DOWNSTREAM STUDY SERIES
AND SUPPORT SERVICES
East of the Rockies Downstream Business Analysis and Outlook Study

EAI, Inc.’s East of the Rockies Downstream Business Analysis & Outlook study combines its detailed outlook for the U.S. Central Corridor and Gulf Coast-Eastern Seaboard regions with its latest analysis of refining, logistics, consumption and economics for the Eastern Seaboard-Gulf Coast regions to provide the most detailed and insightful outlook available for this area. Increasing supply of gasoline, declining demand and increasing ethanol supply are causing major shifts in transportation and incremental gasoline supply economics that are having dramatic impacts on both the domestic and international refining business. EAI, Inc. provides insightful analysis of and outlook for the Northeast—New York Harbor in competition with foreign offshore and U.S. Gulf Coast product. The latest logistical shifts and transportation projects are analyzed as to how they will impact the new equilibrium in the Northeast downstream market. EAI, Inc. integrates its latest North American crude outlook and implications for crude supply and pricing in the Northeast and potential refinery margin outlook.

U.S. Southeast Downstream Business Analysis and Regional Deep Dive

EAI, Inc.’s Southeast Seaboard (SES) region of the United States is a major market area representing light product demand of approximately 2551 MBPD in 2014. Light product demand in the SES region has not totally recovered from pre-recession levels but has shown signs of additional recovery and growth in 2014 and into 2015. The SES and the U.S. Northeast markets represent very important outlets for Gulf Coast refining which is experiencing displacement from inland-northern markets, and an increasingly competitive global light product market. This situation is becoming even more challenging as both Gulf Coast and U.S. Central Corridor refiners continue to expand given the favorable crude supply and pricing environment. EAI, Inc. is completing its Southeast Downstream Deep Dive study in context of the overall East of the Rockies Downstream Business outlook and specific interrelationship with the Gulf Coast refining complex and the Northeast market.

Western Regions Downstream Business Analysis and Outlook Study

EAI, Inc.’s West Coast Downstream Business Study covers the trade area extending from Washington down through Southern California, east to cover both Nevada and Arizona, and west to cover the outlying states of Alaska and Hawaii. EAI, Inc.’s West Coast Crude study and Downstream Study are complimentary and provide a comprehensive continuum of coverage from specific crude production provinces through all key refining centers and into specific market areas. The West Coast Downstream Business is undergoing a major transition as demand for light products moderates, external supply pushes into traditional West Coast markets, the use of ethanol expands and LCFS legislation increases the role of alternative fuels and penalizes production of high carbon intensity fuels.
EAI, Inc.’s bottom-up approach to analyzing petroleum business from resources to refining and downstream terminal markets enables the EAI, Inc. study and/or project teams to carve out specialized geographies that envelop current and potential refinery distribution orbits, transportation corridors, terminal hub market orbits, etc. EAI, Inc. has conducted numerous projects addressing specific areas and addressing all of the components addressed as part of item 3 shown previously. The map shown to the right represents EAI, Inc.’s West Texas-New Mexico area and extension to EAI, Inc.’s Phoenix terminal micro-market which has been the focal point of numerous studies over the years for refiners, pipeline companies, marketers and trading operations. EAI, Inc. is updating its West Texas-New Mexico Downstream Business Analysis and Outlook study and cycles through numerous relevant trade areas throughout the year.

Global Integration and Insights

EAI, Inc. has applied its processes to the overall global market including but not limited to the following:

● EAI, Inc.’s East of the Rockies study contains an assessment of the Greater Atlantic Basin Downstream business outlook and implications for supply, demand and refinery rationalization
● EAI, Inc., as conducted a Latin America Deep Dive Downstream Business study
● EAI, Inc. has conducted a Distillate Market Strategy study that addressed North America and other major global distillate markets to assess the overall market and identify opportunities for a major distillate producer.

Analytical Tools, Data Access and PSMDS/LDM Modeling Back Bone

Micro-Market/Terminal Hub and Refinery/Supply Hub Analysis: EAI, Inc. has developed and applies proprietary data bases and analytical tools to define light product consumption at the county and entity level of detail (such as airport level jet demand) and tracks/conducts analysis of supply hubs that consist of refineries, import facility hubs, biofuels plants and major distribution hubs.

Petroleum Supply-Market Decision System (PSMDS) and Local Distribution Model (LDM): EAI, Inc. has developed a petroleum modeling system that integrates in-depth information describing physical, operations and business attributes of the petroleum business ranging from refining through the supply chain and into terminal facilities and out to specific wholesale market sites. EAI, Inc.’s Local Distribution Model (LDM) draws on this information, appropriate information resources and its IBM-CPLEX optimization engine to optimize competition between supply moving through terminals and competing for the wholesale gasoline market.

Custom Consulting & Value-Added Services

EAI, Inc. has developed a truly unique and integrated approach and supporting process to bridge EAI, Inc.’s in-depth information and leading edge analytics to client specific needs. These capabilities have been applied to a number of client specific initiatives including but not limited to:

● Acquisition and asset value assessment including product terminals, product pipelines and refinery assets.
● Project feasibility including expansion and grass root refinery, pipeline and terminal projects
● Integrated market strategy addressing market options, competition, supply chain options and other market factors to optimize netback revenue
● Regulatory and policy analysis and support including RINS, oxygenated fuels, LCFS, etc. and implications for business performance and appropriate investment decisions.

EAI, Inc. draws on its integrated information base, analytics and forecasts spanning resources, transportation, manufacturing, markets, economics and regulations and to support these client specific engagements.
About EAI, Inc.

EAI, Inc. (Energy Analysts International) is a consulting and product development firm founded in 1982 with a mission to provide strategic consulting, products and valued added services built upon thorough information resources, advanced analytics and a clear vision of customer and product objectives. EAI, Inc.’s specialty is providing very regionalized and integrated analysis of the business components that comprise the petroleum business to address key industry topics or company specific strategies. The products summarized here draw on EAI, Inc.’s knowledge and experience in evaluating all aspects of the crude oil business including refining, transportation, pricing and economics and resource development.

To support this mission, EAI, Inc. has evolved:
- Proprietary information resources
- Application tools/software
- Series of leading edge products
- Web based valued added information delivery

EAI, Inc. applies its information, analytics and business/objective formulation process across the energy commodity business spectrum:

- **Business Components**: resources, logistics, manufacturing, distribution and markets
- **Range of Commodities**: refined products (gasoline, distillates, jet fuel), biofuels, crude oil (heavy crude, medium sour, light) condensate, natural gas and natural gas liquids (butane, propane, ethane), alternative energy
- **Business Functions**: planning, strategy, business development, projects, acquisitions & divestitures, financial, operations
- **Geographies/Entities**: Resource, asset and company footprints to distribution hubs, markets transportation corridors and their interactions (regional and global)

Together, these unique capabilities support EAI, Inc.’s standardized and process oriented approach to:

- **Consulting**
- **Industry products**
- **Valued added services**