

Enabling IOR Projects – Project Economics

One-Day Intensive and Enjoyable Course

Unlock full value of mature and developing reservoirs through smart Improved Oil Recovery (IOR) project planning. This one-day course equips petroleum engineers, project managers, and technical teams with the economic, regulatory, and operational insights needed to envision, initiate, plan, and execute successful IOR projects.

Learn how time value of money, NPV, IRR, and payout shape risk and management decision-



making. Understanding when IOR project redevelopment early or late-life may make the most economic sense. Navigate land, unitization, and fiscal regime challenges (Royalty/Tax vs. PSC). Use of real-world case studies—waterflooding, steam flooding, CO₂ flooding, and unconventional/tight oil IOR technology—focus is on execution thinking and strategies to reduce and manage risk while optimizing future project efficiencies and returns.

Course Content:

- Foundations of petroleum project economics: time value of money, IRR, NPV, payback, and Rule of 72 What management may look at for assessing IOR projects?
- Economic components revenues, operating and capital costs, taxes.
- Overview of land, fiscal regime, and regulatory and other commercial considerations (e.g., unitization, royalty/tax, PSC frameworks)
- IOR project cost structure, cost modeling, and risk profiles
- IOR project injection and production volume modeling
- Economic modeling considerations of waterfloods, CO₂, steam, polymer, and hybrid projects involving well workovers, infill well drilling and/or Horizontal well drilling.
- Case studies for carbonate and sandstone reservoirs, fractured systems, and analog-based field redevelopment
- Phased development strategies, project phase timing, and uncertainty management
- Reserves recognition and risk assessment
- Practical project modeling using Excel examples for project evaluation and for consideration of various IOR approaches to maximizing NPV and EURs.
- Sound economic principles to frame, screen, compare, and integrate IOR technologies with much interaction with attendees so material will not be dry.



Instructor
Ed Behm, P.E.
Petroleum Engineer & Asset Development Specialist

Ed Behm is a seasoned petroleum engineer with over 40 years of experience where he specialized in Improved Oil Recovery (IOR) project development across global assets. His career includes hands-on leadership in steam flooding projects in California and Oman, CO₂ EOR and waterflood projects in the Permian Basin, and waterflooding and horizontal drilling projects in Alaska, Colombia, California, Oman, the Permian, and elsewhere in the U.S.



Ed has taught previous industry courses on petroleum economics, reserves, and risk management for subsurface and land teams/managers. Ed currently directs a bespoke IOR-focused project development company. Ed is involved in SPE, the University of Houston PEAB, and the University of Tulsa PE IAB and the IPAA. Recent work includes IOR initiatives in the Permian, horizontal drilling and cyclic gas injection projects in tight oil reservoirs, and advanced field IOR optimization technology development in Oman.