



RE-INTRODUCING BIODIESEL INTO CITY OF MADISON FLEET

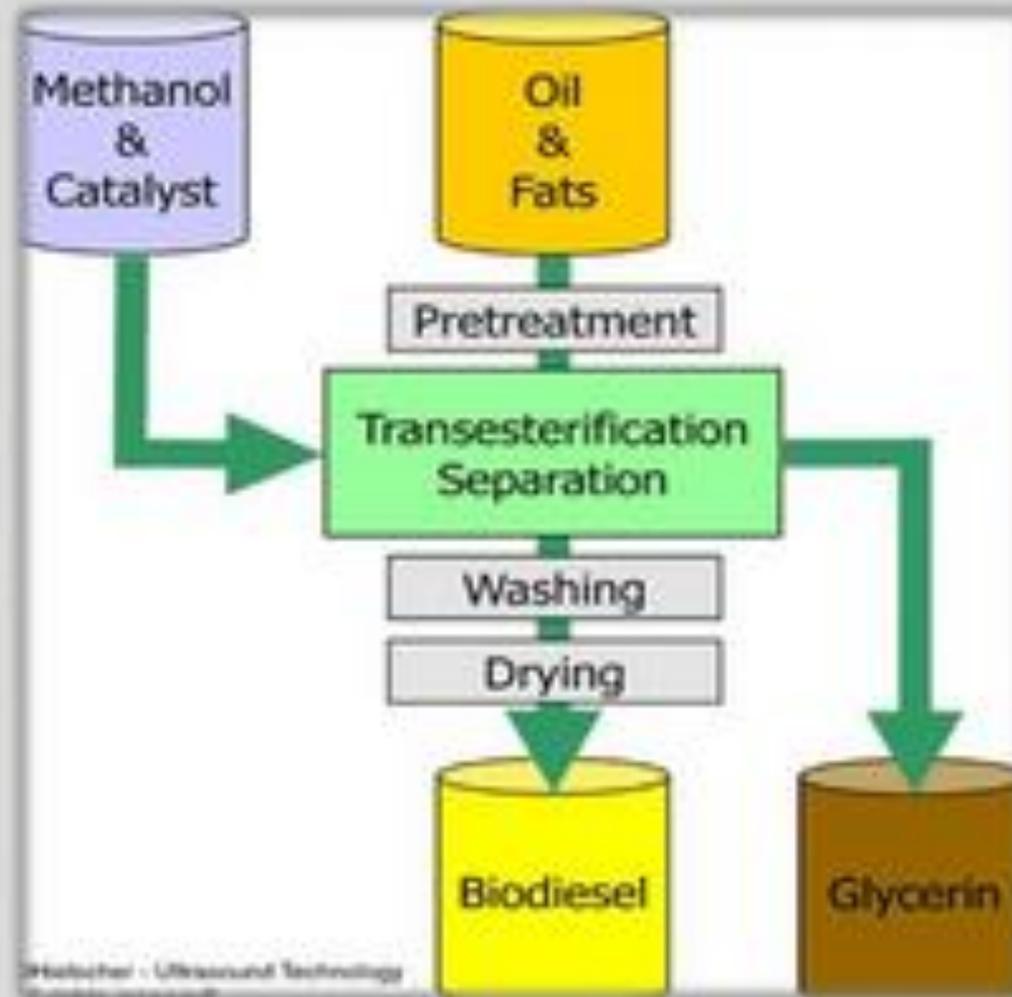


WHAT IS BIODIESEL?

- Renewable energy source
- Largely soybean plant and waste oil based
- Grown and processed in Midwestern states- supporting local economy including WI
- Reduces emissions and carbon footprint
- Reduces dependence on foreign oil

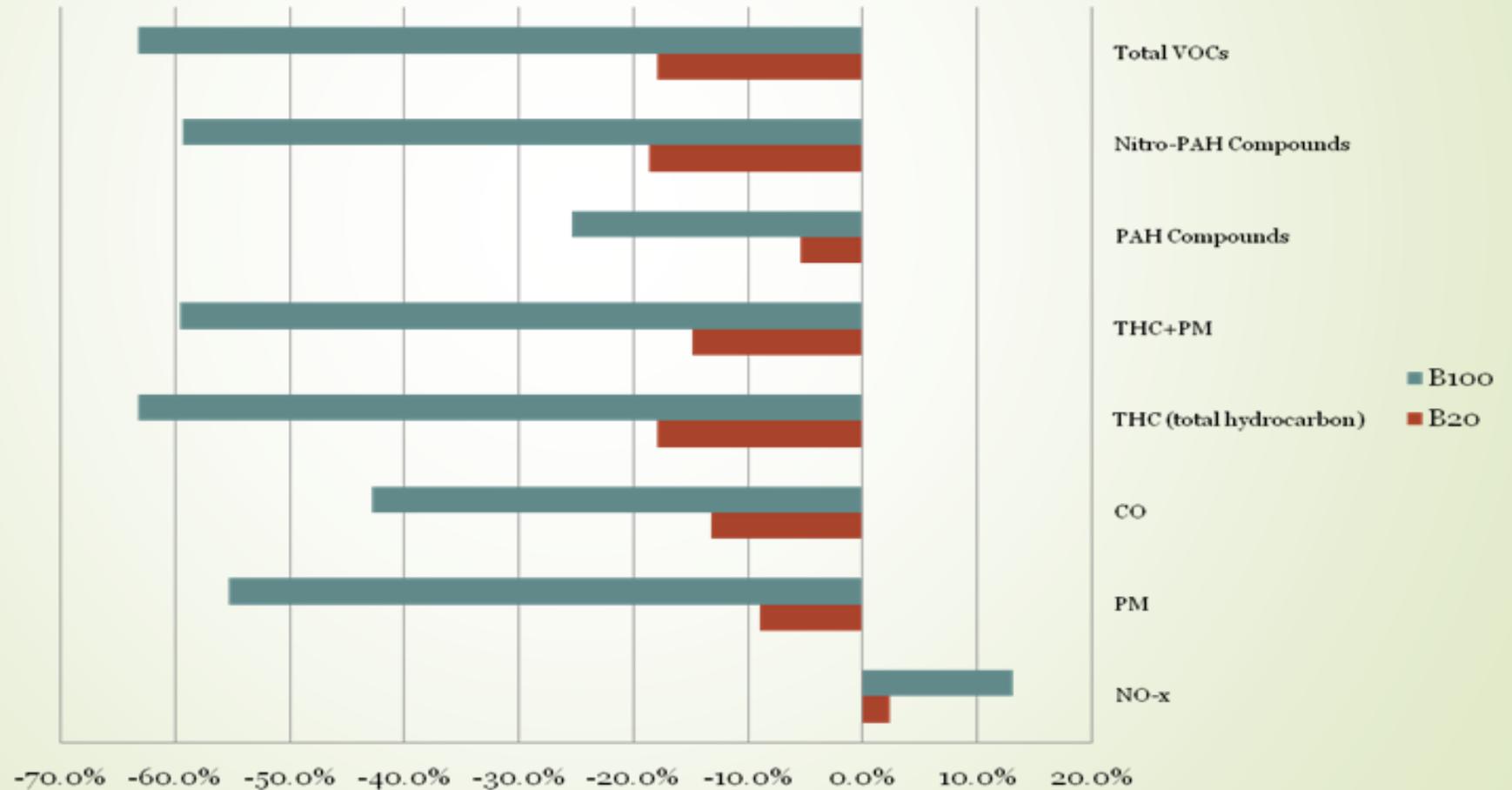


Biodiesel Production Process



EMISSIONS REDUCTIONS

Comparison of Diesel and Biodiesel Emissions
Average Percent Change from Petrodiesel to B20 and B100





BIODIESEL PRODUCTS

- Biodiesel is almost always blended with regular diesel in percentages such as 2%, 5%, 10%, 20%, and 50%- known as B2, B5, B10, B20, B50, etc.
- Blends of up to B20 can be safely used in all diesel engines according to most manufacturers without affecting the warranty. Pilot tests of B50 and even B100 have been successfully completed across the country as well.
- City of Madison currently has an RFP out for B2, B5, B10, and B20 along with regular diesel, with results expected in the next week.
- During winter months it is recommended to use a lower blend due to cold weather such as B2 or B5. Biodiesel has a higher freezing point than regular diesel.

2007 MADISON BIODIESEL PILOT

- In 2007, Madison Fleet Services successfully piloted B2 and B5 over a number of months.
- No major operational issues.
- The pilot was apparently discontinued due to cost.





2018 PLAN

- Fleet will soon receive the results of the fuel RFP recently distributed by the City of Madison for the 2018 Fiscal Year.
- Like all fuels and energy markets, the biodiesel marketplace is subject to fluctuations, sometimes in line with fossil fuels, and sometimes not.
- Pending the pricing information, one path forward would be to introduce B2 or B5 in the spring, move up to B10 in the summer, B5 in the fall, and B2 next winter.
- Operationally, Fleet will check vehicles and storage tanks for any issues. One common issue is fuel filters needing replacement as biodiesel cleans out storage tanks and vehicle tanks.

QUESTIONS?



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