

Low Carbon Fuel Standard Discussion Guide

- LCFS is similar to a Renewable Portfolio Standard (RPS) – except for auto fuels
 - MI's RPS requires utilities to have a portfolio of cleaner, renewable sources of electric power
 - A LCFS would require refineries and fuel blenders to have a portfolio of cleaner fuels to lower the carbon intensity of transportation fuels
- Dirty fuels (tar sands) and less-sustainable biofuels (corn ethanol) are increasing the carbon footprint of MI's transportation sector
- A LCFS will create markets for Michigan-made fuels and power for transportation
 - MI has invested economic development incentives to bring Advanced Battery Manufacturing (batteries for electric cars) to Michigan
 - MI is investing in technology to produce advanced biofuels, like Cellulosic Ethanol
 - A LCFS will reduce our dependence on foreign, dirty fuels and create markets for cleaner, home-grown fuels and electric power for transportation
- LCFS is being considered at the State, Regional and Federal level
 - To reduce our impact on global warming
 - Create markets for cleaner fuels
 - Ensure the sustainability of alternative fuels
- LCFS – Essential Components
 - Regulates fuel refiners and blenders
 - Requires 10% reduction in carbon intensity by 2020
 - Includes Lifecycle Analysis of Carbon footprint of fuel options – seed to tailpipe – to make sure we do biofuels the right way
 - Must include sustainability criteria for biofuels
 - To protect against unsustainable biofuel crop production
 - To protect against unintended indirect land use impacts – US and globally
- LCFS under consideration at many levels:
 - Adopted by rule in CA
 - Recommended by MI Climate Action Council
 - Recommended by Midwest Governor's Assn. Climate group
 - Michigan can be a leader, and have a seat at the table in the development of a federal LCFS by adopting one here first
- MI will soon have a bill introduced that would require a 10% reduction in carbon intensity of transportation fuels by 2020
 - Rep. Gonzales is the likely sponsor
- Do you think you could support this policy?

Low Carbon Fuel Standard - Arguments and Answers

What are the advantages of a LCFS?

- Reduce our vulnerability to foreign oil supply fluctuations and price spikes
- Create economic opportunities for renewable fuel producers who can lead the way toward advanced, low-carbon fuels
- Support the auto industry's development of low-carbon electric vehicle technologies (the Chevy Volt and GM's electric plug-in)
- Ease transition to a low carbon economy

Is a LCFS the only thing we can do to reduce the global warming impact of our transportation sector?

- MI needs to do far more to reduce demand for transportation fuels:
 - We need to invest in public transit
 - We need to make cities walkable and bikable

If we go to electric cars, we'll end up putting more carbon into the atmosphere from burning coal for electricity.

- the carbon footprint of vehicles that rely on electric power (even with our dirty, coal-based electric power) is lower than traditional transportation fuels
- We are already working to lower the carbon footprint of electric power by using more renewables (wind and solar)
- We are also greatly improving our energy efficiency to significantly reduce electric demand by weatherizing homes and installing more efficient lighting and heating, leaving surplus power for electric vehicles

If cars start using electricity, we'll have to build more coal or nuclear plants to meet rising demand.

- Our current electric demand is dropping
- Renewables and energy efficiency will continue to push demand down
- Storage of clean energy (from wind and solar) is coming – underground geologic formations are being discussed as effective storage of compressed air, that can be released to generate electricity when the wind doesn't blow and the sun doesn't shine.
- MI is investing in clean, sustainable second-generation biofuels (cellulosic ethanol)

Michigan is already in great need of more coal or nuclear power. Won't a LCFS make that worse by dramatically increasing demand?

- MI doesn't need coal or nuclear now – the demand isn't there, the cost is very high and financing extremely questionable
- We are investing a lot in renewables that keeps our money in the state – we need to let that work before building more dirty power sources
- Building coal or nuclear plants now will make MI economically uncompetitive, as it will drive our electric prices up – and we'll be stuck with decades of expensive power

A LCFS will raise gasoline prices

- Gas prices fluctuate greatly already – and we have no control
- A LCFS would give MI more control over costs
- A LCFS requires a very gradual reduction in carbon intensity, allowing technology

Who will oppose this?

- Oil refineries and blenders – who don't like being told what to do
- Supporters of corn ethanol – who will be afraid of losing their huge subsidies to more sustainable fuel sources