance in a small, but potentially significant, way.

Increasing the number of electric vehicles driven in the U.S. is important for the environment, for energy independence, and for Michigan's economy, which remains dependent on the automobile industry. Michigan's economy stands to benefit greatly if these vehicles are popular with consumers. Advanced battery and electric vehicle manufacturing could revitalize Michigan's manufacturing base.

Very few service station owners (one or two per year) have claimed the currently-available tax credit for E85 or biodiesel pumps and pump conversions. Given that so few of those credits have been claimed, why not open up that program, in its final year, to businesses that install electric vehicle charging stations? In the H-1 Substitute version of the bill, the total of all tax credits that may be claimed for electric vehicle charging stations is capped at \$800,000 per calendar year—a low cost for an incentive that could help ensure the success of electric vehicles.

The bill is supported by the Public Service Commission's Plug-In Electric Vehicle Preparedness Task Force.

Against:

Given Michigan's current state budget woes, no new tax credit—no matter how small or well-intentioned—should be enacted at this time. Tax revenues are already insufficient to adequately fund important government programs.

Moreover, some people say that even if the maximum amount of available credits were claimed, the resulting number of new public electric vehicle charging stations will be too low—and the stations sited too randomly—to make much of a difference.

Is the bill necessary, given the existence of the federally-funded ChargePoint America program? That program already ensures that at least some public charging stations will be built in Michigan by October 2011.

Why should a tax credit be available to a business that also receives a grant reimbursing it for the same costs? The bill, as drafted, would not prohibit a business from receiving multiple incentives or grants based on the same charging station costs.

Why are tax credits only available for installing level 2 charging stations? Should businesses that install faster level 3 charging stations also be eligible for the tax credit?

Is it appropriate for the state to offer a tax break to businesses that install electric vehicle charging stations? Shouldn't the free market determine whether consumers purchase electric cars and whether charging stations for them are built?

As written, the tax credit is available only in a tax year that begins after December 31, 2010, and that ends before January 1, 2012, apparently making only calendar-year tax filers eligible to claim the credit for a charging station installed in 2011. To encourage more businesses to install charging stations, shouldn't all businesses that do so, including fiscal-year tax filers, be eligible for the credit?

Response:

An amendment is anticipated to address making the tax credit available to all firms, regardless of the timing of their tax years.

POSITIONS:

Representatives of the following entities testified in favor of the bill or otherwise indicated their support:

The Public Service Commission; A123 Systems; Azure Dynamics; Clean Water Action; Consumers Energy; the Detroit Regional Chamber of Commerce; Dow Kokum; DTE Energy; the Ecology Center; the Chrysler Group, LLC; the Ford Motor Company; the General Motors Company, the International Brotherhood of Electrical Workers; the Indiana-Michigan Power Company; the Integrys Energy Group; the Lansing Board of Water and Light; the Michigan Electric and Gas Association; the Michigan Environmental Council; the Michigan Manufacturers Association; the Michigan Townships Association; the National Electrical Contractors Association, Michigan Chapter; the Upper Peninsula Power Company; and the Wisconsin Public Service Corporation.

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■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.