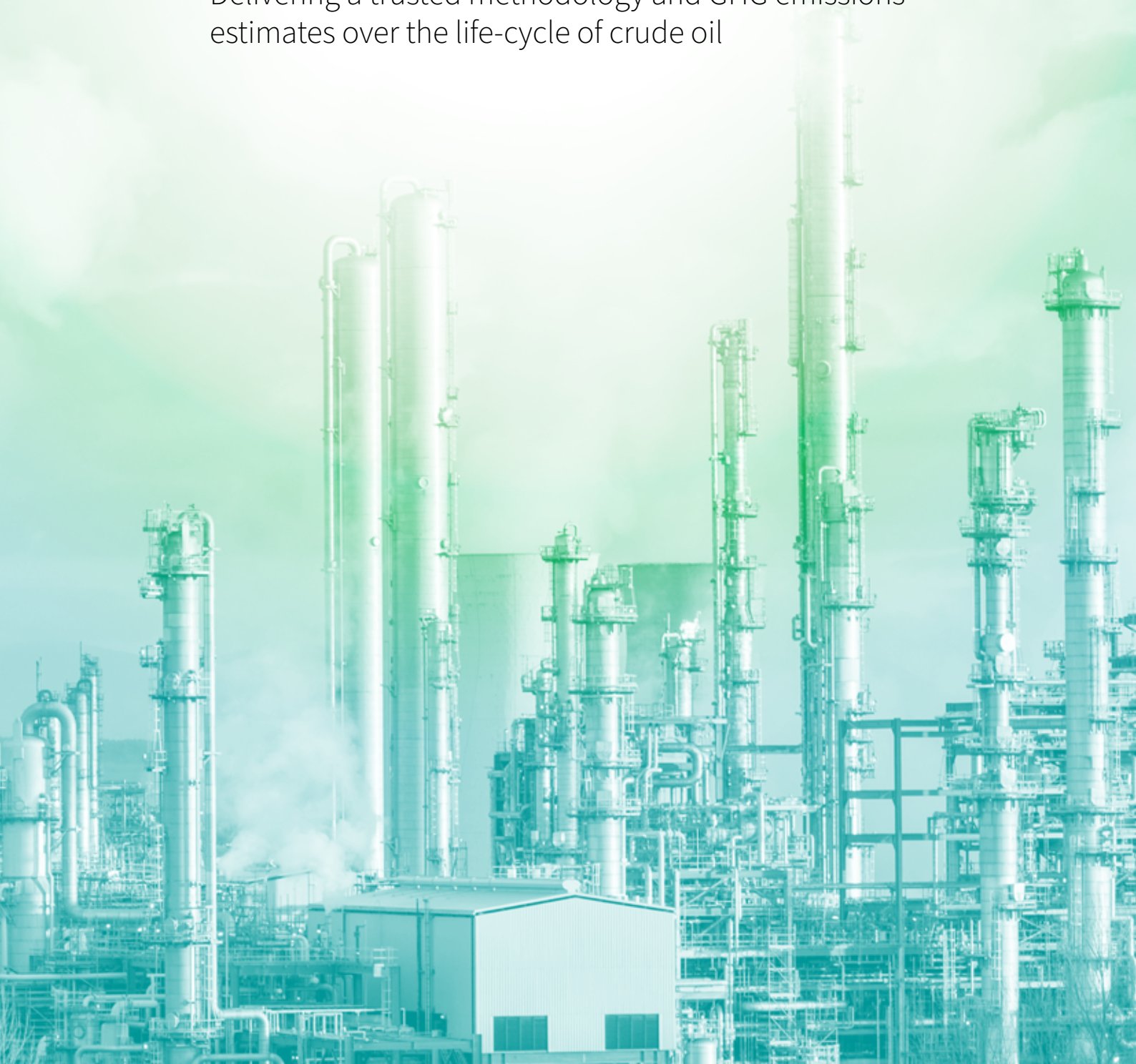




The Right Measure

Delivering a trusted methodology and GHG emissions estimates over the life-cycle of crude oil



What this Multi-Client Study Will Achieve

- Develop a shared understanding of ‘best practices’ for the estimation of the GHG emissions from crude oil production to end-use.
- Make public key findings and ‘best practices’, to improve transparency and encourage greater comparability between estimates.
- Identify the key sources of where and why estimates of GHG emissions of various crude oils diverge (by crude properties and methodology).







Addressing Key Needs for Emissions Estimation



O&G Producers

- Evaluate the GHG intensity of key assets and compare to peers.
- Support the development of independent GHG emissions estimates based on a transparent method and robust data.
- Weigh in on best methods and practices, as well as limitations on crude oil GHG estimation.
- Address GHG estimates from third-parties that may use different methods.



Investors

- Gain an understanding of the factors that influence the GHG intensity of crude oil.
- Compare and contrast GHG emissions intensities of key sources of supply globally.
- Avoid making buy/sell decisions based on inaccurate and arbitrary assessments of emissions.

The Challenge: At Present, More Questions Than Answers

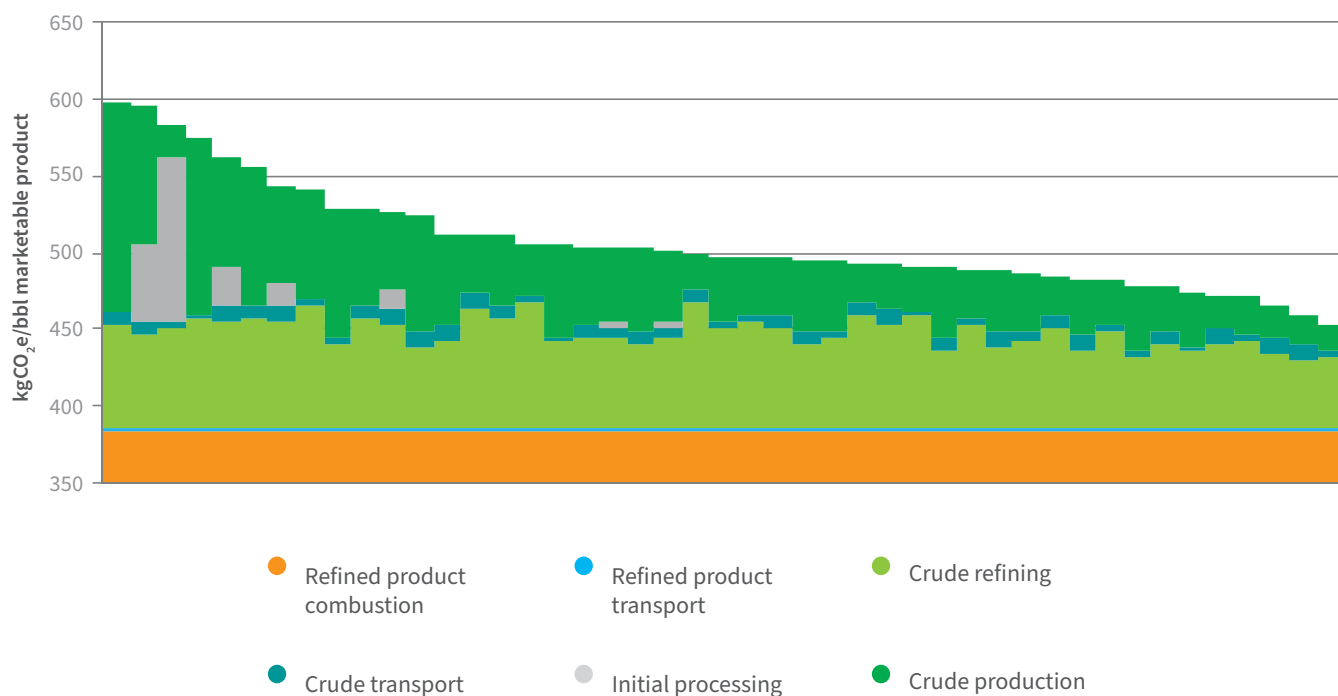
- There is increasing interest in estimates of GHG emissions intensity and life-cycle GHG emissions of crude oil
- There is no prescribed estimation method and inconsistencies are occurring and reliability is an issue
- Reasons for divergent findings aren't always clear or discoverable
- There is increasing risk that opinions and decisions may be made on incomplete or inaccurate information

Extensive Experience and Market Acceptance

IHS Markit is an established thought leader in GHG estimation and is in a position to help ensure what is done is fair, transparent and non-discriminatory.

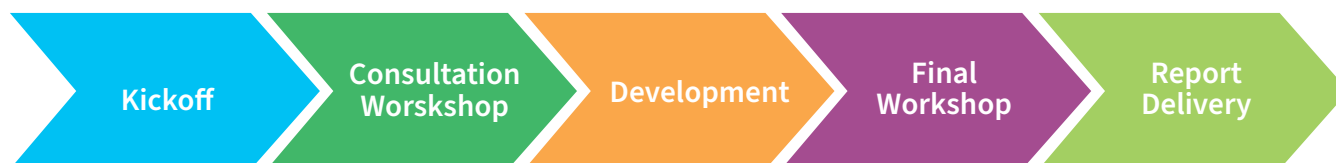
IHS Markit has completed 5+ public reports of GHG intensity of key global plays/technologies, going back to 2009. Our research has been used in the past to respond to shareholder inquiries, communicate facts and understanding differences between crude oil, and to enhance public understanding around benefits and limitations of GHG estimation.

Well-to-wheels GHG emissions of historical crude slate consumed in the US



The Process: Critical to Achieving The Right Measure

From the time the process kicks off with the scoping phase, we estimate the approximate time to report delivery will be 6 months.



Kickoff

- Review of IHS Markit intended approach to defining scope of emissions

Consultation Workshop

- Synopsis and review of current issue and pressures
- Comprehensive review of available data, models, treatment of co-products, system boundaries
- Identification of best practices and metrics to capture uncertainty

Development

- Modelling, accounting and technical analysis
- Play-level GHG life-cycle estimates
- Assessment of uncertainty

Final Workshop

- Present and discussion of results
 - Implications of approach taken
 - Crude stream level GHG intensity estimates over the life-cycle
 - Comparison of uncertainty across plays
 - Comparison of IHS Markit to other estimates

Report Delivery

- Revision based on workshop discussion
- Publication of a white paper summarizing methodology, boundary conditions and best practices
- Access to inventory of 50+ crudes and IHS Markit experts for following calendar year as part of ongoing service



The Right Measure - A landmark collaboration with O&G producers and financial institutions to develop a trusted methodology and GHG emissions estimates over the life-cycle of crude oil

About IHS Markit

IHS Markit (NYSE: INFO) is a world leader in critical information, analytics and expertise to forge solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 business and government customers, including 80 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.

CUSTOMER CARE

NORTH AND SOUTH AMERICA

T +1 800 447 2273

+1 303 858 6187 (Outside US/Canada)

EUROPE, MIDDLE EAST AND AFRICA

T +44 1344 328 300

ASIA PACIFIC

T +604 291 3600

E CustomerCare@ihsmarkit.com