



Michigan Energy Appraisal Summer Outlook 2024

In compliance with MCL 460.6r

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Preface

The Michigan Energy Appraisal is a semiannual assessment of Michigan’s energy baseline. The assessment raises the situational awareness of the state’s energy environment including recent events impacting supply and prices, expected conditions, and changes over the next six months. Additionally, it provides the necessary information to enable a reliable assessment of the risk posed by an energy supply disruption.

Due to data availability issues, Michigan-specific demand outlooks for petroleum energy sources (distillates and gasoline) are unavailable for this edition. However, these energy sources are still discussed in a broader context.

This report is prepared by the Energy Security Section of the Michigan Public Service Commission (MPSC) with assistance from the Energy Operations, Energy Resources, and Regulated Energy Divisions of the MPSC, Department of Licensing and Regulatory Affairs (LARA), State of Michigan.

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The Summer 2024 Energy Appraisal is available on the [MPSC website](#). A major source of data and analyses used in this appraisal is the federal Energy Information Administration (EIA) at <http://www.eia.doe.gov>. The EIA collects national, state, and international data on energy usage, prices, supply, etc., and provides expert analysis on trends in energy.

Comments or questions on this appraisal are welcomed and may be directed to Alex Morese, Michigan Public Service Commission, at moresea@michigan.gov.

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Executive Summary

Energy use in Michigan is closely tied to economic activity within the state. Motorists use gasoline to travel to and from work, companies move goods throughout the state by trucks and trains powered by diesel fuel, the industrial sector uses natural gas as a fuel for their manufacturing processes, and all sectors use electricity to light either their homes, businesses, or factories.

Michigan residents and businesses should expect to have adequate access to energy resources this summer and heading into the fall of 2024. Energy markets remain resilient and robust throughout the country, but not entirely immune to short term weather disruptions and other geopolitical risk factors of which consumers should be mindful. Barring any unforeseen disruptions to energy markets, however, it is expected that pricing conditions will likely be more favorable for consumers this summer – whether that’s apparent from bills incurred when filling up the family vehicle with gasoline or using electricity to cool homes during the summer heat.

The core analyses in this summer’s edition of the Michigan Energy Appraisal were compiled by Staff at the Michigan Public Service Commission and projections sourced from data collected by the federal Energy Information Administration.

Some key report findings for Michigan energy sectors:

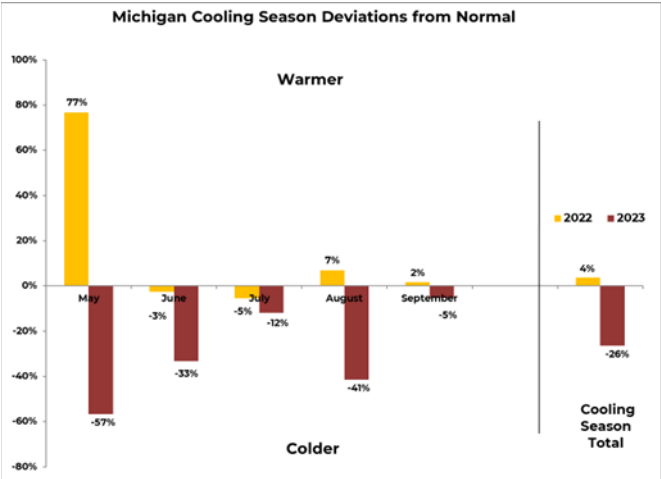
- Midwest **gasoline** prices are expected to average \$3.19/gallon for 2024 and \$3.37/gallon in 2025. Gasoline prices for this summer driving season (April-Sept.) are projected to average \$3.48/gallon compared to \$3.54/gallon last summer in the Midwest.
- The EIA projects that West Texas Intermediate (WTI) **crude oil** will average \$83.05/bbl for 2024 and \$80.88/bbl in 2025.
- Michigan **electricity** demand is forecast to increase about 1 percent in total for 2024, driven by a 2.8% increase from the residential sector and a 0.8% increase from the industrial sector. Residential electric rates edged up slightly, as customers of investor-owned utilities saw a median rate increase of 3.9 percent between May 2023 and May 2024.
- Michigan’s industrial production index, an economic indicator used to measure output from the industrial sector, is expected to grow slightly at 1.1 percent for 2024, potentially increasing the demand for **distillates**. No. 2 heating oil prices ended the 2023/24 heating season \$0.01/gallon lower than last year at an average of \$3.57/gallon.
- Consumption of **natural gas** for all sectors in Michigan is expected to see a 7.3 percent increase for 2024, led by increased demand from the electric power generation sector. Residential demand is expected to increase by 5.5 percent. The EIA forecasts that natural gas consumption in the U.S. electric power sector will be about the same as last summer, which saw the most power sector consumption on record.

Glossary

Barrel	A unit of volume equal to 42 U.S. gallons.
b/d	The abbreviation for barrel(s) per day, also displayed as bbl/d.
Bcf	The abbreviation for billion cubic feet.
Brent	Brent is a major trading classification of sweet light crude oil that serves as a major benchmark price for purchases of oil worldwide.
CDD	Cooling Degree Days - a measure of how warm a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. Cooling degree days are used in energy analysis as an indicator of air conditioning energy requirements or use.
EIA	Energy Information Administration - the statistical and analytical agency within the U.S. Department of Energy.
GWh	One billion watthours.
GCR	Gas Cost Recovery - the actual cost of natural gas that a local distribution company pays to purchase natural gas for your use.
HDD	Heating Degree Days - a measurement designed to quantify the demand for energy needed to heat a building. A measure of how cold a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit.
LSE	Load serving entity - a cooperative, municipal, or investor-owned utility, or an alternative electric supplier (AES) that provides electricity to its customers.
Mcf	One thousand cubic feet.
MISO	Midcontinent Independent System Operator –a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of 16 states and one Canadian province.
mmBtu	One million British thermal units.
MW	One million watts of electricity.
OECD	Organization for Economic Cooperation and Development - an intergovernmental economic organization with 35 member countries, founded in 1961 to stimulate economic progress and world trade.
OPEC	Organization of the Petroleum Exporting Countries
PJM	PJM – an RTO that coordinates the movement of wholesale electricity in all or parts of 13 states and the District of Columbia.
STEO	Short-Term Energy Outlook published monthly by EIA.
WTI	West Texas Intermediate (also known as Texas light sweet) – a grade of crude oil used as a benchmark in oil pricing.

Data and Methodology

A vast majority of the predictive energy data (consumption, prices, and stocks) used in this appraisal’s models are from EIA forecasts drawn from their Short-Term Energy Outlook (STEO). Energy supply and demand is often dependent upon weather-related variables. Therefore, variables such as heating and cooling degree days are also heavily used in the forecasts. Heating and cooling degree days are a commonly used metric for calculating building energy consumption. Deviations from “normal” degree day figures are helpful in understanding variations in consumption of energy commodities (see adjacent chart).



Future degree day deviations cannot be known at the time the appraisal forecasts are made, so assumptions are needed. For any model using degree day deviations, the assumption is made that future weather conditions will be approximately “normal” and there will be no deviations from the historical average degree day figure calculated by the National Climatic Data Center at that given point in time during the forecast period.

Monthly data is used for all forecasts in this appraisal. However, certain variables used in the appraisal models are only reported or predicted on a quarterly basis from their respective source. Quarterly data leave data gaps in the monthly time series, therefore extrapolation tools are needed. A cubic spline interpolation tool, used for curve fitting, is employed to acquire the approximate monthly data points in between the quarterly figures that were available for use in the models.

The forecast models used for the Appraisal are, for the most part, derived from EIA forecast models used in their preparation of the STEO. More specifically, these forecast models are called ARIMA (Auto Regressive Integrated Moving Average) models. ARIMA models are an econometric tool used by analysts to better understand the relationship between variables, or to predict future points in a time series. The auto regressive and moving average portions of the model mean that past observations and past forecast errors are used in prediction of future observations. The integrated portion of the model means that a transformation was applied to the data for statistical purposes.

Forecast models are frequently evaluated and updated in order to provide as accurate information as possible so that future energy expectations can be built. However, given that the forecasting models used in this appraisal partly use predictions, extrapolated data, and assumptions of normal weather, the potential does exist for the forecasted value at a given point in time to vary from actual observed values for the same point in time.

Trending Topics

Michigan 2023 Energy Legislation

Public Acts 229, 231, 233, 234, and 235 were passed on November 8, 2023, and signed by Governor Gretchen Whitmer on November 28, 2023. These new laws make changes to requirements related to Integrated Resource Plans, establish a clean energy standard, increase the Renewable Energy and Energy Waste Reduction standards, and create a voluntary siting process at the Commission for renewable energy and energy storage projects of statewide significance.

Public Act 229, which addresses the energy waste reduction standard, and Public Act 231, which makes changes to the Integrated Resource Planning Process, are effective February 13, 2024. Public Act 235, which establishes the new clean energy standard and updates the renewable energy standard, is effective February 27, 2024. Public Act 233, which creates the siting process for renewable energy and energy storage projects at the Commission, is effective November 29, 2024.

MPSC Energy Legislation Implementation

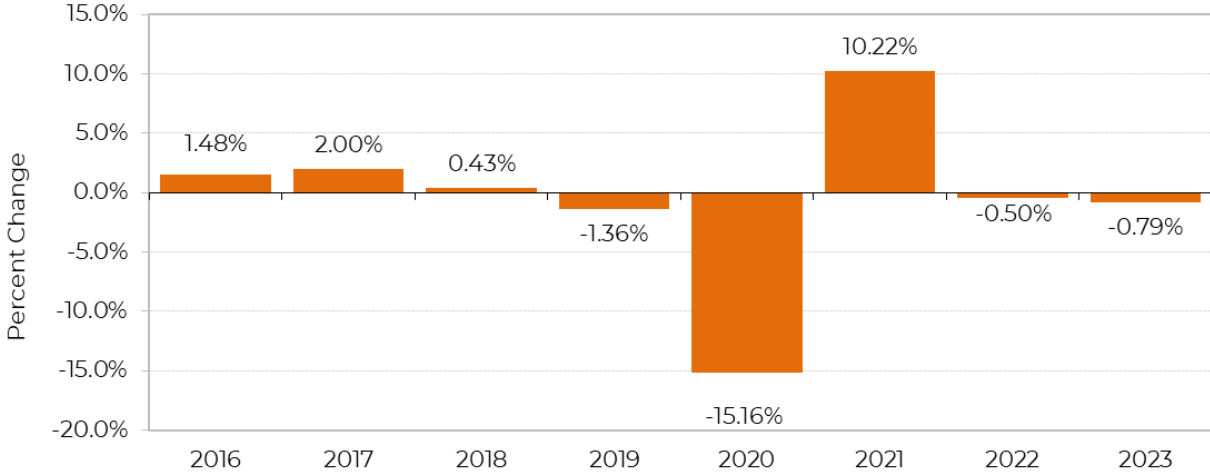
On February 8, 2024, the Michigan Public Service Commission took steps to open implementation proceedings on changes made to Michigan's energy laws. The Commission issued seven orders including:

- Case No. U-21547 (pertaining to Public Act 233), which provides siting authority to the MPSC for utility-scale solar, wind, and energy storage projects under specified conditions.
- Case No. U-21567 (concerning Public Act 229), which increases utility energy waste reduction (EWR) targets, requires municipal and cooperative utilities to participate in EWR programs, and establishes mandatory amounts utilities must spend on EWR for low-income customers.
- Case No. U-21568 (concerning Public Act 235), which increases electric utilities' renewable energy portfolio standards to 50% in 2030 and 60% by 2035.
- Case No. U-21569 (pertaining to Public Act 235), which increases the size of Michigan's distributed generation (DG) program, from 1% of an electric utility's or alternative electric supplier's average five-year in-state peak load average to 10%, and other changes to the DG program.
- Case No. U-21570 (pertaining to Public Act 231 and related parts of Public Act 253), which allows the MPSC to consider climate, environmental justice and affordability matters in long-term energy planning and requires an assessment of the potential for electrification of transportation, buildings, and industries consistent with economy-wide elimination of greenhouse gas emissions in Michigan.
- Case No. U-21571 relates to the energy storage provisions of PA 235.
- Case No. U-21572, which addresses Public Act 235's requirement that the MPSC study and report to Governor Whitmer and state lawmakers on electric issues unique to the Upper Peninsula.

Motor Gasoline Demand

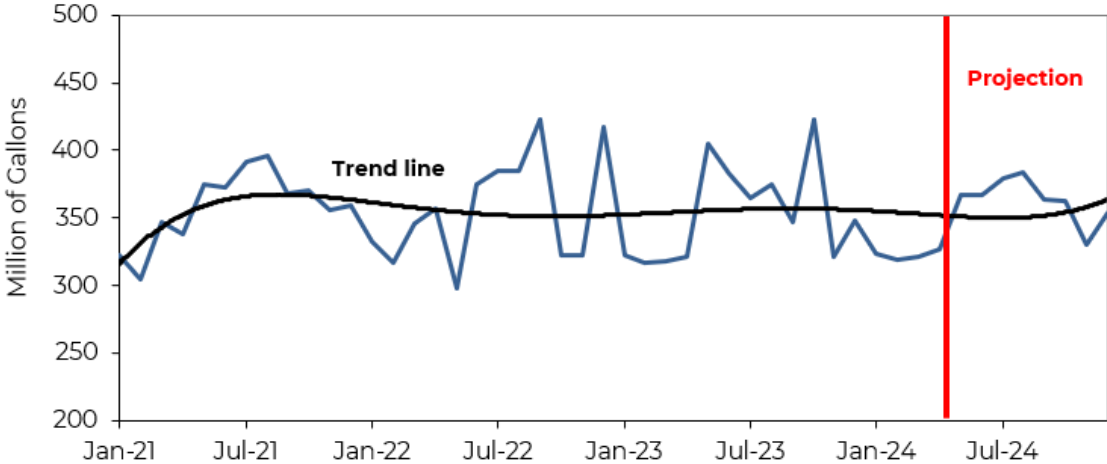
Gasoline sales in Michigan are projected to decrease by 1.1% for 2024 compared to 2023 (see Figures 1, 2, and 3), which would be the third consecutive year of decline for the motor vehicle fuel. One determinant of gasoline demand is personal disposable income – which grew by 3.2% in 2023 from the previous year, but is only expected to increase by 1.7% in 2024. U.S. vehicle miles traveled is projected to grow by 1% for 2024 – an indication that improvements in gasoline vehicle fuel efficiency is likely helping to lower overall gasoline demand. Additionally, the adoption of electric vehicles (EVs) in Michigan will likely impact future gasoline demand as well. According to the DOE’s Alternative Fuels Data Center, the number of EVs, plug in hybrid EVs, and hybrid EVs grew by 108% between 2017 and 2022 in Michigan.

Figure 1
Historical Michigan Gasoline Consumption



Source: Energy Information Administration

Figure 2
Michigan Gasoline Sales



Source: Energy Information Administration

Figure 3

Michigan Gasoline Sales Projections

(Millions of Gallons)

			Total	Historical	
			All Grades	(prior year)	% Change
Historical	2021	Total	4,301	3,913	9.9%
	2022	Total	4,281	4,301	-0.5%
	2023	Total	4,246	4,281	-0.8%
Projection	2024	January	323	323	0.1%
		February	320	317	0.9%
		March	322	318	1.0%
		April	327	321	1.8%
		May	367	404	-9.4%
		June	367	383	-4.1%
		July	379	365	3.9%
		August	384	375	2.4%
		September	364	347	4.8%
		October	363	423	-14.1%
		November	330	321	2.9%
		December	354	348	1.7%
2024		Total	4,200	4,246	-1.1%

NOTE: These projections are based on Michigan's economy and stable gas prices.

SOURCES: Historical data - Energy Information Administration, U.S. Department of Energy.

Projection -- Energy Security Section, MPSC.

Supply

For the week ending June 7, 2024, 10.1 million barrels per day of gasoline were produced in the U.S. compared to 10.2 million barrels per day for the same week in 2023. In addition to domestic production, 912 thousand barrels per day were imported by the U.S. for the week ending June 7, 2024. National gasoline inventories are currently in the lower half of the five-year range for this time of year. For the week ending June 7, 2024, U.S. total gasoline inventories stood at 233 million barrels (26 days of supply), up 13 million barrels from the same date last year. Midwest inventories were at 48.5 million barrels, about 5.6 million barrels higher than last year.

Based on the most recent available data, the U.S. refinery utilization rate for the week ending June 7, 2024, was 95 percent, 0.8 percentage points lower than the comparable week of last year. As refineries begin to finish maintenance and gear up for summer driving demand, this rate is likely to increase. The U.S. operable refinery

capacity currently totals 18.43 million barrels per day, up from 18.03 million barrels per day at this time last year.

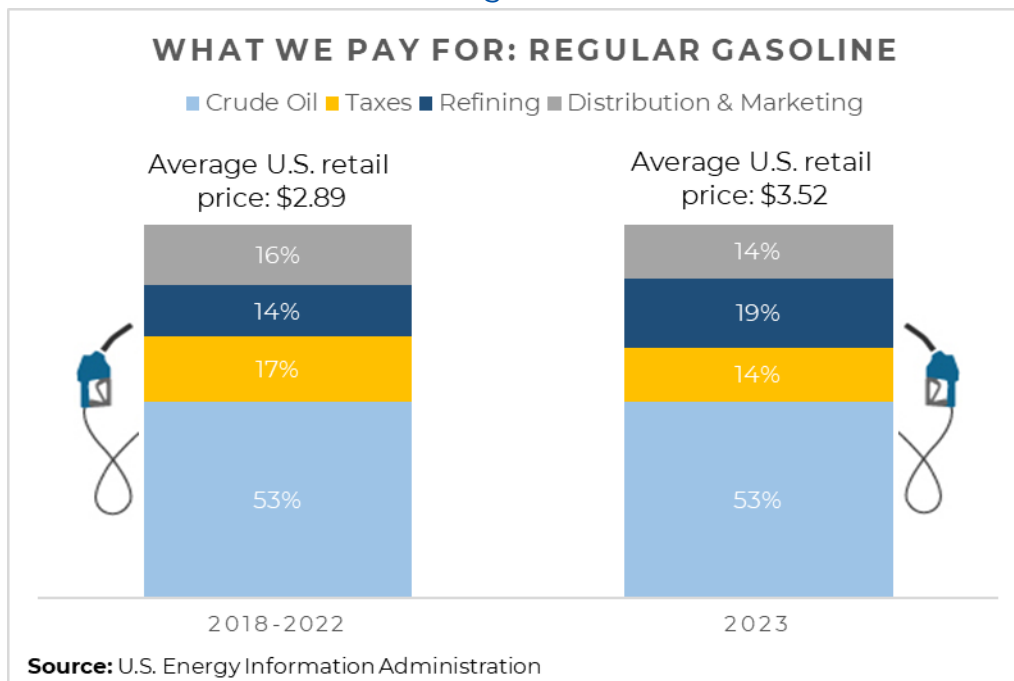
Price

According to AAA, the average price for a gallon of regular unleaded gasoline in Michigan on June 20, 2024, was \$3.53, compared to \$3.56 a year ago. However, with continued geopolitical risks around the world, crude oil prices could rise again, adding to the cost consumers may have to pay at the pump this summer. Figure 4 below describes the breakdown of U.S. gasoline prices by the individual components that impact the price for gasoline.

The U.S. price of regular gasoline averaged \$3.53/gallon in 2023, 45 cents higher than in 2022 – which was still a period of depressed demand due to the COVID-19 pandemic. Prices did steadily increase throughout much of 2023, peaking at \$3.84/gallon in August before lowering to \$3.13/gallon to end the year. Rising gasoline prices in 2023 were primarily a result of higher crude oil prices along with tightened gasoline supply in areas of the country.

The EIA projects Midwest regular-grade gasoline prices to average \$3.48/gallon during the summer driving season (April-September), compared to \$3.54/gallon last summer. Midwest regular-grade gasoline prices are forecasted to average \$3.34/gallon for all of 2024. Unforeseen refinery outages, political unrest, adverse weather conditions, or any other disruptions to supply may have the potential to increase national product prices in the short term.

Figure 4



Petroleum

U.S. Outlook

The EIA’s May 2024 Short Term Energy Outlook (STEO) revised U.S. crude oil production figures upward slightly from just a month ago. U.S. crude oil production averaged 12.93 million b/d in 2023 and is expected to increase to 13.2 million b/d for 2024 and up to 13.73 million b/d in 2025. The price for WTI reached as high as \$93.67/bbl in September of 2023 as tight supply conditions persisted. A major contributing factor to elevated prices over the past several years has been the backwardation of crude oil markets. Backwardation in a market occurs when nearer futures contracts command a higher price than longer dated contracts. This behavior typically arises when the market is undersupplied in the near term, which then acts to drive up prices. As of May 22, 2024, the futures market for WTI was still in backwardation, with the prompt month at \$77.29/barrel and \$76.41/barrel for September 2024. Current WTI spot prices reside at \$77/barrel and \$82/barrel for Brent.

U.S. crude oil stocks currently reside 7.4 million barrels lower than a year ago as demand has outpaced supply additions (see Figure 6). As of June 7, 2024, the U.S. had 460 million barrels in inventory (1.5% decrease relative to 2023) which is nearly the middle of the five-year range for this time of year. U.S. crude oil exports have slowed recently, with the weekly average ending June 7, 2024, standing at 3.19 million barrels per day – down from 3.27 million b/d a year ago. As shown in Figure 5, the U.S. crude oil rig count tends to follow the price of oil, albeit sometimes with a lag. As the price of oil increases, producers will often increase their drilling activity to increase their production and take advantage of more favorable market conditions. Conversely, when the price of oil falls, drilling activity slows as newly drilled wells become less economical.

Figure 5

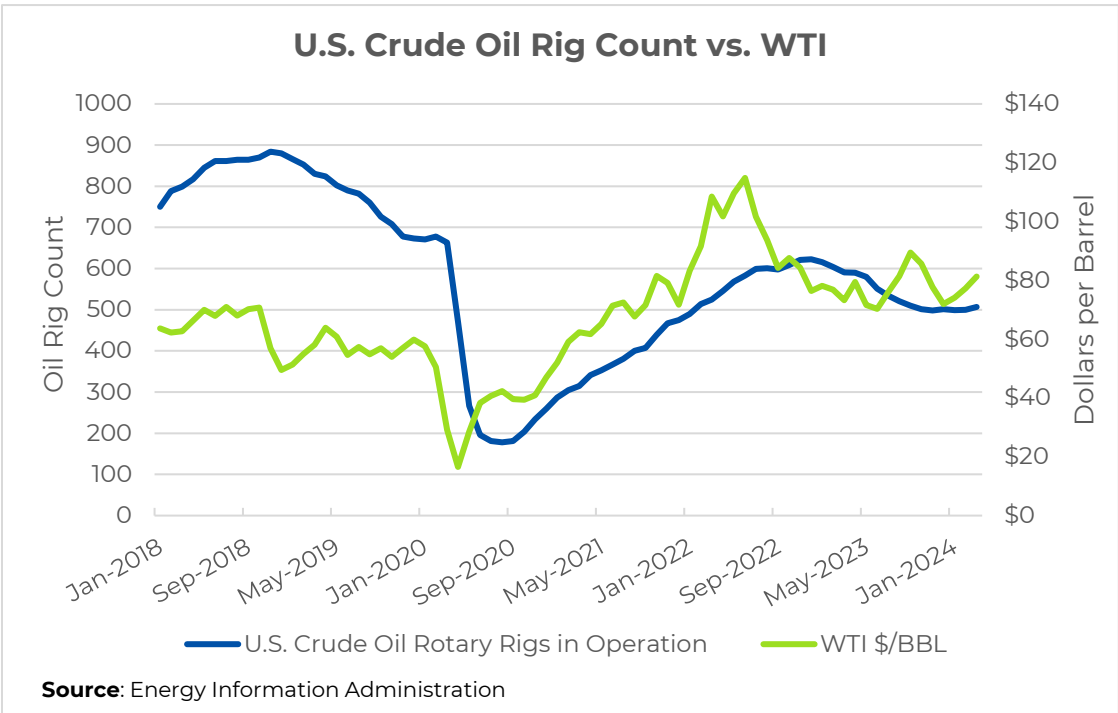
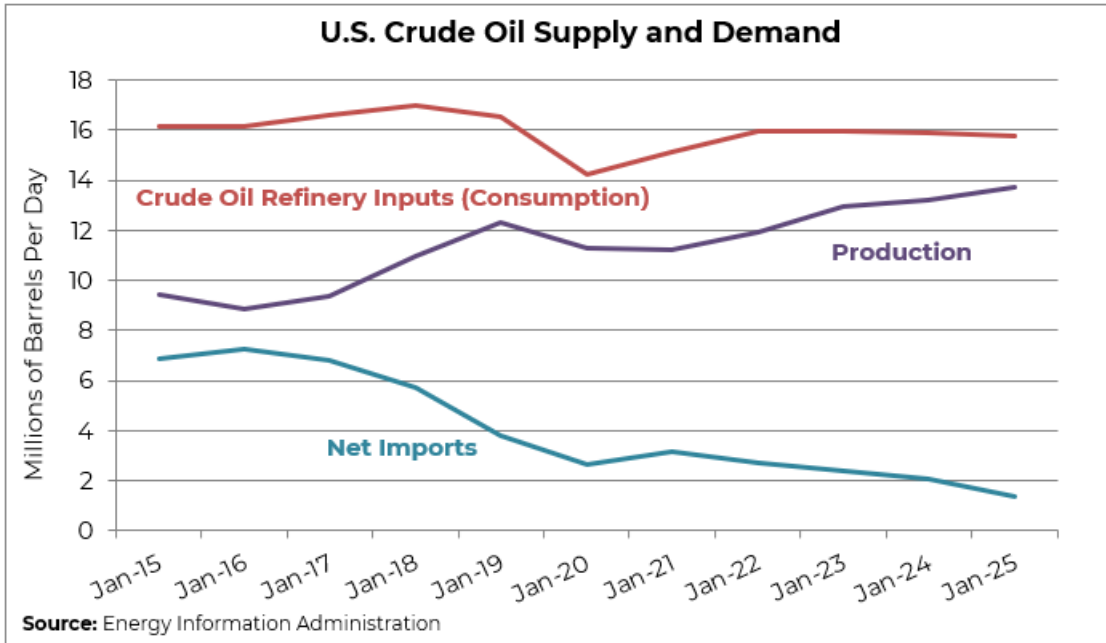


Figure 6



World Outlook

The EIA May STEO reports that global petroleum consumption will increase by 0.92 million b/d in 2024 and again rise by 1.42 million b/d in 2025. The increase for 2024 is attributed primarily to non-Organization for Economic Cooperation and Development (OECD) nations.

Global petroleum production and supply is expected to rise by 0.96 million b/d in 2024 and further grow 1.9 million b/d in 2025. The 2024 and 2025 production projections outpacing expected consumption increases demonstrate why lower crude oil prices are anticipated for 2025. In March 2024, the Organization of Petroleum Exporting Countries (OPEC) and non-member Russia announced they would continue with 2.2 million b/d of production cuts through the second quarter of 2024. Since 2022, OPEC has persisted with production cuts to support crude oil markets. OPEC supply represents approximately a third of the world's petroleum liquids supply and decisions made by the organization can greatly influence the direction of global petroleum markets.

EIA projects that West Texas Intermediate (WTI) crude oil will average \$83.05/bbl for 2024 and \$80.88/bbl in 2025. The Brent (North Sea) crude oil spot price is forecast to average \$87.79/bbl and \$85.38/bbl, respectively. WTI and Brent are light sweet crudes used as international benchmarks in spot market pricing.

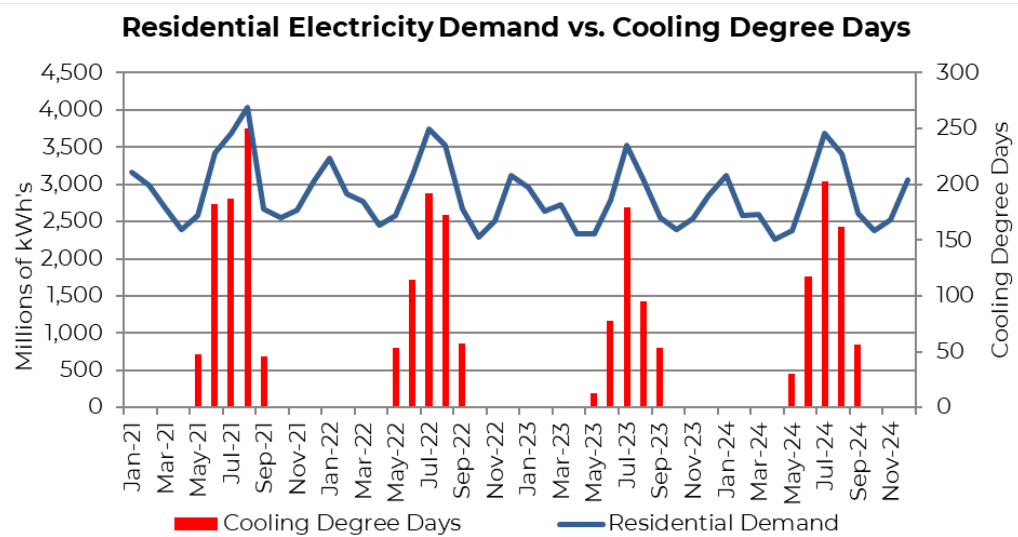
Electricity

Demand

Assuming normal weather, Michigan's total electric sales for 2024 are projected to increase by 1% to 98.5 terrawatt hours (TWh) compared to 97.5 TWh in 2023. The increase in sales is expected to come primarily from the residential (2.8%) and

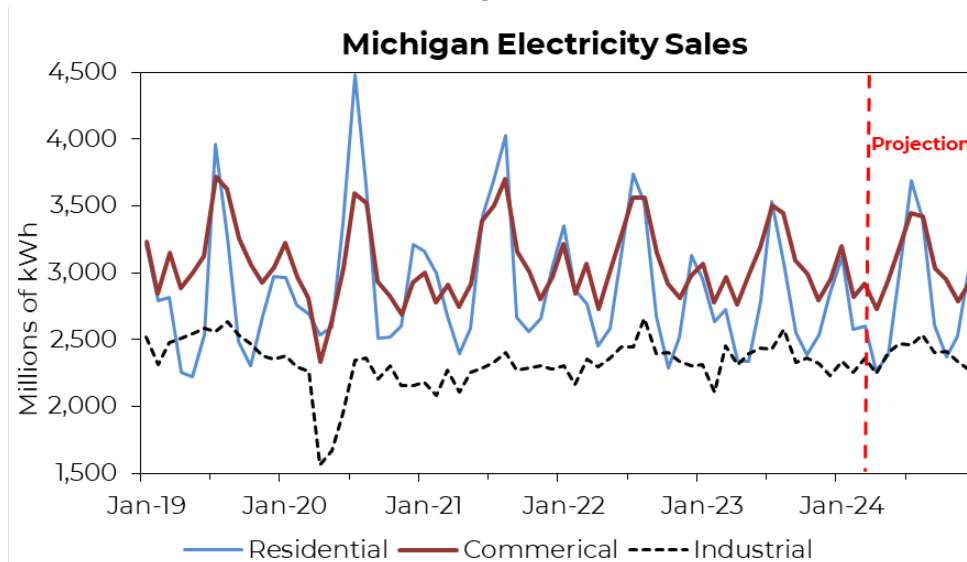
industrial (0.8%) sectors, while a decrease of 0.5% is expected for the commercial sector (see Figures 7, 8, and 9). Two of the primary drivers of electricity consumption in the residential market are for cooling during hot weather and home heating during the winter. Summer 2023 had 26% less cooling degree days than historical averages – indicating a slightly cooler than normal summer. Industrial sector usage of electricity, which is less dependent on weather fluctuations and more highly correlated to economic activity, decreased by 0.8% in 2023.

Figure 7



Sources: Energy Information Administration & NCDC

Figure 8



Source: Energy Information Administration

Figure 9

Michigan Electricity Sales Projection
(Millions of kWh)

		Residential	Commercial	Industrial	Total
Historical	2021 Total	35,868	36,890	27,081	99,839
	2022 Total	35,035	37,129	28,486	100,649
	2023 Total	32,699	36,558	28,263	97,520
Projection	2024 January	3,117	3,203	2,336	8,656
	February	2,578	2,823	2,258	7,659
	March	2,603	2,921	2,364	7,888
	April	2,262	2,733	2,247	7,242
	May	2,383	2,935	2,402	7,720
	June	2,998	3,203	2,467	8,667
	July	3,691	3,450	2,463	9,604
	August	3,406	3,418	2,533	9,357
	September	2,612	3,033	2,407	8,052
	October	2,373	2,954	2,413	7,741
	November	2,530	2,783	2,338	7,652
	December	3,060	2,919	2,273	8,251
	2024 Total	33,613	36,374	28,502	98,489
2023-2024 Change	2.8%	-0.5%	0.8%	1.0%	

NOTE: Projected electricity sales are based on historical trends.

SOURCES: Historical Data – Energy Information Administration, U.S Department of Energy. Projection: MPSC, Energy Security Section, using primarily EIA data

Supply

To serve Michigan’s electrical needs, load serving entities in Michigan participate in the wholesale electricity day ahead and real time markets operated by their respective Regional Transmission Operators (RTO). Michigan load serving entities also participate in their respective RTO’s resource adequacy constructs and capacity markets. Michigan is part of two separate RTOs. Most of Michigan is within the Midcontinent Independent System Operator (MISO) and the remaining southwest section of the lower peninsula is in PJM.

In MISO, last year’s auction for planning year 2023/2024 was the first auction using the seasonal resource adequacy construct. The amount of capacity required to serve MISO Zone 7, which includes the Lower Peninsula, for summer 2024 was 21,565 MW. The amount of MISO Zone 7 capacity offered into the market was 21,914 MW with 21,671 MW of capacity clearing the auction with a price of \$30/MW-day. The amount of capacity required to serve MISO Zone 2, which includes the Upper Peninsula, for summer 2024 was 13,396 MW. The amount of MISO Zone 2 capacity offered into the market was 14,820 MW with 14,820 MW of capacity clearing the auction with a price of \$30/MW-day.

MISO-wide, the predominant fuel types to clear the summer 2024 auction were natural gas (42.5%) and coal (27.1%). Nuclear (8.5%), wind (3.8%), and solar (3.6%) were also represented in the auction. Although wind and solar represent a small portion of the overall capacity in the MISO region, 4.85 GW of solar and 5.15 GW of wind capacity cleared the summer auction, compared to 3 GW and 4.95 GW in the previous year, respectively.

Price

Year-over-year changes in residential electrical bills can vary from utility to utility, with some residents seeing their bills decrease while other bills increase (see Figure 10). Residential bills in areas of the Central and Western Upper Peninsula, where population densities tend to be lower and the local power grid is challenged by various constraints imposed on and by the surrounding electrical generation and transmission systems, continue to be some of the highest in the state.

Figure 10

Michigan Electric Rate Comparison

	May-23		May-24		Percent Change
	Monthly Bill	¢/kWh	Monthly Bill	¢/kWh	
INVESTOR OWNED					
AEP (I&M) Combined	\$83.30	16.66	\$88.60	17.72	6.4%
Alpena Power	\$75.40	15.08	\$83.82	16.76	11.2%
Consumers Energy	\$91.43	18.29	\$95.54	19.11	4.5%
DTE Electric	\$100.35	20.07	\$103.72	20.74	3.4%
Northern States Power	\$82.62	16.52	\$78.52	15.70	-5.0%
UMERC - (FORMERLY WEPCO)	\$83.83	16.77	\$77.64	15.53	-7.4%
UMERC - (FORMERLY WPSC)	\$82.51	16.50	\$74.47	14.89	-9.7%
Upper Peninsula Power	\$121.09	24.22	\$133.01	26.60	9.8%

Note: Monthly Bill calculations are based on usage of 500 kWh/month and exclude state sales tax.

The EIA forecasts residential retail electricity prices in the east north central U.S. to average 15.90 cents/kWh for 2024, a decrease of 1.8% from the prior year. A major driver of these prices includes generator fuel costs, but also includes transmission and distribution costs. Residential and commercial rates are typically higher as it is more expensive to distribute the electricity to them, as they frequently require more miles of low voltage distribution infrastructure, than it is to industrial customers. Variations in electricity demand, weather, and power plant availability can all impact the price consumers pay for their electricity.

Natural Gas

Demand

Natural gas demand in Michigan is expected to rise by 7.3 percent in 2024 due to overall upward trending demand from the electric power sector. Residential sector usage is expected to increase by 5.5%, while commercial and industrial sector usage declines 0.3% and 8.4%, respectively (see Figure 11). Weather variation greatly affects

natural gas usage in the electric power sector (see Figure 12). Current projections from NOAA’s Climate Prediction Center (CPC) indicate that the remaining 2024 summer cooling season (June-September) may be about 8.4% warmer than the 1981-2010 normal. Deviations from these weather projections could lead to very different consumption patterns as homes and businesses increase their electricity use to combat the heat. In addition to weather influenced demand, consumption for electricity generation is likely to be influenced by the price of natural gas. Total usage for 2024 is projected to be 1,129.9 Bcf, compared to 1,053 Bcf in 2023.

Figure 11

**Michigan Natural Gas Demand
(Billion Cubic Feet--BCF)**

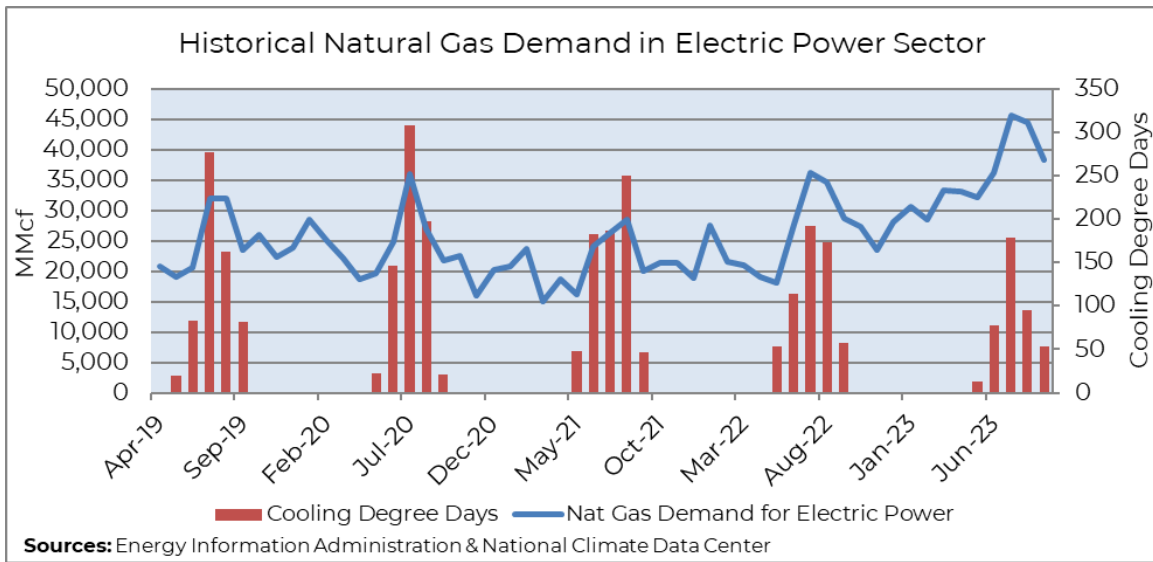
		Total Demand	Residential Demand	Commercial Demand	Industrial Demand	Electric Power Demand
Historical	2021 Total	871.2	296.0	161.4	158.6	255.1
	2022 Total	989.3	328.7	179.3	167.9	313.4
	2023 Total	1,053.0	295.3	168.8	163.1	425.9
Projection	2024 January	140.4	58.8	28.9	18.3	34.4
	February	115.0	40.9	22.8	15.4	36.0
	March	115.8	41.3	20.1	14.5	39.9
	April	85.6	23.7	13.0	12.1	36.8
	May	68.9	13.5	8.5	10.0	37.0
	June	66.5	6.8	5.6	9.3	44.8
	July	76.3	6.2	5.0	9.3	55.8
	August	76.2	5.9	5.3	9.8	55.1
	September	63.9	6.9	5.6	10.0	41.4
	October	82.9	19.9	10.4	11.7	40.9
	November	105.9	38.2	17.5	13.4	36.8
	December	132.4	49.3	25.7	15.6	41.8
		2024 Total	1,129.9	311.4	168.3	149.4
	2023-2024 change	7.3%	5.5%	-0.3%	-8.4%	17.6%

NOTE: Projected demand is based on historical trends.

SOURCES: Historical Data – Energy Information Administration (EIA), U.S Department of Energy.

Projection: Energy Security Section, MPSC, using primarily EIA data (see methodology section for additional detail).

Figure 12



Supply

Storage levels in Michigan are projected to be 576 Bcf at end of 2024, which would be 2.8% higher than at the previous year’s end. Michigan has over 10 percent of the nation’s available underground storage capacity for natural gas, the largest of any state. Working gas storage inventories for the lower 48 states were 2,974 Bcf for the week ending June 7, 2024, 16.6% higher than the same time last year. Natural gas storage levels are normally at their lowest levels by the end of the heating season in March and are built up during the summer months. Storage injection typically begins after the end of the heating season and is sensitive to both current market prices as well as price expectations for the upcoming heating season. About 10% of Michigan’s natural gas needs are supplied via its own natural gas production wells. However, this production continues to slowly decline as the wells age, becoming uneconomical and shut in.

Price

The Energy Information Administration’s (EIA) May STEO projects Henry Hub natural gas spot prices to average \$2.27/Mcf for 2024, a 13.7% decline from the 2023 average. Prices are expected to rise to an average of \$3.21 for 2025. The EIA’s projected prices reflect several factors helping to lower near term prices including storage levels above the five-year average, and a warmer than normal spring for the Central and Eastern part of the country. The EIA expects that natural gas production will decline in 2024 as a result of lower prices – helping to balance market supply and demand dynamics and leading to the slight rise in prices for 2025.

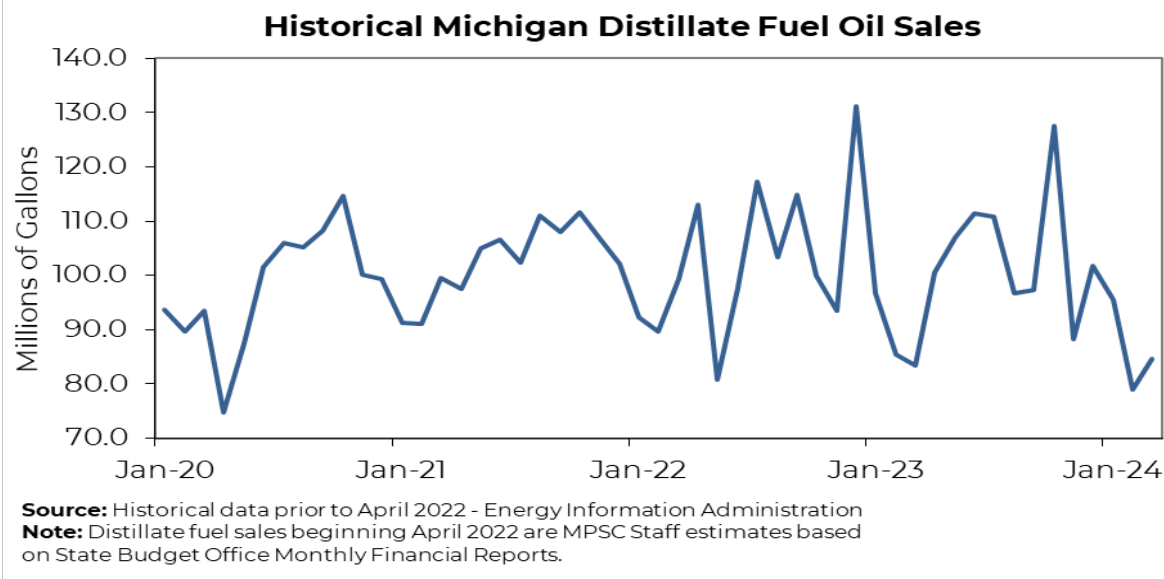
Distillate Fuels

Demand

Ultra-low sulfur diesel fuel has historically accounted for 99% of total distillate demand, a majority being used for transportation by highway trucks, with the

remainder consisting of heating oil, kerosene, and No. 1 distillate. Other users of distillates, although less prominent, include the agricultural, commercial, and industrial sectors, as well as vessel fueling. Distillate use in Michigan is typically seasonal in nature (see Figure 13) with individual peaks occurring in the Spring, late Summer, and early Fall. These peaks can likely be attributed to farm activity in the Spring and Fall and increased vessel activity as the Great Lakes become free of ice.

Figure 13



Supply

For the week ending June 7, national inventories of distillate oil were 123.4 million barrels, about 9.5 million barrels higher than this same time last year. Midwest inventories for the same week totaled 33.6 million barrels, 7.4 million barrels higher than a year ago. National production levels of distillates remain strong, and marginal increases in year over year inventories are a result of increased demand and a robust export market. For the week ending June 7, national production of distillates totaled 5.05 million b/d, while net exports averaged 1.26 million b/d, and consumption averaged 3.65 million b/d. These figures demonstrate why distillate stocks have built slowly over the course of the past year when demand plus net exports is nearly equal to production levels.

Price

Nationally, the EIA expects retail prices for on-highway diesel fuel will average \$3.99 per gallon for 2022, a decrease of \$0.22 from 2023. However, it is expected that distillate prices will rise slightly for 2025, with prices estimated to average \$4.15 per gallon. According to AAA Michigan, the average price of diesel in Michigan was \$3.79 per gallon on June 20, \$0.13 per gallon lower than the price seen at this time last year.

The average cost of No. 2 heating oil in Michigan was \$3.57 to end the 2023-2024 heating season, just \$0.01 per gallon lower than the end of the previous heating season. The principal price driver for heating oil is the U.S. refiner acquisition cost of crude oil. Other factors affecting the price of heating oil include the seasonality of

demand from weather conditions, competition in local markets, and regional operating costs.

Conclusion

As the summer driving and cooling season begins, residents should expect energy supplies to be readily available to meet their needs. Michigan's energy systems remain robust and are well positioned to meet the evolving needs of consumers in the state. MPSC Staff will continue their work to ensure this robustness and remain watchful for any risks to the state's energy systems.