



**ADI Forum**  
OIL & GAS • ENERGY • CHEMICALS

Houston, Texas  
February 21, 2019  
[www.adi-forum.com](http://www.adi-forum.com)







# ADI Analytics

OIL & GAS • ENERGY • CHEMICALS  
CELEBRATING 10 YEARS

ADI Analytics is a consulting and advisory firm specializing in oil and gas, energy, power, chemicals, and industrials.

Founded in 2009, ADI has completed over 300 projects for more than 100 clients including ExxonMobil, Shell, Chevron, ConocoPhillips, Marathon Oil, Saudi Aramco, Phillips 66, Reliance, BASF, LyondellBasell, GE, Honeywell, KKR, and U.S. Department of Energy.

In late 2017, ADI acquired the assets of Chemical Market Resources expanding its consulting, research, and advisory expertise in chemicals, petrochemicals, polymers, and plastics.

We help clients with market research, strategic planning, competitive benchmarking, and technology assessments along with offering a number of other consulting services. In addition, ADI offers several subscription-based research, intelligence, data, and analytics products.

Our growing team includes chemical and petroleum engineers, economists, MBAs, and PhDs with extensive domain expertise in oil and gas, energy, power, and chemicals. We differentiate ourselves through deep, field-based industry expertise; proprietary analytics; and client-centric, flexible delivery models.

[www.adi-analytics.com](http://www.adi-analytics.com)



## Welcome to the 2019 ADI Forum!

North America will soon be more of an energy exporter than a consumer. Production from our oilfields is finding its way through the value chain as well as around the world in the form of oil, gas, LNG, LPG, ethane, and, even ethylene and polyethylene.

In such a world, focusing exclusively on your business silo whether it's Permian, pipelines, LNG, or LPG is inadequate and can lead to missed opportunities. Our industry's fortunes today are more dependent than ever on understanding the entire value chain.

Facilitating that comprehensive, strategic understanding of the entire oil and gas value chain is why we host the ADI Forum.

Today, over seven panel sessions, more than 20 speakers will help you get current on upstream, midstream, downstream, LNG, and NGLs. More importantly, you will connect the dots across these segments for a strategic view of the oil and gas value chain and how it impacts your business.

Each panel session will set the context using insights from ADI's research and consulting work followed by an insightful dialogue with industry leaders. We welcome your active participation with questions and comments today.

Thank you for joining us!



**Uday Turaga**  
*Forum Chair*



**Ron Sills**  
*Forum Vice-Chair*



**Faiza Tanvir**  
*Forum Producer*



## Agenda

**7:30 am Registration and Breakfast**

**8:30 am Welcome and Forum Logistics**

*Uday Turaga, ADI, CEO*

**8:35 am Keynote Presentation**

*James Steffes, Direct Energy, Executive VP, Corporate Affairs*

**9:10 am The Outlook for Oil and Gas in 2019**

*Uday Turaga, ADI, CEO*

**9:40 am Panel Session 1: Upstream and Supply**

**Natalya Brooks**  
Equinor  
Senior Strategy  
Advisor

**Jim Sledzik**  
Saudi Aramco Energy  
Ventures  
Managing Director, NA

**Utkarsh Gupta**  
ADI  
Analyst

**Jorge Milanese**  
ADI  
Advisor

**10:40 am Break**

**11:00 am Panel Sessions 2: Midstream and Gas Processing**

**Brad Wright**  
Plains All American  
MD, M&A & Strategy

**Roger George**  
Exterran  
SVP, Global Engineering and  
Product Lines

**Uday Turaga**  
ADI  
CEO

**12:00 Lunch**

**1:00 pm Panel Session 3: Downstream Oil and Gas**

**Austin Knight**  
Air Liquide USA  
Chief Operating Officer,  
Large Industries

**Chris Knirk**  
Shell  
Procurement Head,  
C&T

**Swati Singh**  
ADI  
Analyst

**Uday Turaga**  
ADI  
CEO





**2:00 pm Panel Sessions 4: LNG Markets**

**Linda Berndt**  
Eagle LNG Partners  
Vice President

**James Reddinger**  
Stabilis Energy  
CEO

**Uday Turaga**  
ADI  
CEO

**3:00 pm Break**
**3:20 pm Panel Session 5: Gas Utilization**

**Eberhard Lucke**  
NiQuan Energy  
VP, Process Eng. & Tech.

**Fabio Ribeiro**  
CISTAR  
Director

**Panuswee Dwivedi**  
ADI  
Analyst

**Ron Sills**  
ADI  
Advisor

**4:05 pm Panel Session 6: Natural Gas Liquids (NGL) and Chemicals**

**Dave Marchese**  
Caliche  
Development  
Partners  
CEO

**Angela John**  
BP  
Director, Structured  
Products

**Jennifer Jewson**  
LyondellBasell  
Director, NA  
Feedstocks

**Brandon Johnson**  
ADI  
Project Manager

**4:50 pm Break**
**5:00 pm Reception and Panel Session 7: New Energy**

**Cory Steffek**  
Ara Partners  
Managing Director

**Alyssa Karotkin**  
Equinor  
Manager, Commercial  
Negotiations

**Uday Turaga**  
ADI  
CEO



## Speakers



**Natalya Brooks** is a Sr. Strategy Advisor in Equinor's Corporate Strategy and Innovation team. She has been with Equinor for 11 years, most recently as the head of the US Strategy organization and the BD Manager for the Gulf of Mexico. Prior to Equinor, she worked for J. S. Herold in the strategy consulting team. Natalya has an MBA from Monterey Institute of International Studies in California and a BA in foreign languages.



**Roger George** is Sr. Vice President, Global Engineering and Product Lines at Exterran. Prior roles include Product Line Leader of GE's Gas Turbine, GM and an executive with GE's Distributed Power running Global Sales and Commercial Operations. Earlier he worked for Optimal CAE, Inc. and Ford Motor. George holds an MBA from University of Chicago, and MS, PhD in mechanical engineering from University of Missouri.



**Jennifer Jewson** joined Lyondellbasell (ARCO Chemical) as an R&D Chemist in 1996 and held various positions as a Business Analyst, Commercial Manager within the Olefins and Chemicals Divisions, and Sales Director for NA Chemicals, Director of Global Business Process Team in Europe, and currently as Business Director of North American Feedstocks. She holds BS in Chemistry, a PhD in Inorganic Chemistry and an MBA.



**Angela John** is the Director of Structured Products within BP's global energy marketing and trading organization. Prior to this, John served as SVP of BP's NA physical NGL business. Through her 27-year career with BP, John has gained extensive experience and a deep understanding of chemicals, refining, oil, natural gas and NGLs markets. John holds an MBA from Northwestern's Kellogg School of Management and BS in chemical engineering from the University of Houston.



**Alyssa Karotkin** joined Equinor (Statoil) in 2008 doing business development. She manages team of international negotiators in Houston. Prior to Equinor, she was a briefing attorney for a U.S. Magistrate and a U.S. Senior District Judge. Karotkin holds a BA in public policy and psychology from Duke University and a J.D. from the University of Texas School of Law.



**Austin Knight**, COO, Large Industries at Air Liquide USA is responsible for leading the strategy, financial performance, operations, commercial, energy management, and engineering activities for supply of industrial gases to chemical producers, refineries, and steel manufacturers in the US. Prior to Air Liquide, he was a lead electrical engineer at Fluor. Austin holds a BS in electrical engineering from Texas A&M University and an MBA from UT at Austin.





**Chris Knirk** brings 25 years of experience in supply chain management, engineering, strategic sourcing, and M&A. Knirk joined Royal Dutch Shell in 2008. He leads a global team of 30 procurement professionals that take advantage of Shell Oil's scale to do deals for Catalysts, Chemicals, and Metals. Knirk has done this with companies like PepsiCo, Cadbury, and Shell Downstream. Chris holds a BS in mechanical engineering from LSU and an MBA from Our Lady of the Lake University.



**Linda Berndt** brings 15 years of experience in developing LNG markets. She serves as VP of Eagle LNG Partners and is responsible for government relations, public affairs and commercial development of small-scale LNG fueling solutions. Linda is a graduate of the University of Pennsylvania's Executive Development Program and holds a BS in Marketing and Business Management from Oklahoma City University.



**Eberhard Lucke**, VP of Process Engineering and Technology at NiQuan Energy Group brings over 25 years of experience as a consultant, engineer and manager. Prior experiences include Process Engineering Manager at CB&I Lummus, consultant for KBC Advanced Technologies, and several executive positions in the EPC industry. Eberhard holds a M.Sc. degree in chemical engineering from the University of Essen in Germany.



**Dave Marchese**, CEO, Caliche Development Partners, has 20 years of operational and financial experience in the energy assets. He held several management roles at Haddington, Bobcat Gas Storage, Norton Energy Storage, Fairway Development, Apex Compressed Air Energy Storage, Endicott Biofuels, Eschelon Energy Partners, Reliant Energy, and Jacobs. He holds a BE and an MBA from Vanderbilt University.



**James Reddinger** is CEO, Stabilis Energy, a leading small-scale LNG production and distribution company in North America. Stabilis operates under the brand names Stabilis Energy (LNG production) and Prometheus Energy (LNG distribution). Prior roles include CFO of Tiger Rentals, MD at UBS Investment Bank, and a VP at Credit Suisse. He holds a BA from Harvard University and an MBA from Northwestern University.



**Fabio Ribeiro** is the Director of the National Science Foundation Engineering Research Center on the Innovative and Strategic Transformation of Alkane Resources (CISTAR) at Purdue University. His research interests are centered on the kinetics of heterogeneous catalytic reactions and catalyst characterization under reaction conditions. He has a PhD from Stanford University



**Jim Sledzik**, Managing Director for North America at Saudi Aramco Energy Ventures (SAEV) has more than 30 years of experience in the oil and gas industry. Prior roles include MD at Hall Labs, Senior Partner & President for Energy Ventures, Global Marketing Director and VP of Multi Client Services for WesternGeco and Global Account Director for Schlumberger. Sledzik has an MBA from the University of Pittsburgh and a BS in geosciences from Pennsylvania State University.







**Cory Steffek** is Managing Director at Ara Partners. Prior experiences include Managing Director of North America at Saudi Aramco Energy Ventures, Corporate Development and Strategy at First Solar and several management roles at Altira Group and PPG industries. Steffek holds a PhD in materials chemistry from the University of Michigan and an MBA from The Kellogg School of Management at Northwestern University.



**James Steffes** is the EVP of Corporate Affairs for Direct Energy. Prior roles include CEO of Circular Energy, and NRG Energy as head of Green Mountain Energy. He serves as an Executive Board Member on the Advanced Energy Economy. He brings more than 20 years of experience in the competitive energy industry with an MS in public policy from Harvard Kennedy School and a BS in foreign service from Georgetown University.



**Brad Wright** is Managing Director, M&A and Strategic Planning at Plains All American Pipeline, L.P. Prior roles include an Associate at Barclays Capital, advising upstream and midstream clients on M&A and capital markets, and an analyst at Merrill Lynch (Petrie Parkman & Co). Wright holds a BBA and an MBA/JD from the University of Texas at Austin.



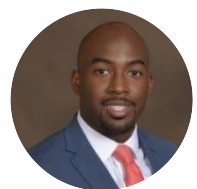
**Uday Turaga** brings 20 years of industry experience gained at ConocoPhillips, ExxonMobil, Booz & Company, and ADI Analytics. He specializes in corporate strategy, market research, economic analysis, competitive intelligence, and technology assessments with rich domain expertise spanning oil and gas exploration, production, and refining, coal and power, and chemicals. Turaga holds a PhD in fuel science from Penn State and an MBA from the UT Austin.



**Ron Sills** is an internationally recognized expert on energy conversion technologies in the natural gas/coal/biomass to products value chain. Prior roles include Gas Conversion Network Leader at BP, manager of Mobil's Research Planning & Evaluation Group, and member of the commercialization team of the Methanol-to-Gasoline process. Sills holds a PhD and M.S. in chemical engineering from MIT and a B.S. in chemical engineering from Columbia. He is the co-inventor for 10 patents.



**Jorge Milanese** is an experienced oil and gas professional with expertise in domestic and international business development, acquisition and divestiture, corporate development and upstream assets management. His working experience has included engagements with major global oil and gas operating companies as business development VP and Assets VP. Milanese holds an MBA from MIT and a BS in aeronautical engineering.



**Brandon Johnson's** expertise includes technology assessments, competitive benchmarking, market size modeling, and risk analysis using Monte Carlo uncertainty analysis in the oil and gas, chemical, power generation, and mining industries. He holds a BS in physics from Stephen F. Austin State University.



## ADI Services and Offerings

Thank you for joining us at the ADI Forum. ADI's offerings are described below, and more is at [www.adi-analytics.com](http://www.adi-analytics.com) or by contacting us at [info@adi-analytics.com](mailto:info@adi-analytics.com) or +1 (832) 768-8806.

<b>Consulting services</b>	ADI helps operators, suppliers, and investors in oil & gas and chemicals with market research, strategy, competitive intelligence, cost / economic analyses, operational benchmarking, and technology assessments.
<b>Subscription research</b>	Our subscription offerings include cutting-edge market intelligence and industry research through monthly or quarterly reports along with data and analytics, conference calls, and access to research teams.
<b>Multi-client reports</b>	ADI will regularly cover themes of topical interest to the oil and gas and chemical industries through multi-client reports that enable subscribers to catch up on a rapidly evolving industry trend.
<b>Data, forecasts, and analytics</b>	ADI maintains and licenses data and analytics on supply, demand, pricing, assets, transactions, contracts, trade flows, companies, investors, and other key metrics and categories.

## ADI Consulting Services

<b>Build strategy</b>	<b>Drive sales and marketing</b>	<b>Navigate markets</b>
<ul style="list-style-type: none"> <li>▪ Research/analyze trends, markets, industry, players</li> <li>▪ Identify/validate strategic options and M&amp;A ops.</li> <li>▪ Define and test M&amp;A / investments via scenarios</li> <li>▪ Profile competitive, policy, and other external risks</li> </ul>	<ul style="list-style-type: none"> <li>▪ Size and analyze markets and market shares</li> <li>▪ Identify and profile best segment / customer mix</li> <li>▪ Optimize go-to-market and channel strategies</li> <li>▪ VOC to refine offerings, pricing, and profit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Track industry / business trends for intelligence</li> <li>▪ Identify key opportunities and external threats</li> <li>▪ Develop strategies for opportunities and threats</li> <li>▪ Develop models- and analytics-based forecasts</li> </ul>
<b>Analyze financial issues</b>	<b>Optimize procurement</b>	<b>Accelerate innovation</b>
<ul style="list-style-type: none"> <li>▪ Benchmark financial / investment performance</li> <li>▪ Build valuation models to assess capital investment</li> <li>▪ Develop robust business performance forecasts</li> <li>▪ Analyze financials to find portfolio initiatives / ops.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Build accurate view of procurement spend</li> <li>▪ Benchmark procurement players and strategies</li> <li>▪ Find category mgmt. and strategic sourcing ops.</li> <li>▪ Define procurement spend optimization KPIs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assess current and new process technologies</li> <li>▪ Estimate capex and opex for process technologies</li> <li>▪ Identify process ops., needs, costs, benefits</li> <li>▪ Plan market-backed R&amp;D / innovation strategies</li> </ul>



## ADI Downstream Market Advisory

ADI's Downstream Market Advisory is a subscription service for research, intelligence, analytics, and insights on North American downstream oil and gas markets. It helps subscribers identify and act on opportunities, trends, and risks in refining and petrochemicals with clear, concise market intelligence, analytics, industry fundamentals, project updates, and forecasts.

### How you benefit

- **Identify and take advantage of** trends, opportunities, and risks in refining/petrochemicals
- **Understand downstream markets** via trusted market intelligence and primary research
- **Make decisions confidently** with reliable updates on capital projects, M&A, and awards
- **Save time** with concise, easy-to-digest presentation reports with clean, compelling visuals
- **Access data** from ADI's proprietary analytics and tools for your models and analyses
- **Answer urgent questions immediately** with on-demand access to ADI's research team

### What you get

- Monthly PDF report on **downstream market performance**
- Monthly PDF report with **insights on topical theme**
- Monthly spreadsheet with **market data and analytics**
- Quarterly call for **interactive discussion on research**
- On-demand phone / e-mail **access to research team**
- Complimentary access to the **annual ADI Forum**

### Topics of coverage

- Downstream performance and profitability assessment
- Downstream capex, investment outlook, and projects
- Issues and outlook for downstream supply chain / vendors
- Analyses of industry players, trends, projects, and news
- Strategy scenarios, signs, milestones, winners, losers, etc.

### What is covered

- Oil price, supply, outlook
- Fuel demand and outlook
- Refinery crack spreads
- Capacity utilization rates
- Turnaround outlook
- Capex forecast by region
- Capex breakdown
- Capital projects by player
- Supplier profiles / models
- Operator profiles/models
- News summary/analyses
- Regulations and tech.

### Illustrative themes

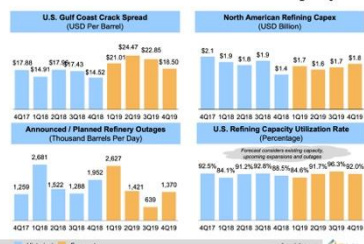
- Refining operating costs and outlook
- Petrochemical capex outlook
- Refining and midstream nexus for growth
- Ethylene cracker projects review
- Light-heavy crude differentials
- Ethanol, E15 and beyond
- Electric vehicles, CAFÉ, and fuel demand
- Global catalyst market review

### Excerpts from recent reports

Refiners will have a strong 2019 with robust crack spreads and continued capital spending although some risks remain



In key NA refining metrics, crack spread, capital spending, and turnarounds increase while utilization rate falls marginally



Growing ethane exports demand in countries including UK, Norway, Sweden, India and Brazil further narrowed the balance



For more information, please contact [info@adi-analytics.com](mailto:info@adi-analytics.com) or +1 832 768 8806





## ADI Gas Monetization Advisory

ADI's Gas Monetization Advisory is a subscription service for research, intelligence, analytics, and insights on natural gas utilization options and markets. It helps subscribers identify and act on opportunities, trends, and risks in gas use for power, LNG, fuels, chemicals, and transportation with market intelligence, cost / economic analytics, project news, and forecasts.

### How you benefit

- **Identify and take advantage of** trends, opportunities, and risks in gas utilization options
- **Understand power, LNG, and gas exports** via trusted market intel and primary research
- **Make decisions confidently** with reliable updates on capital projects, M&A, and awards
- **Save time** with concise, easy-to-digest presentation reports with clean, compelling visuals
- **Access data** from ADI's proprietary analytics and tools for your models and analyses
- **Answer urgent questions immediately** with on-demand access to ADI's research team

### What you get

- Quarterly PDF report on **gas monetization markets**
- Quarterly PDF report with **insights on topical theme**
- Quarterly spreadsheet with **market data and analytics**
- Annual call for **interactive discussion on research**
- On-demand phone / e-mail **access to research team**
- Complimentary access to the **annual ADI Forum**

### What is covered

- Gas price, supply, outlook
- Gas utilization volumes
- Power demand / outlook
- LNG supply / demand
- LNG prices and margins
- Capex forecast by project
- Capex splits by option
- Capital projects by player
- Operator profiles/models
- News summary/analyses
- Regulations and tech.
- Emerging tech profiles

### Topics of coverage

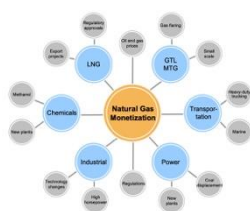
- Operating gas utilization projects' performance and outlook
- Power, LNG, and gas use projects, capex, and investments
- Issues and outlook for gas utilization supply chain / vendors
- Analyses of industry players, trends, projects, and news
- Strategy scenarios, signs, milestones, winners, losers, etc.

### Illustrative themes

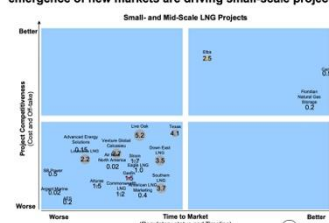
- Chinese LNG demand and infrastructure
- Gas conversion to methanol
- Methanol-to-power costs and economics
- Emerging gas monetization technologies
- Alternative marine fuels and outlook
- Gas turbine market assessment
- Gas-to-liquids cost and economics
- Gas storage market review

### Excerpts from recent reports

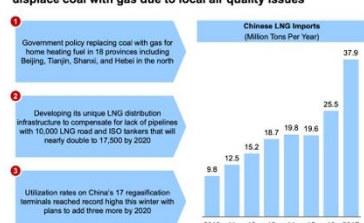
Natural gas monetization spans several active, dynamic, rapidly evolving, and increasingly interlinked markets



Finally, liquefaction technology improvements and the emergence of new markets are driving small-scale projects



China is importing more LNG and investing in infrastructure to displace coal with gas due to local air quality issues



For more information, please contact [info@adi-analytics.com](mailto:info@adi-analytics.com) or +1 832 768 8806



## ADI Multi-Client Reports

<b>Small- and medium-scale LNG</b>	In-depth review of the small- and medium-scale LNG market in North America covering demand, supply and projects, costs and economics, infrastructure, technology, policy and regulatory issues, and forecasts.
<b>IMO 2020 scenarios</b>	Scenario planning around IMO 2020 identifying compliance options and implications for oil and gas producers, refiners, traders, equipment suppliers, and marine fuel consumers with adoption and price forecasts.
<b>Hydrocarbon exports</b>	Comprehensive review of the North American infrastructure to export oil, gas, LNG, ethane, ethylene, and polyethylene including a review of the corresponding global supply, demand, and price markets.
<b>Oilfield water treatment market</b>	North American produced and flowback water volume forecasts and treatment options, costs, economics, and treatment players and their profiles to identify investment opportunities and market trends.

## ADI Data, Forecasts, and Analytics

ADI maintains a wide range of historical data and forecasts on regional and global supply, demand, pricing, capacities, and owners. We can gather any kind of market and asset data at a highly granular level. Contact us if your needs are not in the illustrative list below.

Commodities		Assets, plants, and infrastructure	
▪ Crude oil by type	▪ Natural gas and LNG	▪ Oil / oilsand reserves / fields	▪ LNG export / regas plants
▪ Refined products	▪ Natural gas liquids	▪ Well counts by type	▪ Methanol / ammonia units
▪ Methanol	▪ Ammonia	▪ Completions by type	▪ Refineries, units, terminals
▪ Petrochemicals	▪ Polymers by grade	▪ EOR, gas, and artificial lift	▪ Heavy oil upgraders
		▪ Production facilities	▪ Thermal / met coal mines
		▪ Pipelines by mile / dia	▪ Coal processing assets
		▪ Compression stations	▪ Power plants by type
		▪ Gas processing plants	▪ Water treatment plants
Equipment, product, and service market assessments			
▪ Well automation	▪ Shape charge liner	▪ Asset virtualization	▪ Distributed control
▪ Offshore gas fac.	▪ Downhole casing	▪ Maint. drones	▪ Proc. automation
▪ Offshore pipelines	▪ Energized fracs	▪ Condensate splitter	▪ Flare gas recovery
▪ Chemical inj pumps	▪ Oilfield chemicals	▪ LACT / GPU units	▪ Refining catalysts
▪ Acidizing market	▪ Wireless seismic	▪ Compressor serv.	▪ Tower internals
		▪ Cryogenic plants	▪ Micro GCs
		▪ Drag reducers	▪ Frac sand
		▪ Corrosion inhibitors	▪ Wireless power
		▪ Sulfur removal tech	▪ Energy storage
		▪ Pipe coatings	▪ Compressor drives
			▪ Brush seals
			▪ H2S scrubbers
			▪ LNG storage tanks
			▪ Small-scale GTL
			▪ Hypercompressors
			▪ Lube/fuel additives
			▪ Hydrogen plants
			▪ MTBE market
			▪ Shale trucking
			▪ Lube recycling
			▪ Compressor valves







**ADI Forum**  
OIL & GAS • ENERGY • CHEMICALS

**Save the date!**  
**Wednesday, January 15, 2020**  
**Houston, TX**







# ADI Analytics

OIL & GAS • ENERGY • CHEMICALS

CELEBRATING 10 YEARS

440 Cobia Drive  
Suite 1704  
Houston, Texas 77494

[info@adi-analytics.com](mailto:info@adi-analytics.com)  
+1.832.768.8806  
[www.adi-analytics.com](http://www.adi-analytics.com)

