Position: Scientific Officer Low Carbon Pathways	Start: As soon as possible
	Application deadline: 31 July
	Type of contract: Open-ended

Concawe is looking for a Scientific Officer to contribute to the activities of the Refining into the Energy Transition Management Group (RET MG), in relation to the development and assessment of Low Carbon Pathways for the European fuel manufacturing sector. This includes contributing to:

- Assessment of low-carbon pathways, covering key technologies, fuels and feedstocks (including sustainable biofuels, hydrogen and e-fuels)
- Assessment of sustainable biomass and alternative feedstock availability, including scalability, sustainability constraints and implications for the transition
- Techno-economic and environmental analysis, including carbon intensity, costs and scalability of pathways toward climate targets
- Integration of alternative feedstocks and technologies into the conventional refining system, supported by modelling and scenario-based analysis

Who are we?

Concawe is the science division of an international non-profit association (European Fuel Manufacturers Association aisbl) whose mission is to provide research & technical support to the EU downstream fuel manufacturing industry. Its aim is to improve the understanding of the environmental, health and safety impacts originating from the refining of crude oil and the distribution & use of petroleum products by the industry, authorities, users and other interested parties. In addition to the studies developed by its staff, Concawe also undertakes research in partnership with universities, research institutes and expert consultants. The Association represents the interests of 40 private Companies operating petroleum and renewable fuels refineries in the EU. Members account for 95% of EU fuel manufacturing capacity.

What do we offer?

- Individual Training program, technology and professional skills development
- Responsibility and autonomy in your area of expertise
- A global view and concrete involvement on industry and societal challenges
- International and dynamic multicultural environment
- Competitive salary package complemented with fringe benefits
- Enhanced work life balance (working from home, sliding working hours system etc.)

What do we expect from you?

The role of the Scientific Officer – Low Carbon Pathways includes contributing to technical analysis, research activities and project coordination to contribute to Concawe's Refining into the Energy Transition Management Group (RET MG). The position supports the development, assessment and communication of Low Carbon Pathways for the European fuel manufacturing sector (as detailed underneath).

General Duties

Contribute to the development and implementation of the annual technical research plan, as agreed with the Refining into the Energy Transition Management Group (RET MG) and Concawe Director, with general duties of:

- Monitoring relevant technical and regulatory developments related to low carbon pathways, renewable fuels and refining transformation
- Identifying and managing technical risks associated with ongoing and planned research studies.
- Contribute to the scoping, tendering and management of research projects, including preparation of technical scopes of work, contractor selection, contract preparation and monitoring of technical progress, timelines and deliverables.
- Contribute to the development, drafting and quality assurance of Concawe technical outputs (including reports, briefing materials and presentations), ensuring scientific robustness, consistency of assumptions and clear communication of key findings.
- Co-ordinate with Member Company experts in Special Task Forces (STFs) and technical working groups, including preparation of meetings and follow-up of actions.
- Lead the development, review and management of research projects, including cost awareness and delivery timelines.

- Contribute to internal and external representation of Concawe, as appropriate, including participation in technical meetings, workshops and stakeholder discussions.
- Cooperate with other Concawe programmes (e.g. Fuels Quality & Emissions, Air Quality, Water & Soil) on cross-cutting topics related to energy transition, fuels and lifecycle emissions.
- Comply with and support the implementation of the governance rules of the Association

Key responsibilities

Scientific & Technical Expertise

- Conduct technology scouting and targeted technical deep-dives on key renewable and low-carbon fuel production technologies
- Perform techno-economic evaluations of selected technologies, including assessment of technology readiness level (TRL), scale-up potential and CO_2 abatement costs
- Evaluate and compare low-carbon pathways at system level, including carbon intensity, energy efficiency and cost benchmarking across options
- Assess the availability and characteristics of biomass and alternative feedstocks, including resource potential, supply chain constraints and sustainability criteria

Low Carbon Pathways & System Integration

- Analyse the integration of alternative feedstocks and low-carbon processes into refinery units and system configurations
- Contribute to the integration of technologies and feedstocks into Concawe's EU refining model, in collaboration with internal modelling experts
- Assess the role of electrification and CO_2 utilisation in future refining and fuel production systems
- Develop a system-level understanding of refining sector transformation, linking feedstock availability, technology deployment and emissions reduction pathways
- Contribute to scenario modelling of pathways toward EU climate targets (2030 / 2050), in collaboration with internal modelling experts

Project Management

- Lead the definition of research scopes, evaluation of proposals and management of externally contracted studies
- Lead the coordination of STF-3 (biofuel availability / feedstocks) and contribute to STF-2 (Refining Technologies) activities, including definition of work programmes and delivery of outputs
- Liaise with external consultants and contractors, ensuring alignment on assumptions, methodologies and deliverables
- Monitor project progress, ensuring timely delivery, technical quality and alignment with Concawe priorities
- Lead the integration and validation of study outputs, ensuring consistency of assumptions across projects

Regulatory, Policy & Stakeholder Support

- Analyse the technical implications of EU legislation (e.g. RED III and related transport decarbonisation frameworks) on the deployment of renewable and low-carbon fuels, including impacts on feedstock availability, fuel pathways and refining integration
- Support the assessment of policy scenarios, including the impact of technology and fuel uptake pathways on the refining sector
- Contribute to technical input supporting Concawe and FuelsEurope activities, including long-term transition strategy work
- Engage with Member Company experts and external stakeholders to ensure technical alignment and relevance of analyses

What is your professional profile?

- **Education & Experience**
  - Master's degree (PhD preferred) in chemical engineering, energy engineering, environmental science, process engineering or a closely related field
  - Relevant professional experience (typically 3–7 years) in the refining, energy, biofuels or low-carbon fuels sectors, or in consulting, research institutes or academia in relevant areas
  - Strong technical background in low-carbon fuels and technologies, including renewable fuels, hydrogen and fuel production pathways
  - Experience in techno-economic and environmental assessment, including evaluation of carbon intensity, costs, scalability and technology maturity
  - Good understanding of biomass and alternative feedstocks, including resource potential, supply chains, sustainability criteria and implications for fuel production and refining integration
  - Familiarity with analytical and modelling approaches (e.g. scenario analysis, lifecycle assessment or similar frameworks) applied to energy systems or fuel pathways
  - Good understanding of EU energy and transport policy frameworks (e.g. RED III and related initiatives) and their implications for fuels and refining
  - Experience working in multi-stakeholder technical environments, involving industry experts, consultants and policy-oriented discussions

- **Skills & Competencies**
  - Strong analytical and problem-solving skills
  - High attention to detail and commitment to scientific rigour
  - Ability to structure and interpret complex technical information and datasets
  - Ability to translate complex science into clear, concise messages for different audiences
  - Good organisational and coordination skills, with the ability to manage multiple topics in parallel
  - Strong communication skills (written and verbal), including preparation of reports, presentations and technical briefings
  - Excellent written and spoken English
  - Team-oriented, with the ability to work effectively in a multicultural environment
  - Proactive and self-driven, with the ability to deliver high-quality outputs with limited supervision

What is your report line? Reports to the Science Executive Renewable Fuels Manufacturing

To apply, please send your CV and motivation letter to: **recruitment@concawe.eu**
mentioning "Concawe Scientific Officer – Low Carbon Pathways" in the subject of your e-mail.

By applying for this vacancy, you agree that we use your personal data for recruitment purposes only.
All your private information will be deleted from our files after the recruitment process.