



## Refinery and Petrochemical Hydrocarbon Loss Management: Improving Performance and The Bottom Line

**Potential PDH:** 16

### Description:

In oil refineries and petrochemical plants, hydrocarbon loss management (HCLM) is a critical component of successful performance. The hydrocarbon management practices in a facility directly impact financial, commercial, legal, environmental and regulatory outcomes. Upon completion of this course, participants will understand the three basic elements of Management, Measurement and Control in a hydrocarbon management system and how they function and interact to improve real performance. They will also understand the related industry standards, appropriate hydrocarbon accounting practices and functional practices that promote loss identification and gap closure to capture before unrealized value.

### Outline:

#### HCLM OVERVIEW

- What Is HCLM?
- Why Is It Important?
- Where Are Potential Loss Sources?

#### MANAGEMENT

- HCLM Organization & Culture
- HCLM Process & Procedures
- HCLM Standards (API and EI)
- HCLM Goals

#### MEASUREMENT

- HCLM Measurement Layer
- HCLM Measurement Types
- HCLM Measurement Considerations
- HCLM Measurement Standards (API)

#### CONTROL

- Hydrocarbon Accounting
- Hydrocarbon Mass Balance / Reconciliation
- Hydrocarbon Loss Identification / Tracking
- Hydrocarbon Loss Improvement



### Who Should Attend:

Course participants will have the opportunity to understand the broad view of hydrocarbon loss management as well as specific details of improving bottom line performance through the three elements of HCLM based on industry standards and best practices. This course is ideal for those in the refinery and petrochemical industry with direct plant performance related managerial and supervisory responsibilities like plant managers, finance managers, and accounting managers as well as those with daily responsibilities related to hydrocarbon measurement, movements, and accounting like yield accountants, control engineers, maintenance engineers, plant or process engineers and any of those with supervisory roles in these areas. Those from financial and insurance firms, measurement and analysis equipment and service providers, logistics and shipping providers, third party measurement inspection providers and government agencies may also find this course informative and beneficial.

### Subject Matter Expert (SME):

**Darren York** has 25 years of experience in Supply Chain Optimization and Industrial Engineering for the Refining and Chemical industry, Darren York has held key roles as a Principal Consultant and Global Product Manager at KBC Advanced Technologies, working with clients worldwide. His expertise spans refinery and petrochemical planning, scheduling, crude selection, product blending, logistics, trading, economics, LP modeling (PIMS, RPMS, GRTMPS, Petro, Spiral), and compliance. Previously, at Flint Hills Resources, he led business development, planning, and performance management, focusing on optimizing hydrocarbon supply chains and margin capture through project leadership, business analytics, and data visualization.

**Jean-Gael Le Floc'h** has 25 years of experience in process consulting in the field of supply chain, midstream, and downstream refining activities in the oil and gas industry. He has participated in the consulting, digitalization, and asset transformation. He has managed projects and including due diligence for mergers & acquisitions, refinery configuration & feasibility studies, margin improvement (energy & yields), capital employed optimization, supply chain & logistics optimization, and asset integrity assessments providing technical advice to oil refineries. He has led supply chain planning and scheduling. Jean-Gael has participated in communities of practice for downstream operational excellence, hydrocarbon management, upstream, supply chain & logistics, and technical services. He has performed stochastic modeling for the midstream industry (discrete event simulation). He has managed client prospection, as well as business unit marketing development (brochures, speaker at international conferences, website). Mr. Le Floc'h holds a Bachelor's Degree in Chemical Engineering and a Master's Degree in Refining, Petrochemicals, & Gas from École Nationale Supérieure d'Électrochimie et d'Électrometallurgie de Grenoble (ENSEEG) of the National Polytechnical Institute of Grenoble (INPG). He is a Member of EVOLEN, the French Association of Petroleum Professionals.