



CAROLINA COLL

Director CCUS and Energy Storage

Direct: +44 782 484 8535

ccoll@millerandlents.com

EDUCATION

- PhD. Petroleum Engineering, Imperial College, London, 2001
- M.Phil. Petroleum Engineering, Imperial College, London, 1997
- B.S. Physics, Simon Bolivar University, Caracas, 1984

RELEVANT AREAS OF EXPERTISE

International Experience:

Petroleum engineer with more than 25 years of extensive international experience in the Oil and Gas industry, as well as in energy transition sectors such as Carbon Capture, Utilization, and Storage (CCUS) and Energy Storage. Expert in evaluating all subsurface aspects of CCUS and subsurface energy storage, storage screening, injection development planning, due diligence, economic evaluation, risk assessment, monitoring, and estimating storage resources. Proficient in applying international standards such as SPE SRMS, UNFC Injection guidelines, ISO 27914, and regulatory compliance with the EU directive, US Class VI and UK CCS regulations. Robust track record experience advising clients on CCUS and energy storage projects across various regions including the UK (North Sea and onshore), Ireland, Italy, Hungary, Greece, South Africa, Nigeria, Singapore, Bahrain, Australia, Brazil, Canada, and the US.

Member of the UNECE Expert Groups on Gas and Clean Electricity, contributing to climate decarbonization policies and strategies in CCUS. Serving member of the SPE CO₂ Storage Work Group and the UNFC Injection Working Group, developing guidelines for CCS and Hydrogen storage.

Extensive international experience in engineering, modelling, simulation, and reserves evaluation using SPE PRMS and SEC standards, she has worked across the UK, Europe, Russia, Kazakhstan, North Africa, Africa, the Middle East, India, Australia, South America, Canada, and the US.

Internationally recognized expert in probabilistic reserves estimation, past member of the SPE Oil and Gas Reserves Committee (OGRC), member of the Expert Group on Resources Management (UNRMS/UNFC) of the economic commission for Europe (ECE) and a lead author of the 2022 SPE PRMS Guidelines on probabilistic resource estimation.

EXPERIENCE

- | | |
|----------------|---|
| 2025 – Present | Miller and Lents, Ltd. — London, UK
Responsible for all aspects of CCUS and subsurface energy storage evaluation, storage screening, reservoir and engineering injection plans, monitoring, resources determination, and economic analysis of CCUS and energy storage projects including Hydrogen. |
| 2024 – 2024 | Independent Advisor CCUS and Energy Storage — London, UK
Responsible for advising clients on CCUS subsurface screening, reservoir modelling, and resources determination using international standards. Provided expert consultancy and advice in the energy and energy transition sectors in emerging countries for sustainable development projects funded by the national agencies, national governments, multilateral banks, and private companies. |

EXPERIENCE *(continued)*

2020 - 2023 2023	CGG — London, UK <u>Discipline Expert Engineering (O&G, CCUS & Energy Storage) Tech +</u> Globally responsible for technical expertise in reservoir engineering (SME) in the areas of CCUS, Hydrogen and O&G including Geothermal. Responsible for mentoring and functional excellence in the areas of reservoir characterization and engineering, CCUS and hydrogen. Developed new technologies and workflows for CCS and H2 monitoring and advised on energy transition (CCUS, Hydrogen Geothermal) and O&G sector.
2020	<u>Head of Reservoir Development, CCS and Energy Storage</u> Responsible for overseeing O&G, CCUS and Energy storage projects ensuring excellence in reservoir modeling and petroleum engineering. Led a global, multidisciplinary team across different regions from Canada to Russia, France, Brazil, and the UK. Defined corporate strategy for CCUS, new products and R&D used for storage screening, risk evaluation and resources estimation. Managed client interactions, asset valuations, due diligence, and CPR reserves reporting.
2018 - 2019	International Finance Corporation (IFC) London, UK <u>Principal Industry Specialist- Global Infrastructure & Natural Resources</u> Responsible for managing IFC's energy portfolio of equity and debt investments in O&G across Europe, Asia, Africa, and MENA. Developed IFC's strategy for CCUS and Energy Storage (Hydrogen) to define investment strategies in emerging markets. Oversaw producing JVs, identifying risks and production opportunities to enhance project revenue, validating reserves and resources estimations for asset valuations. Supported new M&A opportunities in upstream gas as a transition fuel and Greenhouse Emission (GHE) reduction opportunities addressing policy, regulatory, including ESG risks. Assisted startups with exploration planning and M&A screening.
2017 - 2018	LSBU — London, UK <u>Senior Lecturer Petroleum Engineering</u> Responsible for advanced Petroleum Engineering courses for MSc mechanical engineers and petroleum engineers' graduates and undergraduates. Supervised MSc theses and examined BSc and MSc theses in Chemical and Petroleum Engineering. Developed and coordinated M.Sc. Advanced Reservoir Engineering courses and delivered Reservoir Management course and served as module leader for the MSc interim project. Contributed to university-industry research.
2001 - 2016 2010 2008 2005 2003 2001	BG Group — London, UK and BG Tunisia, Tunisia <u>Head of Corporate Reserves</u> <u>Deputy Head of Corporate Reserves</u> <u>Asset Manager, BG Tunisia</u> <u>Petroleum Engineering Manager, BG Tunisia</u> <u>Principal Petroleum Engineer</u> Responsible as Head of Corporate Reserves and Chief Development Manager for BG Group PLC reserves and resources, overseeing technical assurance for 47 assets with 3.5 BOE of proved reserves and 260 MMBOE production. Provided technical input on asset emissions for corporate reporting and engaged with stakeholders, including government and regulators. Reported to the Reserve, Executive, and Audit Committees, and stock markets (LSE, ASX, NYSE) on reserves and resources, policy, and guideline changes. Led a multidisciplinary team of 12 experts and ensured independent technical assurance of BG's reserves and resources estimates using SEC and SPE PRMS guidelines. Managed, developed, and updated BG's reserves policy and standards, and led technical and economic evaluations for M&A worldwide. Managed external consultants for annual audit reviews. Member of BG's Technical Leadership Team reporting the EVP Technical.

PROFESSIONAL ORGANIZATIONS

- Society of Petroleum Evaluation Engineers (SPEE)
- Society of Petroleum Engineers (SPE)
- Expert Group on Injection UNFC
- SPE CO2 Storage Work Group
- UNECE Expert Group on Gas and Clean electricity
- Board member of the SPE London Section
- EAGE European association of Geologist and Engineers (EAGE)

PUBLICATIONS

- Total publications – More than fifty-six (56) papers, presentations, and book chapters

Latest publications/workshops:

- EAGE 2021 Energy transition Series: Putting Carbon underground. EAGE
- Value of Geoscience for Carbon Capture, Storage and Utilization | Hart Energy

OTHER

- Nationality: British/Italian
- Language Skills: English/Spanish/French/Italian
- Years with Firm: Since 2025
- Software Skills: Proficient in IHS Harmony, Kappa Saphir and Topaze, Petrel, Petrel RE, Eclipse, Intersect, VIP, CMG, STARS, Peep, OFM, PVT, MBAL, Geosim/TRS



MILLER AND LENTS
GLOBAL OIL AND GAS CONSULTANTS
Trusted Experience. Upstream Expertise.

909 Fannin Street • Suite 1300 • Houston, Texas • 77010

P: 713.651.9455 • F: 713.654.9914 • MILLERANDLENTS.COM