A Critical Look at U.S. Fuel Demand Data: The Limitations of EIA Weekly Reports

WHITE PAPER | AUGUST 2024

www.dtn.com

CONTENTS

Overview: The EIA weekly petroleum status report 3

Discrepancies emerge.....3

Understanding the limitations 4

Impact on market participants.....4

The EIA's response.....5

The value of alternative data sources 5

Conclusion 6

Accurate and timely data are crucial for decision-making in the complex world of energy markets. The U.S. Energy Information Administration (EIA) has long been the go-to source for petroleum supply and demand. However, recent data discrepancies in weekly reports have raised concerns about the reliability of this information and its impact on market participants.

Overview: The EIA weekly petroleum status report

The EIA's Weekly Petroleum Status Report is among the most widely watched and anticipated publications in the energy sector. Released every Wednesday morning, the report provides estimates on crude oil and petroleum product supply, including gasoline and diesel fuel. Traders, analysts, and industry professionals eagerly await this report, as it often moves markets and influences pricing decisions.

Discrepancies emerge

In recent months, the industry has witnessed significant discrepancies between the EIA's weekly estimates and the more comprehensive monthly data report.

For instance, in May, the weekly reports painted a picture of tepid U.S. gasoline demand, contributing to a decline in international oil prices. However, the monthly update for May, published with a two-month lag, showed materially higher implied U.S. gasoline and overall oil demand.

These discrepancies are not isolated incidents. The gap between weekly and monthly data has been wide enough to suggest two different U.S. oil demand narratives, causing confusion and speculation among market participants.

Understanding the limitations

Several factors contribute to the limitations of the EIA's weekly reports:

- **Estimation challenges:** Weekly data is largely based on estimates and preliminary information, making it prone to inaccuracies.
- **Lag time:** The weekly report can be up to seven days behind the current market situation.
- **Lack of granularity:** The weekly report provides national-level data but lacks detailed regional breakdowns, which can overlook important local trends.
- **Incomplete picture:** Weekly data doesn't account for factors such as refinery stockpiling or specific market dynamics that may influence supply and demand.
- **Inconsistencies:** Overestimated gasoline output and under-counted exports have been cited for discrepancies between weekly and monthly data.

Impact on market participants

Because of the EIA Weekly report's implied importance, these limitations and discrepancies can lead to significant implications for various stakeholders:

Traders and analysts: Relying heavily on the weekly report's data can lead to misjudgments about market direction. For example, a trader might take a long position (based on the EIA's weekly report showing increased demand), only to discover that actual demand was lower leading to unexpected losses.

Policymakers: Flawed data can result in misguided energy policies that do not accurately reflect market realities. For instance, policymakers might delay implementing fuel efficiency standards based on weekly reports showing abundant supply, when it is tighter than reported.

Economists: Inconsistent data makes it challenging to assess the true state of U.S. oil demand and its implications for broader economic trends. This can lead to inaccurate economic forecasts and misguided investment decisions.

Retail fuel operators: Gas station owners and fuel distributors might make inventory decisions based on weekly data, potentially leading to overstocking or understocking of fuel supplies.

The reliance on weekly reports also means that market participants are often reacting to outdated information. When the report is released on Wednesday, its data may be up to 11 days old. In a fast-moving market, the delayed inaccuracies can be costly. For example, a sudden change in demand due to a weather event or geopolitical crisis might not be reflected in the weekly report, leaving market participants unprepared.

The EIA's response

The EIA has acknowledged these discrepancies and stated that they are working to align the weekly and monthly data more closely. They've made several changes to both data points to better reflect the state of the U.S. market.

Still, the inherent challenges in collecting and reporting accurate, timely data on such a vast and complex market remain.

The value of alternative data sources

Given the limitations of the EIA's weekly reports, many market participants are turning to alternative data sources to gain a more accurate and timelier picture of fuel demand. Private firms tracking supply and demand have become increasingly important in providing a more comprehensive view of market conditions.

One particularly valuable approach is DTN Refined Fuels Demand (RFD) data product. By tracking daily transactions from up to 85% of U.S. storage terminals and racks, having a near real-time view of fuel demand trends is now possible. This granular, timely data provides significant advantages in tracking and forecasting fuel demand, potentially days ahead of official government reports.

In this way, RFD serves as a bellwether solution to EIA's reports, offering several key advantages:

- **Daily updates:** While EIA provides weekly snapshots, RFD offers daily data and insights, allowing for more responsive decision-making.
- **Leading indicator:** By capturing real-time transaction data, RFD can serve as a leading indicator of trends that may not yet be reflected in EIA reports.
- **Regional granularity:** RFD provides data at national, PADD, and rack/city levels, offering insights into local market dynamics that national-level EIA data might miss.
- **Actual transactions:** Unlike EIA estimates, RFD is based on actual fuel sales, providing a more accurate picture of real-world demand.

Conclusion

While the EIA's Weekly Petroleum Status Report remains an important tool for understanding U.S. fuel markets, its limitations and recent discrepancies highlight the need for caution when interpreting this data. While also leading market participants to consider using additional data sources, which provide more frequent and granular information, to gain a more accurate fuel demand picture.

In this highly paced market, the importance of more timely, more accurate data will only grow. Those who can access and effectively interpret daily demand, such as that provided by RFD, will likely have a significant advantage in navigating the complexities of the refined fuels market.

The future of energy market intelligence lies in combining traditional sources like the EIA with more innovative, real-time data solutions to create a more comprehensive and accurate view of market dynamics.

Learn more
To see how daily demand data can give your operations a whole new point of view.

discover more

© 2024 DTN, LLC, all rights reserved. "DTN" and the degree symbol logo are trademarks of DTN, LLC.