



**Job title:** Principal Process Engineer (USA)

**Organisation:** Clean Planet Energy (CPE)

**Introduction:** Clean Planet Energy (CPE) is a cleantech, renewable and alternative energy company, converting non-recyclable plastic waste into ultra-clean commercial grade fuels with negligible sulphur and nitrous oxide content and low CO<sub>2</sub> emissions. CPE's mission is to continuously devise and implement sustainable green technologies that will prevent toxic plastic waste from damaging the earth's environment and oceans, while reducing the demand for high-emissions diesel, as well as diverting tens of thousands of tonnes of plastic waste annually away from landfills, incinerations, and oceans. For these purposes, CPE are developing and deploying a series of environmentally-friendly EcoPlants, process plant designed and engineered to take any waste plastic feedstock and, through various chemical processes, convert into commercial grade low-carbon footprint, ultra-clean ultra-low sulphur circular fuels to be used as replacements for traditional high-emissions fossil-based fuels.

**Job Description:** The Principal Process Engineer will work in the execution of plans for the development and deployment of CPE's Waste-To-Fuel plants, while also providing technical/engineering contributions to process activities.

With direct reporting to the CTO, and North American President, the Principal Process Engineer will be highly motivated, able to work independently, and have the qualities required to assist the project's technical objectives and execution strategy effectively and efficiently from a process perspective.

The Principal Process Engineer will typically have relevant technical background to assist in the development and deployment of the waste-to-fuel plant's design, engineering, construction, installation and commissioning project, among others. The Principal Process Engineer's skills will typically include a strong background in of Chemical/Process/Refining Engineering. The Principal Process Engineer should have a recognised and relevant Engineering degree and have familiarity with the refining, chemical and petrochemical industries processes. They should also have Professional Engineer / Chartered Engineer status.

Previous experience with pyrolysis, waste-to-energy/waste-to-fuel, gasification, hydroprocessing would be a strong advantage.

The Principal Process Engineer will typically have good organisational and communication skills with the ability to engage positively, as the role requires regular communication with project partners, dealing with proposals, cost estimates, schedules etc.

**Responsibilities:** Generally, the Principal Process Engineer responsibilities will include, but not limited to the following:

- Provide technical support for the management of process engineering deliverables and be responsible for the execution of all the process engineering works required for the delivery of the overall project's technical and functional specification requirements.
- Take ownership of detailed calculations for design/engineering development, and be responsible for the accuracy of these calculations. Be responsible for technical accuracy and quality of the ecoPlants' engineered solutions as dictated by the project's technical and functional specifications



- Demonstrate client focus and be aware of, and respond to, contractor needs, whilst still achieving project and corporate objectives
- Provide technical expertise for the development and maintenance of expertise on all process aspects of the CPE's ecoPlants development
- Lead in developing appropriate technical/process solutions for specific project issues
- Provide technical expertise and support to Business Development (including proposals preparation and evaluation, supplier agreements and MOUs, attendance in clients meetings, presentations, and technical support to relevant business pitches, etc) for the execution of supplier, contractors and partners relations as may be required
- Advise of deficiencies and possible changes to project's engineering design methods, standards, and data
- Participate in relevant meetings, prepare progress reports, and comply with required checking procedures.
- Assist in preparation of Project Procedures, QC Plan (with QA Coordinator), Subcontract package scopes, datasheets, and process documentations
- Monitor/expedite procedures and calculations approval, delivery of materials and equipment (with Procurement Coordinator), interfaces with Engineering and Construction as necessary to expedite engineering/construction solutions
- Ensure works are carried out in accordance with project and process engineering details, procedures, and specifications
- Ensure high standard of safety is achieved and Environmental and Quality Assurance procedures are followed.
- Serve as subject matter expert in all aspects of process engineering activities including process simulations, conceptual designs/engineering, Basic Design/Basic Engineering / Front End Engineering Design (FEED), HAZOP/HAZID, Detailed Design, Construction/fabrication, commissioning, operations, etc.
- Generate, check, approve where applicable process deliverable items such as process simulations, PFDs, P&IDs, equipment sizing, datasheets, and line sizes, etc. in accordance with standard design/engineering practices and CPE procedures.
- Serve as subject matter expert in process design/engineering practices, standards, guidelines including but not limited to relevant sections/codes of API, ASTM, ASME, local regulations, etc.
- Take ownership of the process design/engineering integrity of any licensor areas deployment, as well as ownership of the design/engineering integrity of non-licensor areas of the ecoPlant.
- Lead, manage and supervise the activities of the process engineering team in line with business priorities.
- Serve as mentor to junior/graduate/senior engineers within the team as may be required.
- Keep up to date with the latest technical developments in the fields of pyrolysis, waste-to-fuel, waste-to-energy, hydroprocessing.

**Start Date:** ASAP

**Duration:** Permanent

**Essential requirements for role:** Chemical Engineering discipline, educated to degree level, or equivalent, with a scientific and/or technical background; Minimum 15 years of experience in

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chemical/petrochemical/refining design, engineering, operations, ideally with at least 5 years demonstrable experience in a Lead, Head, Senior, Principal roles, etc.

**Desirable requirements for role:**

- Strong work ethic – prepared to put in extra hours as required.
- Able to manage multiple tasks simultaneously to deliver against tight deadlines.
- Extensive operational knowledge of industrial process plant operations, specifically pyrolysis, hydroprocessing, distillation, separation etc.
- Must be flexible to adjust work schedule as determined by the demands of the business, therefore a certain flexibility is mandatory.
- Professional Engineer / Chartered Engineer status preferred.

**Location of Role:** Remote during COVID, then Texas, USA

Please provide your resume and/or cover letter, along with any other additional references to: [jobs@cleanplanetenergy.com](mailto:jobs@cleanplanetenergy.com)

CPE is an inclusive organisation welcoming talent from all backgrounds. Applicants are assessed based on personal merit and qualifications.

This opportunity is not open for recruiters or agencies, and any applicants that are received though this will be rejected.