

Wisconsin Transportation Fuels Update & Opportunities to Partner

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Wisconsin Office of Energy Innovation
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Wisconsin Office of Energy Innovation

Vision

Securing Wisconsin's energy future and improving its economy and environment.

Mission

The Wisconsin Office of Energy Innovation promotes innovative and effective energy policies and programs that benefit Wisconsin's citizens and businesses.

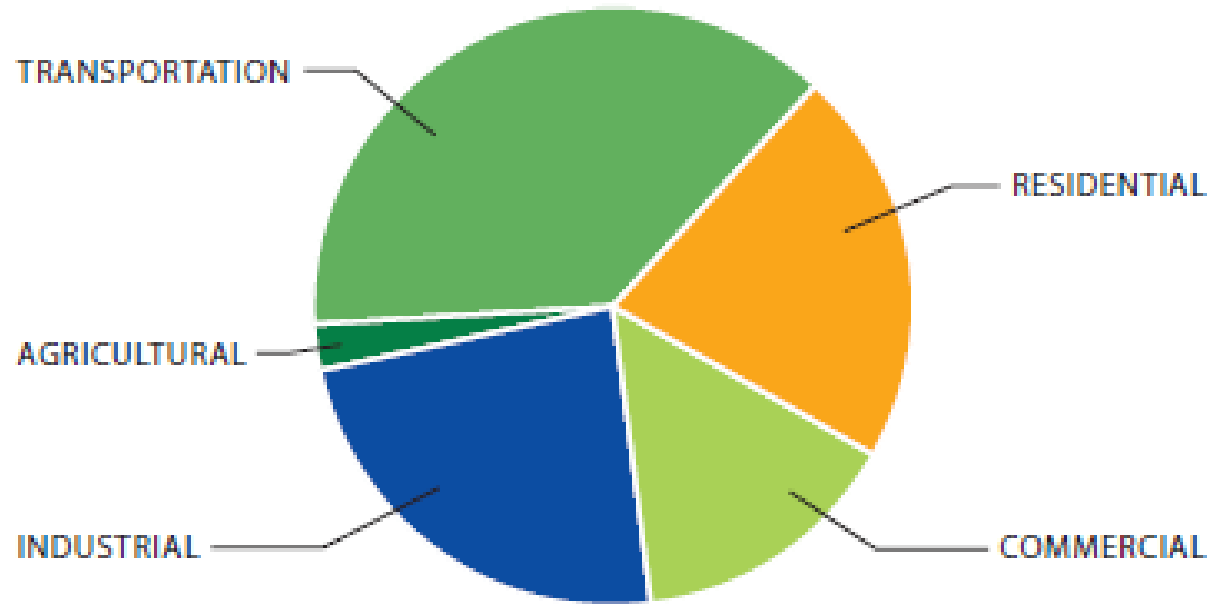
Values

OEI is committed to:

- Open Communication and Transparency
- Collaboration and Teamwork
- Being Forward Looking and Solutions Oriented
- Building and Maintaining Expert-Level Knowledge
- Economic Viability

End Use Energy Consumption

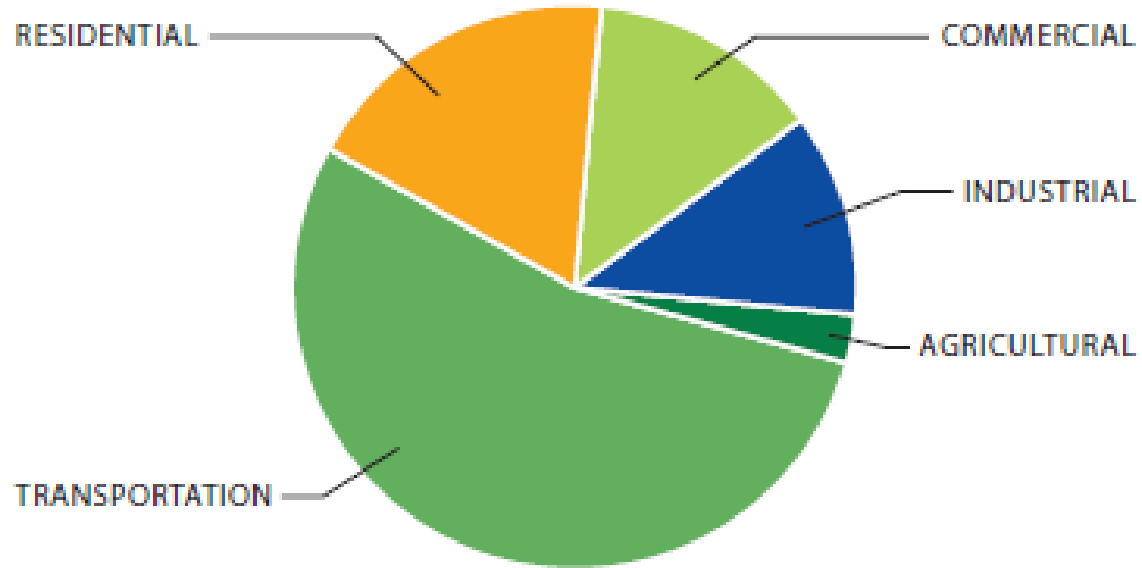
2012 TRILLIONS OF BTU AND PERCENT OF TOTAL



Economic Sector	2012 Trillions of Btu	2012 Percent of Total
Agricultural	25.7	2.3%
Commercial	162.9	14.6%
Residential	240.9	21.6%
Industrial	265.0	23.8%
Transportation	420.3	37.7%

End Use Energy Consumption

2012 MILLIONS OF DOLLARS AND PERCENT OF TOTAL



Economic Sector	2012 Millions of Dollars	2012 Percent of Total
Agricultural	681.4	2.9%
Industrial	2,687.2	11.6%
Commercial	3,056.6	13.2%
Residential	4,279.7	18.5%
Transportation	12,406.1	53.7%

Current Programs & Initiatives

- Focus on Energy
- Clean Energy Manufacturing Revolving Loan Fund
- Municipal Energy Efficiency Technical Assistance Program
- Biofuels Retail Advancement in WI Transportation
- Statewide Wood Energy Team
- Energy Assurance/Resiliency Efforts
- Energy Statistics
- Transportation Initiatives
- Biogas and Biodigester Initiatives
- M-Power Business Champions Program
- Fostering Interagency Energy Work
- Funding Announcements

Wisconsin Transportation Fuel Consumption

(millions of gallons)

	2015	2016	2017 (as of March)
Gasoline	2,637.69	2,663.04	613.52
Diesel	782.58	775.11	188.06
Ethanol	297.51	315.61	84.32
CNG*	11.25	13.65	3.78
Propane	2.49	2.80	0.89
LNG	0.22	0.16	0.06

***2012 – CNG use was 1.4 million gallons!**

On-Road use only, tax-exempt fuel not reported

Source: WI Department of Revenue

Wisconsin Vehicle Registrations

Type	Vehicle Count As of June 30, 2016	Vehicle Count As of Dec 31, 2016
Unleaded	5,466,687	5,534,264
Diesel	424,542	438,332
Ethanol (E85) Flexible Fuel	365,709	383,660
Hybrid Electric	30,720	32,262
Compressed Natural Gas (CNG)	5,739	5,722
Electric	333	325
Propane (LPG)	196	375

Source: WI Department of Transportation

Transportation Fuel Use Costs in Wisconsin

Fuel Type	Prices per gallon/GGE as of Dec 6, 2016	Prices per gallon/GGE as of Jun 8, 2017
Biodiesel (B100)	\$3.3500	\$3.2664
Biodiesel (B20)	\$1.9174	\$1.8186
Biodiesel (B2)	\$1.5951	\$1.4929
#2 Diesel	\$1.5593	\$1.4567
Electricity	\$3.6500 (\$0.1090 kw/hr)	\$3.6700 (\$0.1094 kw/hr)
Unleaded	\$1.5025	\$2.5064
E85	\$1.7536	\$1.6628
E10	\$1.5320	\$1.6224
Natural Gas	\$0.8310	\$0.8069
Propane	\$0.8934	\$0.8398

Prices are commercial averages and do not include taxes, rebates, or subsidies.

Source: Energy Management Institute

VW Partial Settlement

- September 15, 2015 – VW identified by CARB/EPA as tampering engines
- VW will pay \$2.7 billion to establish a mitigation trust and \$2 billion to promote the use of zero emission vehicles (“ZEVs”) and ZEV technology. Round 1 announcement, more rounds in the future
- \$67 million Mitigation Trust allocation to Wisconsin for NOx reducing actions.

VW Partial Settlement – Mitigation Trust Timeline

Timing	Date	Consent Decree Milestone
Settlement Effective Date (SED)	10/25/16	Consent Decree entered into court
SED + 30 Days	12/24/16	Trustee candidates submitted
	03/15/17	Selection of Trustee
60-90 days after the SED		Finalization of Environmental Trust Agreement
Trust Effective Date (TED)		Establishment of Environmental Trust
TED + 15 days		Trustee established trust account
TED + 60 days		Trustee established trust account
TED + 120 days		Trustee approves /denies Beneficiary status
TED + 210 days		Beneficiary Mitigation Plan submitted
		Prepared by NASEO

VW Partial Settlement – What's Next

- Wisconsin
 - Department of Administration will serve as the beneficiary for Wisconsin
 - Budget Proposal
 - Designated \$32 million be available to all transit systems and \$10 million available to purchase state vehicles.
 - There is still \$25 million that is not accounted for in the budget, but they will probably hold off on making any commitments on that money until the next budget cycle
 - Enacted in Summer
 - Plan announced shortly thereafter
 - Tribal Allocation – just over \$54 million
- EPA VW Settlement Resources
 - <https://www.epa.gov/enforcement/volkswagen-clean-air-act-partial-settlement>
 - <http://www.naseo.org/volkswagen-settlement>
 - NASEO's [Volkswagen Settlement Beneficiary Mitigation Plan Toolkit](#)
 - <https://www.epa.gov/enforcement/volkswagen-clean-air-act-civil-settlement>
 - <https://www.epa.gov/enforcement/third-partial-and-30l-second-partial-and-20l-partial-and-amended-consent-decree>

Fostering Change

- Behavior Modification
- Changing the message – energy efficiency now reducing energy waste
- Appealing to the various generations
- Making energy jobs appealing to the next generation
- Increasing knowledge on how we make, transport and consume energy



What's Next

- Technology and Society will change:
 - Advanced Grid Efforts
 - Autonomous vehicles
 - Drop-in fuels from artificial photosynthesis
 - Solar thermophotovoltaics
 - Electric Vehicles to Grid
 - Carbon dioxide to fuels
 - Cybersecurity
- Policy - Energy assurance and infrastructure improvements a high priority
- Unexpected funding sources
 - Settlement money changes the outlook for specific energy sector (i.e. Transportation and EV)

Opportunities to Partner



- OEI Strategic Planning
- Stakeholder Engagement
 - Improve communication with stakeholders on all of the above to ensure the programs and incentives we provide meet the needs of businesses and citizens in the state.
- Strategies to create synergies between existing programs - Focus, MEETAP
- Launch of new programs in SEP and Revolving loan Fund

Questions and Contact



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<https://psc.wi.gov/Pages/Programs/OEI.aspx>