



Joe Barth
Consultant

Expertise – Refining and Petrochemicals Planning and Optimization

Mr. Barth does management consulting assignments for petroleum refining and petrochemicals Supply Chain, including Organization and Best Practices Audits, and benchmarking.

He has more than 33 years of petroleum refining and petrochemicals industry experience with ExxonMobil in all aspects of processing and planning. Joe then worked for HSB Solomon Associates as a Senior Consultant for fourteen years. For the past 25, years he has specialized in Planning and Optimization (P&O) for integrated refining/petrochemical sites, linear program (LP) modeling, and model support best practices. He has completed major studies, conducted training seminars, presented papers, and developed best practices on P&O and scheduling processes.

Experience

June 2018-present	Refining/Petrochemicals Planning & Optimization Consultant; Freelance, Addison, Texas Available to advise P&O work processes/tools and teach process technology basics & economics
2004–May 2018	HSB Solomon Associates LLC; Dallas, Texas Senior Consultant Designed and managed the Solomon <i>Fuels Study</i> P&O benchmarking survey; taught Solomon Refinery-Petrochemicals Economics Seminar worldwide— over 100 seminars to-date; lead P&O improvement projects (19 refining/petrochemical Solomon P&O NCM ³ audits)
2002–2004	ExxonMobil Refining and Supply; Baytown, Texas Refining – Chemicals Optimization Advisor Developed Supply Best Practice; site PIMS model owner; Molecule Management Baytown Site Leader
2000–2002	Esso Thailand, Sriracha Refinery – Petrochem Complex; Chonburi, Thailand Supply Advisor Handled major supply products contracts, raw material evaluation, and modeling improvement; site PIMS model owner
1985–2002	Exxon U.S.A. Refining Refining – Chemicals Coordination, Baytown, Texas Complex

Supported tactical business planning processes (annual and monthly operating plan, raw materials evaluation); site PIMS model owner

Headquarters Refining Planner

Responsible for strategic planning and reformulated fuels studies and investments; developed site PIMS model

Engineering Associate Baytown Refinery Raw Materials

Responsible for crude evaluation, including assay management, crude quality monitoring, modeling, and economics

1983–1985

Esso Caribbean and Central America; Coral Gables, Florida

Corporate regional contact for Aruba, Nicaragua, and El Salvador refineries

1981–1983

**Esso West Indies; Kingston, Jamaica, West Indies
Refinery Technical Manager**

Managed process and mechanical engineering, coordination and logistics, and laboratory groups

1979–1981

Exxon U.S.A. Headquarters; Houston, Texas

Performed capital investment evaluation; industry comparative analysis

1971–1979

Humble Oil & Refining – Exxon USA; Baytown, Texas

Held various operations and technical supervision and staff roles in engineering and logistics

Major Consulting Projects

- Supply Logistics Study for Caribbean Island-nation (2012)
- World-wide diesel quality and producibility analysis for Solomon operating year 2008 *Fuels Study*
- Major study on impacts of CO₂ Emissions Constraints and Credit Trading for Japanese refining industry (2006)
- Planning and Optimization Best Practice Audits for operating companies in Canada, Caribbean, Brazil, Romania, Poland, Kuwait, Qatar, Korea, Singapore, Thailand, and United States (2005–2012)
- Consultant to large Brazilian petrochemical company on Supply Chain Best Practices (2004–2005).
- Developed Solomon Scheduling Best Practice Audit Scorecards (2005)
- Developed Solomon Planning & Optimization Benchmarking Assessment for various refineries in 2002, 2004, 2006 and 2014 Solomon Fuels Refining Performance Analyses (Fuels Studies). Delivered presentations to clients in North America and Europe (2004–2008).
- Consultancy to develop and implement best practices for LP (PIMS) model development and sustainment for ExxonMobil worldwide. Included audits and action plan developments for Altona, Australia; Baytown, Texas; Chiba, Japan; Beaumont, Texas; Okinawa, Japan; Torrance, California; and Sriracha, Thailand (2001–2003)

- Profit improvement projects for ExxonMobil Sriracha, Thailand; Baton Rouge, Louisiana; and Baytown, Texas (2001–2004)

Education

Master of Science, Engineering (1994)
University of Houston
Houston, Texas

Bachelor of Science, Chemical Engineering (1971)
Auburn University
Auburn, Alabama

Professional Registration

Professional Engineer, Texas Registration #39451