



AAPG[®]
EAGE

3rd EDITION:

**AAPG/EAGE MAXIMIZING ASSET VALUE:
INTEGRATING GEOSCIENCE WITH RESERVOIR
MANAGEMENT AND TECHNOLOGIES
OPTIMIZATION GTW**

7-9 DECEMBER 2026 | AL KHOBAR, SAUDI ARABIA

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WORKSHOP OVERVIEW

The upstream sector is facing increasing pressure to maximize asset value while managing capital discipline, cost inflation, energy transition demands, and growing subsurface complexity. In this environment, value creation requires stronger integration across geoscience, reservoir engineering, facilities, digital technologies, and commercial decision-making.

This workshop will explore how organizations can better align subsurface understanding, surface constraints, and capital allocation to improve asset performance across the full field lifecycle. Discussions will address integrated portfolio decision-making, real-time optimization, mature field rejuvenation, asset repurposing, and the use of hybrid physics-based and data-driven (AI/ML) modelling workflows to unlock value from both existing and future assets.

A key focus will be on translating technical insight into practical decisions, from concept selection and development planning to operations, late-life asset management, and emerging low-carbon and non-hydrocarbon opportunities such as carbon capture and storage (CCS), geothermal, helium, natural hydrogen, and critical minerals. The workshop will also examine how digital technologies, advanced surveillance, automation, and scalable data infrastructure can support faster, more reliable decisions while preserving subsurface judgment.

Through case studies, industry experience, and multidisciplinary discussion, participants will gain practical perspectives on improving recovery, reducing uncertainty, extending asset life, optimizing investments, and building more resilient portfolios. The workshop will provide a collaborative platform for sharing strategies, workflows, and lessons learned to support integrated asset value creation in a rapidly evolving energy landscape.

ATTENDEES AND BENEFITS

This workshop is designed for geoscientists, petrophysicists, reservoir engineers, asset managers, development planners, production and operations specialists, digital transformation teams, and decision-makers involved in maximizing the value of subsurface assets. It is particularly relevant for professionals working across mature fields, brownfield redevelopment, portfolio planning, real-time optimization, reservoir modelling, asset repurposing, and emerging low-carbon or non-hydrocarbon opportunities.

The workshop will benefit participants seeking to strengthen integration between technical disciplines, surface and facility planning, commercial evaluation, and capital decision-making to improve asset performance, reduce uncertainty, and support more resilient development strategies.



SESSIONS' DESCRIPTIONS

1 STRATEGY AND PORTFOLIO INTEGRATION

Aligning Subsurface, Surface and Capital Decisions

This session examines how upstream organizations are restructuring teams, processes, and decision frameworks to deliver integrated portfolio choices under structural pressures: geopolitical instability, energy transition scrutiny, and sustained cost inflation. As operators allocate capital across a broader, more uncertain opportunity set spanning oil, gas, and emerging low-carbon plays, integration across geoscience, reservoir engineering, facilities, and commercial planning has become a capital-allocation imperative.

A central theme is the alignment of subsurface insights with surface and facility decisions throughout the field lifecycle (from concept selection and final investment decision (FID) through development, operation, and late-life choices), and the role of geoscience in supporting gas, carbon capture and storage (CCS), and other low-carbon subsurface opportunities at the portfolio and capital-allocation level.

Topics of Interest:

- Integrated portfolio decision-making across subsurface, surface, facilities, and commercial teams
- Capital allocation under uncertainty across oil, gas, CCS, and low-carbon opportunities
- Organizational models: centralized centers of excellence, asset-embedded teams, and partner-led delivery
- Quantification, communication, and integration of geoscience uncertainty into capital decisions
- Static models, seismic and facies risk, and data quality in portfolio-level decisions
- Case studies linking integration to faster decisions, better-aligned investments, and portfolio resilience

2 INTEGRATED WORKFLOWS AND DIGITAL TECHNOLOGIES FOR REAL-TIME OPTIMIZATION

From Sensors to Decisions

This session examines how integrated workflows are helping compress decision cycles across the asset lifecycle. With growing operational data and tighter capital cycles, real-time optimization has become essential, requiring models to be updated, forecasts refined, and field signals acted upon within hours or days rather than months.

The discussion will highlight compute and data infrastructure as critical enablers of faster, more reliable decisions, while emphasizing the human role in preserving subsurface judgment as automation expands. Cross-asset lessons from conventional and unconventional plays will show how different data densities and decision tempos are shaping complementary digital workflows.

Topics of Interest:

- Real-time reservoir monitoring, model updating, and decision support
- Integrated workflows for faster production and intervention decisions
- Surveillance technologies: fiber optics, DAS/DTS), advanced logging, and smart completions
- Trade-offs between speed, robustness, and trust in automated outputs
- Scalable data platforms and compute infrastructure as first-class assets
- Cross-asset lessons from conventional and unconventional plays
- Talent and capability development in integrated digital workflows

3 ASSET REJUVENATION

Maximizing Value from Mature Fields

Mature hydrocarbon assets remain central to global supply, yet many face production decline, rising water cuts, and capital constraints that increase the cost of each incremental barrel. As capital discipline tightens, brownfield rejuvenation offers a capital-efficient pathways to sustain production, defer abandonment, and unlock reserves.

This session explores mature asset rejuvenation through integrated reservoir surveillance, infill drilling, and IOR/EOR. It weighs well-level interventions against reservoir-scale recovery programs, addresses ageing infrastructure and life-extension strategies, and shows how systematic monitoring and updated models translate into measurable production gains and reserves additions.

Topics of Interest:

- Brownfield rejuvenation and mature field value creation
- Integrated reservoir surveillance and updated dynamic models
- Infill drilling, well interventions, and IOR/EOR strategies and recovery improvement
- Minor and satellite reservoir development tied to existing facilities
- Ageing infrastructure: integrity assessment and life-extension strategies
- Integrated case studies showing the full workflow: surveillance, updated models, intervention or development decisions, and measurable value outcomes

SESSIONS' DESCRIPTIONS

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ASSET REPURPOSING AND NEW DEVELOPMENT

Unlocking Value in the Energy Transition

Complementary to Session 1's portfolio-level treatment of low-carbon and non-hydrocarbon opportunities, this session focuses on the project-execution layer. Operators face the dual challenge of maximizing value from existing assets while positioning portfolios for emerging businesses such as carbon capture and storage (CCS), geothermal energy, helium, natural hydrogen, lithium-bearing brines, and other critical minerals.

The session examines key technical and strategic trade-offs between greenfield projects and brownfield repurposing (capital efficiency, accelerated development timelines, subsurface uncertainty, and infrastructure reuse), alongside flexible development concepts such as phased, modular, and adaptive facility designs that enhance resilience under uncertainty.

Topics of Interest:

- Repurposing hydrocarbon assets for CCS, geothermal, and low-carbon applications
- Greenfield versus brownfield development strategies
- Infrastructure reuse, tie-backs, hubs, and scalable facilities
- Phased, modular, and adaptive development concepts
- Valuation methodologies for non-hydrocarbon subsurface resources
- Screening and risking of CCS, geothermal, helium, natural hydrogen, and lithium-bearing brines
- Containment, injectivity, and uncertainty management in subsurface risk characterization

5

MODELLING MATURE ASSETS AND BROWNFIELDS IN THE AI ERA

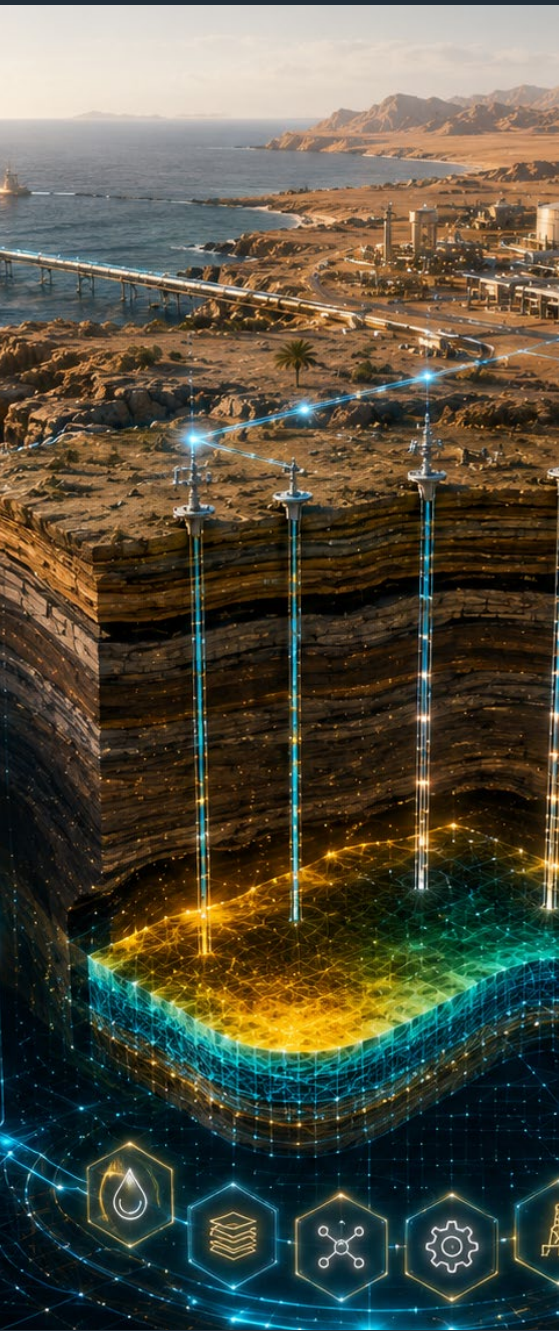
From Physics to Intelligent Workflows

Rapid advances in artificial intelligence (AI) and machine learning (ML) are transforming how subsurface models are constructed, updated, and deployed. This session showcases how AI is reshaping subsurface modelling for mature and brownfield assets, exploring the evolving balance between physics-based approaches and data-driven methods, and how hybrid workflows can enhance predictability in heterogeneous or data-constrained environments.

AI-assisted reservoir characterization receives particular attention, with validation, robustness, and repeatability as central themes. The session also explores emerging concepts such as agentic AI and autonomous workflows (for example, autonomous history matching and self-updating type curves), pointing toward continuously learning models and the next generation of modelling workflows for maximizing value from mature assets.

Topics of Interest:

- AI and machine learning applications in mature and brownfield assets
- Hybrid physics-based and data-driven modelling workflows
- AI-assisted seismic interpretation, facies prediction, petrophysical modelling, and uncertainty reduction
- Unlocking value from legacy datasets through machine learning
- Integrated static–dynamic modelling and rapid scenario screening
- Trust and validation: real case studies of AI/ML against complex reservoir heterogeneity and data gaps, with blind testing, robustness, and repeatability
- Agentic AI, autonomous workflows, and self-updating reservoir models



WORKSHOP GUIDELINES

FORMAT

The workshop will be 3 days, consisting of oral presentations, poster presentations and breakout sessions where participants can discuss and investigate a specific theme that is of mutual interest. The first day will feature an inaugural keynote speech by a high-profile professional from the industry.

ATTENDANCE

Registrations are invited from all relevant disciplines with experience and/or knowledge of the subject areas being addressed in the workshop. Registrations will be accepted on a first-come, first-served basis.

CALL FOR POSTERS

You are invited to prepare a poster for presentation at the workshop. If you are interested in participating, please send a short abstract to cnavarro@aapg.org by **7 November 2026**. All posters will be produced as pull-up banners and delivered by AAPG. There will not be any other format available for poster display.

REGISTRATION TYPES & FEES

Fees are inclusive of onsite documentation, coffee breaks and luncheons.

\$1,850	Non-Member
\$1,650	Member *
\$1,550	Committee/Presenter
\$850	Young Professional **
\$500	Academia
\$350	Student

**To avail the Member rate you must be an active member of AAPG, EAGE, KGS, GSO or DGS.*

***To register as a Young Professional, you must be under the age of 35 with less than 10 years of work experience.*

REGISTRATION DEADLINE

To guarantee your seat, please ensure that you complete the registration by **30 November 2026**.

CANCELLATION POLICY

AAPG will refund the tuition, less a \$100 processing fee, if the request is received no later than 30 days prior to the workshop. Cancellations must be made in writing. The registrar will accept cancellation notices by telephone, but all such notices must be followed up by fax or e-mail. No refund will be made for cancellations received less than 30 days prior to a workshop being given. Nonpayment of tuition does not constitute automatic cancellation. If no cancellation notice is received by 30 days prior to a workshop, participants are liable for full tuition. AAPG reserves the right to cancel a workshop if enrollment is insufficient to ensure proper effectiveness. Substitutions for individuals can be made at any time. A paid enrollment may be transferred one time to a future workshop if the request is received prior to the 30-day cut-off date.