



Use of JODI Data by OPEC

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- Importance of data transparency
- JODI data in energy market analysis
- Advantages of JODI data
- Shortcomings of JODI data
- Conclusion

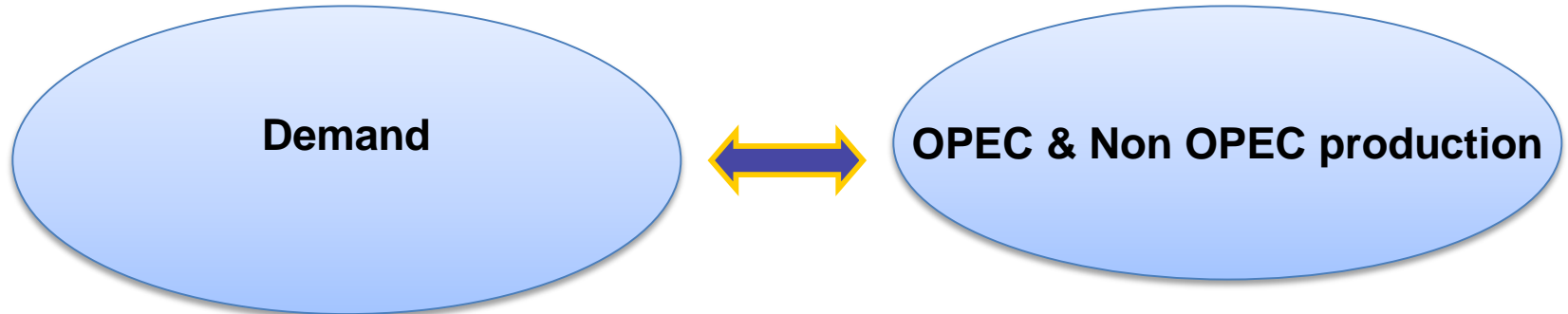


Transparent data: essential for energy markets

- Support decision making
- Encourage investments in, often, long-term projects
- Reduce market volatility
- Facilitate improved short-term forecasts
- Oil market: Decisions based, among others, on oil fundamentals
 - Oil supply
 - Oil demand
 - Inventories
 - Refinery & oil trade related issues
 - Oil prices



Market Fundamentals



**Expectation of fundamentals is a tool
to assess oil market**



- **Demand**: Demand forecasts are based on consumption data subject to a certain time lag, among other factors – the accuracy of the base year is essential in estimating the year ahead
- **Non-OPEC supply**: Non-OPEC supply forecast is based on adding growth projections to an existing baseline – the base is essential in estimating the year ahead
- **OPEC production**: Added to non-OPEC supply, global supply indicates the status of the market when compared to total world oil demand
- **Global stocks**: Oil inventories should reflect interaction between supply and demand forces – the global picture of stocks is the ultimate tool for checking supply and demand numbers
- **Refining**: Refinery intake (crude oil, NGLs, other) partially derived from JODI data and a key component in deriving the world oil balance

JODI data as input into Non-OPEC oil supply

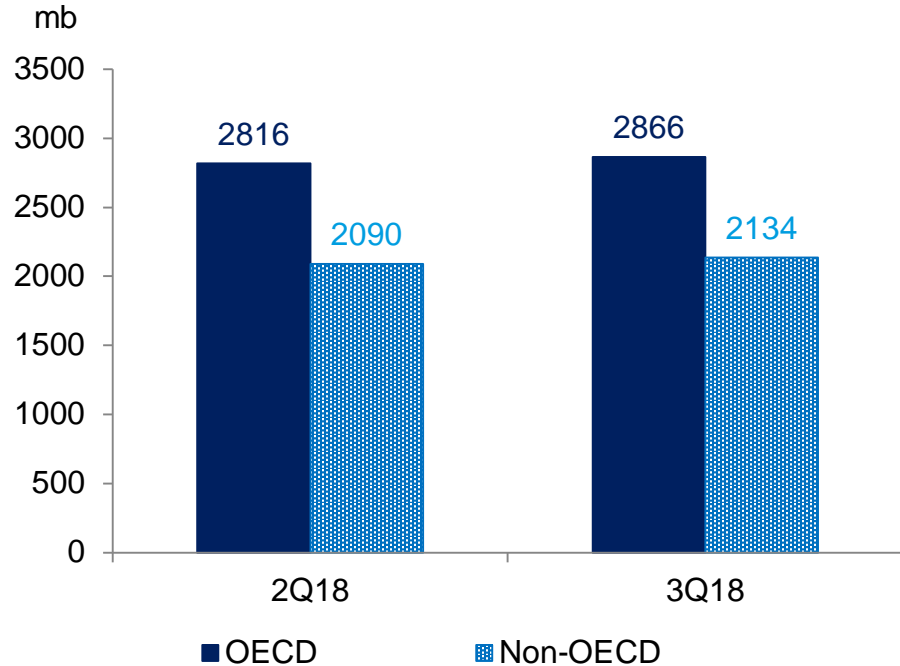


- JODI database is an **important source** and utilized for updating oil **supply information** for a number of **producing countries**
- JODI data are widely used, due to the following **three possible reasons**:
 - JODI data are used as the **first estimate** for some countries (e.g. Canada, Australia, India, Argentina)
 - Data for **smaller producing countries** are taken from JODI, after having been reviewed and compared with other national information, to ease and speed up the update (e.g. smaller producing OECD countries, e.g. Austria, France, Germany, Japan)
 - For some producing countries, **no other genuine information** than JODI is available at reasonable costs (e.g., Bolivia, Tunisia)

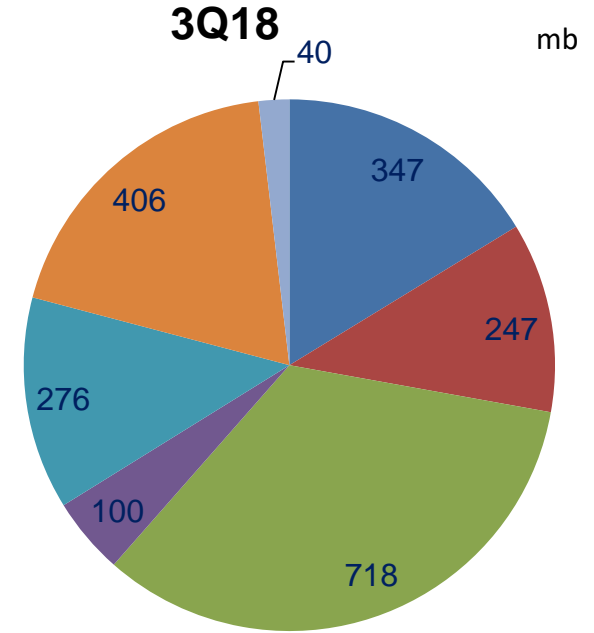
JODI data used to estimate global oil stocks



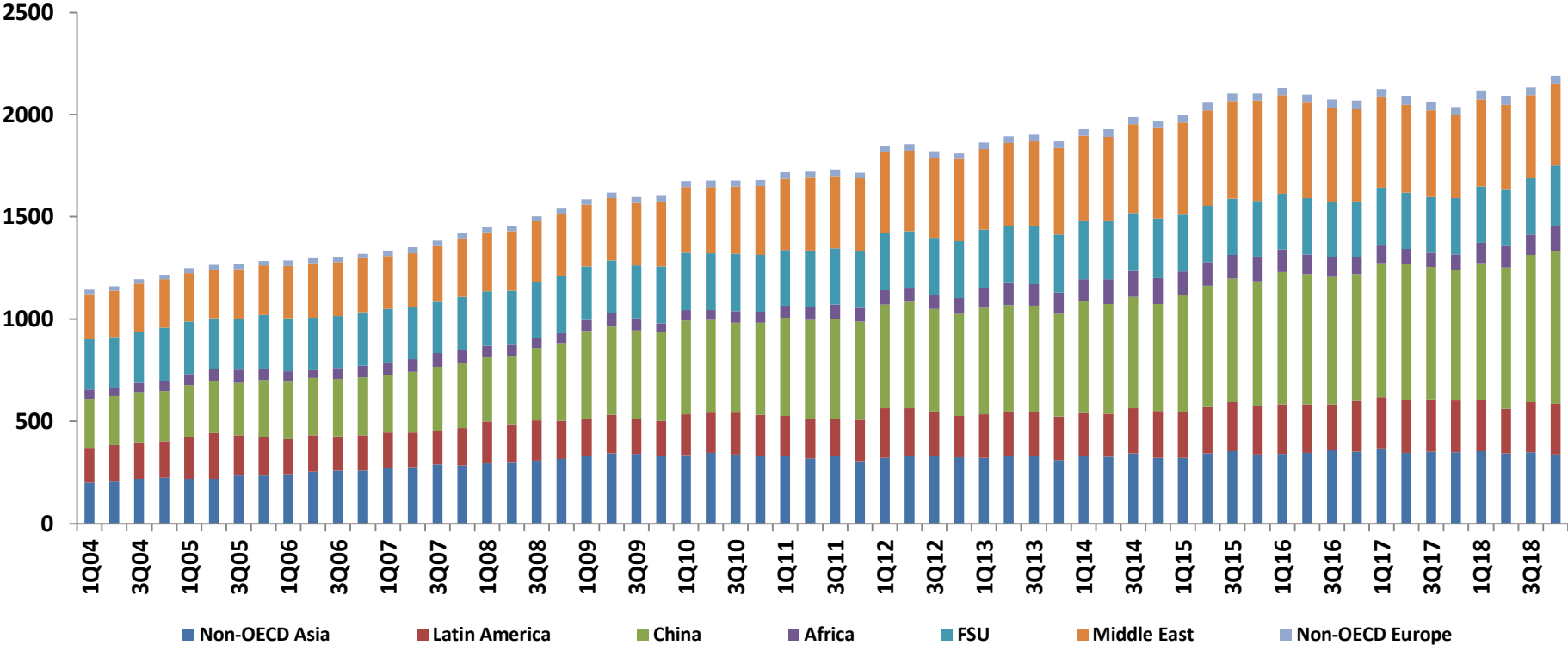
- **Availability** of key **Non-OECD data** in JODI directly relevant to oil market developments



- Non-OECD Asia
- Latin America
- China
- Africa
- FSU
- Middle East
- Non-OECD Europe



Non-OECD oil stocks





- JODI data – official and direct information with **comprehensive metadata** country notes
- Monthly data (**2 months time lag**)
- **Freely** accessible
- JODI contains **unique information** that cannot be accessed elsewhere (for some countries/region)
- Provide data on **fundamental oil flows**
 - Production
 - Demand
 - Trade
 - Storage
 - Refinery
- **Good coverage**

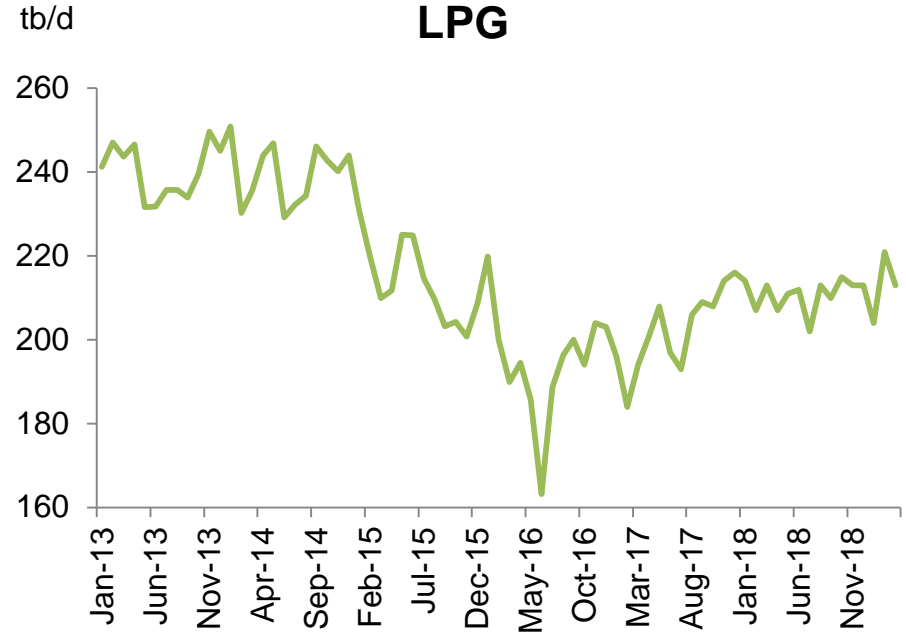
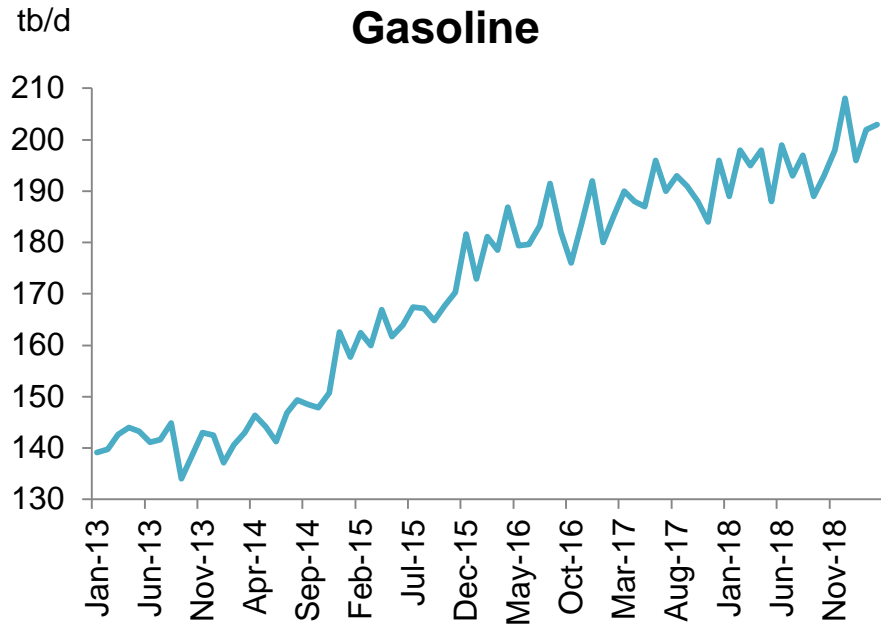


- Crude oil production: Large coverage, about **92%** of total crude oil production
- Demand: Around **83%** of total demand, including some of the new consuming countries
- Inventories: In addition to the OECD, a large number of non-OECD countries
- Refinery: Around **86%** of total refinery intake & output
- Trade: Large coverage, about **88%** of total oil exports & imports

JODI data as feed to world oil demand



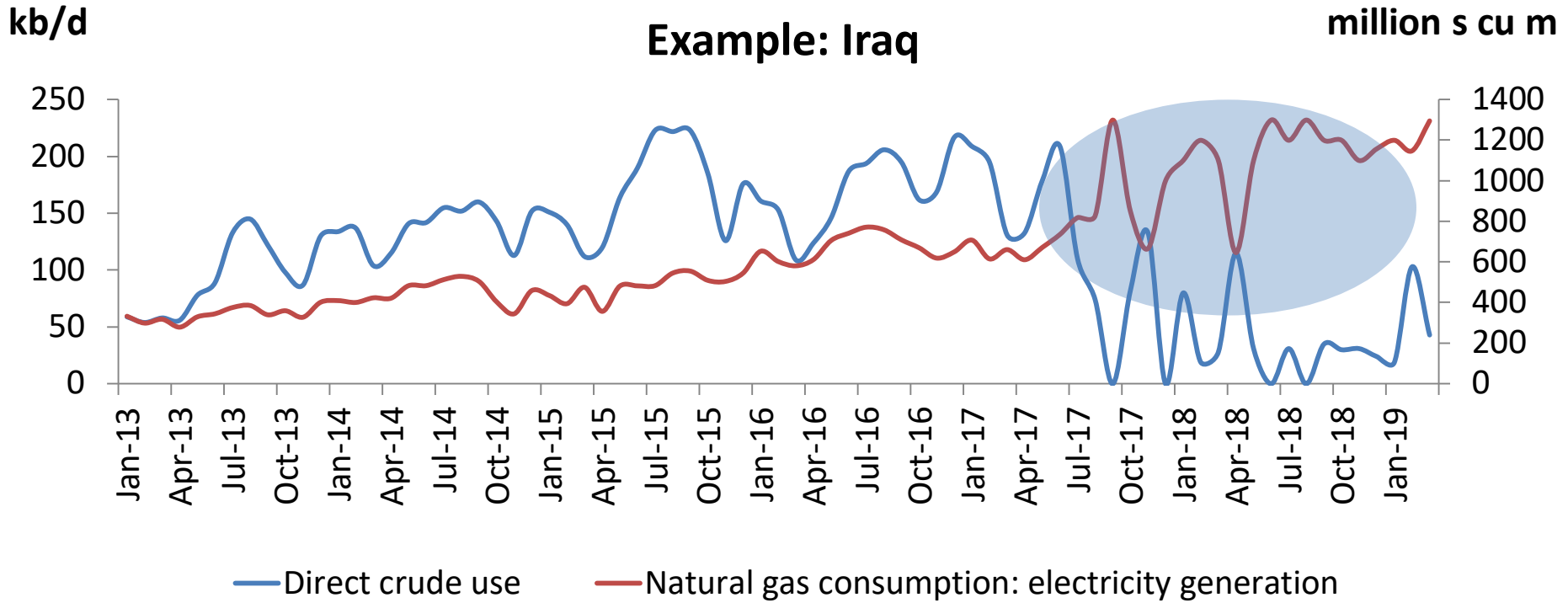
Data for main petroleum categories in Non-OECD essential for understanding oil market i.e. **Thailand**



Inter-relation between oil & natural gas markets

- **Interaction between oil & natural gas** markets is expected to further increase in future
 - Gas-to-liquid (GTL) plants
 - Petroleum products from gas plants
 - Fuel substitution
- **JODI gas** offers global coverage of gas production, imports, exports, stocks and demand on a monthly basis, covering **77** countries representing nearly **90%** of global gas markets
- There are **industry reference data sources** including BP statistics, Cedigaz, IEA statistics and EIA statistics. However, **none of these** natural gas data sources **cover monthly data** with such **extensive geographical coverage** as the JODI gas as World Database

Interaction between natural gas & oil: JODI data

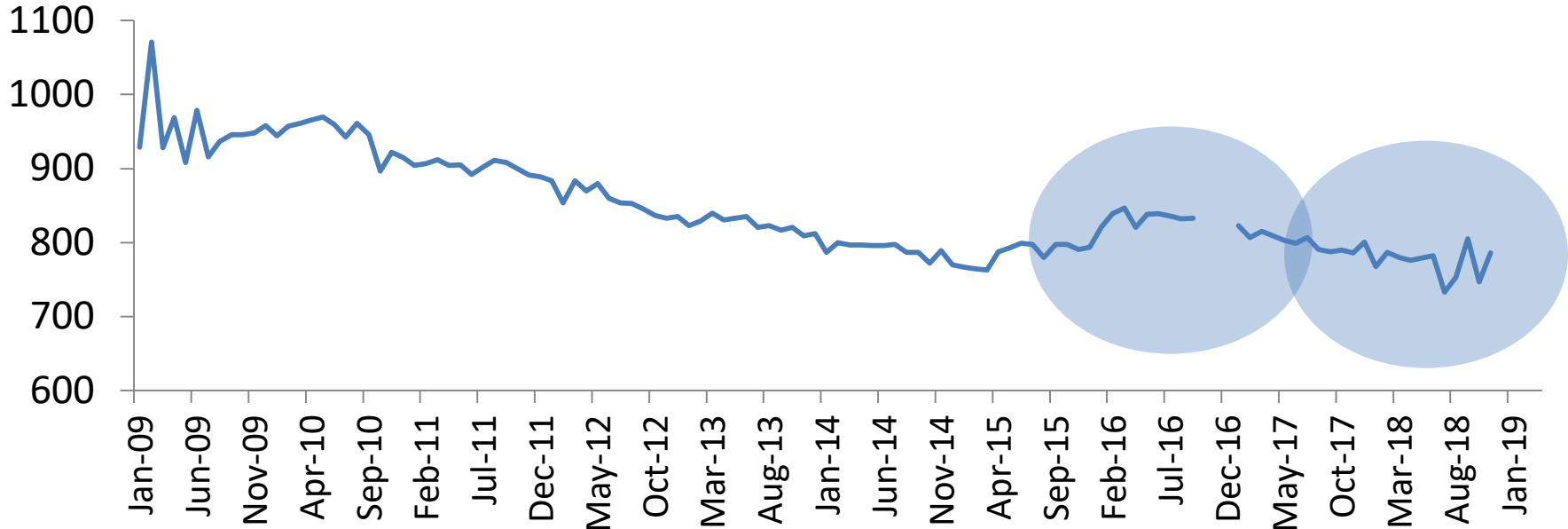




- **Coverage** could be further **improved** in terms of products & countries
- **Lack** of key data for some **main producing/consuming countries**
 - Oil demand & stocks in **China**
- Discrepancies:
 - Discrepancies between stock changes & supply/demand balance
- Drawbacks in **timeliness** of reported data
- **Revisions** in reporting organizations/agencies using oil data



Indonesian crude production, kb/d





- **JODI oil & gas** databases contain **official** country data and **valuable** information, which cannot be found easily elsewhere
- **Substantial usage** of JODI oil data by **OPEC** in oil market related research
 - As feed to historical baseline data for key oil variables (Non-OPEC Supply, Demand, Stocks, Refining, etc.)
- Utilization of **JODI** natural gas data mostly in relation to oil markets
- Quality of **JODI** oil & gas data can always be **improved**
 - Granularity
 - Reported time lag
 - Coverage
- **Expansion** of **JODI** to cover other energy commodities to obtain **deeper insight** into energy markets



Thank You.



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