Did you know...?

CMG is connected to the seismic-to-simulation-and-back workflow to achieve increased productivity & integration

CMG is integrated to seismic with **multiple G&G products**
- GOCAD[1] (Paradigm)
- Jewel Suite[1] (Baker Hughes)
- Petrel[1] (Schlumberger)
- RMS[1] (Emerson-Roxar)

Builder™ has **user-friendly workflows for data transfer:**
- Geological models & data
  - RESCUE[1] (industry standard for ECL & CMG grid formats)
- Geomechanics-based hydraulic fracture data:
  - FRACPRO[1] & STIMPRO[1] (RESNET)
  - FracPredictor[1] (FracGeo)
  - FracproPT[1] (Carbo)
  - GOHFER[1] (Barree & Assoc.)
  - StimPlan[1] (NSI Technologies)

CMG is also coupled to:
- Geomechanics
- Surface Network

CMG is coupled to **production engineering software:**
- GAP[1] (Petroleum Experts)
- PIPESOFT[1] (Ensoftec)
- **CoFlow™** provides complete integration of reservoir, production & geomechanics

(Circular workflow diagram: Geomechanics → Reservoir Engineering & Simulation → IPSM Well Planning & Drilling → Economic Evaluation → Seismic Processing & Imaging → Interpretation & Modelling → Reservoir Characterization, centered on CMG)

Converting simulation models to CMG is quick and seamless

One Click Data Import Conversion
User-friendly, automated ECLIPSE **conversion workflow**
Quick and easy, drag and drop functionality
Seamless model conversion

CMG will help you convert your simulation models to CMG at **no extra cost**

CMG converted
306
reservoir models
(2013–2016)

CMG is faster than the competition on every performance benchmark we're invited to

CMG models run **fast, right out of the box**
CMG is always **researching and optimizing** solver and parallel performance

CMOST™ license multiplier helps you complete **more simulation runs** and reduce overall study time

CMG's Simulators

Faster Model Run Time
- Timely Decision-making
- Short Term Operational Decisions
- Long Term Design Plan

More Runs
- Less Uncertainty
- Better Decisions
- Minimize Risk

CMG simulators remain the industry standard for usability, physics, robustness & performance

Builder & Results™
Create and analyze results in a **user-friendly, workflow-based** environment

Easily import or create:
- Geological models
- Reservoir property distribution
- PVT models
- Injection/production history
- Well trajectories & completions
- Hydraulic fracture data

>570 Companies
in **58 countries** choose CMG to model complex recovery processes because of the robust and detailed physics

World-class SA, HM, OP and UA workflows, data analytics, and simulation job management

leads to... **quick decision making** and **efficient execution** of small to large scale projects

---

CMG's licensing model is significantly lower than the competition, reducing the overall cost for simulation

CMG software is **"plug & play"**
No need to purchase additional modules to get more features or advanced functionality

No hidden "integration" fees or 3rd party plug-ins required to import data, manipulate well patterns or optimize field plans

CMG has had only **two** nominal **price increases** in the past 16-years

CMG's flexible needs-based licensing plans results in **cost savings:**
- CMOST license multiplier = **great scalability** across multiple cores
- CMG's private cloud licensing helps **optimize simulation and hardware costs**

CMG is superior in modelling conventional, secondary recovery and unconventional reservoirs

World's fastest black oil reservoir simulator
- Models **all aspects of primary and secondary recovery**
- In development for >35 years and used in >42 countries

IMEX ▸ GEM ▸ STARS

Fast and easy transition from an **IMEX** black oil model to EOR process modelling in **GEM** and/or **STARS** advanced processes simulators for **asset recovery evaluation and optimization**

500+ Consulting Projects
for **200+ customers worldwide**

CMG has repeatedly proven the value of simulation in enhancing and optimizing recovery from assets

CMG Pioneered the theory on reservoir simulation technology and advanced recovery processes

>4500
technical paper references

>300
technical papers authored by CMG

Probabilistic Forecasting + Robust Optimization workflows
- Minimize risk
- Accurately predict probability of reservoir success

91%
Rate of Success
Case Study: Robust Optimization method **increased the rate of success to 91%** on a Low Salinity Waterflood development plan (SPE-173194)

CMG actively collaborates with customers on software features and enhancements

Customer input has resulted in many feature enhancements, including:

Modelling Flow Control Devices in STARS

Geomechanics-based hydraulic fracture import from 3rd party software to Builder

Geochemistry and other chemical EOR modelling capabilities in GEM

CoFlow is the result of a multi-year development partnership between CMG, Shell and Petrobras

For a complete list of customer inspired features, please contact sales@cmg.ca

20%
CMG reinvests **annual revenue** into **Research and Development**

Reservoir Engineering & Simulation

CMG's focus on reservoir simulation

leads to... customers' sharing strategic direction, **industry collaboration** and the continuous improvement of CMG software

---

Contact
For more information please contact
sales@cmg.ca

R&D Investment
CMG reinvests 20% annual revenue back into R&D, to further innovation and drive technology forward

Superior Software
CMG delivers easy to use software that provides the most accurate results

Dedicated Support
Experienced technical sales & support personnel, deliver high-quality, timely and personalized customer support

Relevant Training
CMG's industry renowned reservoir software training provides the skills to improve productivity and efficiency

---

cmgl.ca/simulationfacts