### TRAINING COURSE

# **Petrochemical Price Forecasting**

Explore the different considerations involved for short-, mediumand long-term price forecasting. Factors like feedstock cost, byproduct values, variable & fixed costs elements will be discussed and considered. Concepts like industry cost curves will also be explained. Along with S&P detailed supply-demand methodology, these will all be brought together to assess historical margins, industry operating rates and return on investments – all to forecast petrochemical prices based on grounded fundamentals. This is a hands-on workshop as there will be case studies for attendees to work on for every aspect of the price forecasting process.

Bring your laptops with you for this workshop; you will need it!



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#### 1. Price Definitions & Forecasting Methodologies

Short-, Mid- and Long-term

## 2. Short-term Forecasting Techniques

- Linear regression analysis method; Other techniques (in brief)
- → Case Study #1: Forecasting the next five months' prices (\*selected petrochemical product, polypropylene in this case)

#### 3. Medium-Term Forecasting Techniques

- Integrated Case Study Introduction; Production Cost Analysis; Underlying energy and feedstock values; Feedstock, variable, fixed costs, and co-product credits; Alternative values; Production cost models.
- ightarrow Case Study #2: Cash Cost of Production (\* selected petrochemical product)
- Historical Return on Investments
- → Case Study #3: Estimating Historical Return on Investments (ROI)
- Cost Curves Methodology
- Inherent Margin Analysis; Supply/demand balances
- → Case Study #4a: Demand forecast for Year Y
- Impact of operating rates; Market momentum & psychology
- ightarrow Case Study #4b: Global supply-demand-trade flow-operating rates planning for Year Y

## 4. Long-Term Forecasting Techniques

- Return on Investment
- $\rightarrow$  Case Study #4C: Forecast medium-/long-term ROI and prices.
- Diagnostic Checks;
- Price ratios and spreads;
- Regional relationships and arbitrage