Greentown Go Make 2026

Request for Applications

Greentown Labs requests applications from innovative startups developing catalytic technologies that enable industrial decarbonization and defossilization. Greentown Go Make 2026 with Shell and Technip Energies aims to accelerate process technology and catalytic innovations that advance low-carbon fuels, low-carbon gases, carbon dioxide removal, and sustainable chemical manufacturing—driving progress toward a net-zero industrial future.

Program Benefits for Startups:

- A structured platform to engage leadership from Shell and Technip Energies to explore and develop potential collaboration outcomes, as well as potential pilots and demonstrations.
    - Catalyst expertise and support from Shell, including in the areas of technical validation; development, scale-up, at-scale manufacturing, and market channel development; as well as access to Shell's array of open innovation and investment models (e.g., Shell Ventures, Shell GameChanger, etc.).
    - Process engineering expertise and support from Technip Energies, including guidance on process design, reactor design, scale-up, licensing models, and integration of new technologies into industrial operations.
- Exclusive access to the Greentown Labs, Shell, and Technip Energies networks.
- Visibility for the selected finalist startups in this very competitive field (e.g., Press Release, Greentown's website).

WHAT WE'RE LOOKING FOR

Catalysts are the foundation of industrial chemistry and a critical enabler of the global energy transition. Nearly 90% of all chemical processes rely on catalysis, making it a key lever for reducing emissions and resource use across sectors[1]. According to the International Energy Agency, innovations in catalytic technologies could cut up to 1 gigaton of CO_2 emissions annually by 2050 through improved efficiency and reduced energy consumption[2].

Despite their ubiquity, many conventional catalytic processes remain fossil-based and energy-intensive. Innovations in catalyst design, preparation methods, and reactor integration can unlock significant gains in efficiency, selectivity, and carbon intensity reduction—transforming the economics and sustainability of key value chains.

[1, 2] Technology Roadmap Energy and GHG Reductions in the Chemical Industry via Catalytic Processes

Greentown Go Make 2026 with Shell and Technip Energies seeks startups developing novel catalytic technologies that advance decarbonization and defossilization across the energy and chemical sectors. We're looking for startups at Technology Readiness Levels (TRL) 3–8 that demonstrate both technical novelty and offer a credible pathway to scale and commercialization within three to five years.

Startups with process technology innovations involving either homogeneous or heterogeneous metal-based catalyst systems, advanced catalyst preparation methods, catalytic reactor technologies, or solutions that enable new-to-Shell and/or Technip Energies value chains are especially encouraged to apply.

TECHNOLOGY SCOPE AREAS

Applicants must meet two criteria, namely i) Technology Domain, and ii) Catalyst Area set out below. This requirement ensures that the startups' barriers to scale align with Shell and Technip Energies capabilities, maximizing the potential collaboration value during the accelerator phase of the program.

i) TECHNOLOGY DOMAIN

Low-Carbon Fuels

Fuels produced with significantly reduced greenhouse gas emissions compared to conventional fossil fuels, enabling defossilization of hard-to-electrify sectors such as (but not limited to) aviation, shipping, and heavy transport. Examples include:

- Biofuels (from biomass, waste oils, or residues)
- Synthetic fuels (e-fuels made from renewable electricity and captured CO_2)
- Hydrogen-based fuels (e.g., ammonia as a hydrogen carrier)

Low-Carbon Gases

Gases with a lower carbon footprint than traditional natural gas that are critical for industrial heat, power generation, and as feedstocks for chemicals. Examples include:

- Blue hydrogen (from natural gas with carbon capture)
- Green hydrogen (from renewable-powered electrolysis)
- Biogas and biomethane (from organic waste)
- Synthetic natural gas

Carbon Dioxide Removal

Technologies that remove CO_2 from the atmosphere or industrial emissions and store or reuse it to compensate for residual emissions. Examples include:

- Direct Air Capture (DAC)

- Bioenergy with Carbon Capture and Storage (BECCS)

Sustainable Chemical Manufacturing

Processes that reduce emissions and fossil dependency in chemical production to produce final products or chemical derivatives. Examples include:

- Novel crude oil-to-chemical technology
- Technologies that enable alternative, sustainable chemical feedstocks

Additionally, we are interested in technology areas that have the potential to valorize waste streams and unlock new feedstocks and products—such as biogenic, waste-derived, circular, or CO_2-based inputs—within the Technology Domains outlined, particularly where these enable catalytically driven value chains that are new to Shell and Technip Energies.

ii) CATALYST AREAS

Homogeneous / Heterogeneous Metal-Based Catalysts

Catalytic systems of interest include both heterogeneous and homogeneous catalysts, encompassing supported or unsupported configurations, monometallic or bimetallic compositions, and systems enhanced with promoters or dopants, including:

- Base metals: Nickel (Ni), Cobalt (Co), Iron (Fe), Moly (Mo) etc.
- Precious metals: Platinum (Pt), Palladium (Pd), Ruthenium (Ru), Rhodium (Rh), Iridium (Ir), Silver (Ag), Gold (Au), etc.
- Spanning molecular, organometallic, and solid-state forms

Catalyst Preparation Methods

Hybrid or novel methods that improve scalability, recyclability, or sustainability, including:

- Powder (e.g. amorphous/structured alumina, silica, titania)
- Carrier (e.g. mixing, shaping, precipitation, drying/calcination)
- Impregnation (e.g. incipient wetness, dry impregnation, solutions, drying/calcination)
- Post treatment (e.g. reduction, pre-sulfiding, pre-sulfurized)

Catalytic Reactor Technologies

- Fixed-bed, fluidized-bed, slurry-phase, and membrane systems
- Process intensification through advanced catalyst/reactor integration
- Modular or distributed catalytic systems

New Value Chains Enabled By Catalysts

- Supported metal catalysts (e.g., metals on alumina, silica, titania)
    - *Excluding metal organic frameworks, covalent organic frameworks, monoliths, foams*
- Zeolites

- Mixed metal oxides
- Bifunctional/multifunctional catalysts
- Promoted catalysts (with additives to enhance performance)

Priority areas also include metal-based catalysts, zeolitic catalysts, advanced preparation methods, as well as reactor and reactor internal technologies, all with potential for global commercial scale and high performance in selective conversion, emissions reduction, and process efficiency. Solutions of high interest include technologies featuring heterogeneous catalysts that align with Shell's scale-up and manufacturing asset footprint.

ACCELERATOR OVERVIEW AND COLLABORATION MODELS

The Greentown Go Make 2026 cohort will consist of up to eight startups who will enter a 6-month accelerator phase of the program, which is focused on building and advancing strategic collaborations with Shell and Technip Energies. During this phase, each cohort member will work closely with both Shell and Technip Energies to develop a tailored collaboration roadmap. This roadmap will outline your objectives, key milestones and deliverables, and the combined target collaboration model with Shell and Technip Energies.

The accelerator phase centers on three main activities:

- **Strategic Fit Validation**: Assessing how your technology aligns with Shell and Technip Energies' priorities and value chains.
- **Technical Due Diligence**: Engaging with subject matter experts from both Shell and Technip Energies to validate your solution's technical and commercial potential.
- **Collaboration Outcome Development**: Defining the next steps for a collaboration model, which may include derisking support, pilot and demonstration projects, scale-up activities, joint development, or commercial agreements.

Throughout this phase, the cohort will have access to guidance and resources from dedicated experts and coaches from Shell and Technip Energies, including technical expertise, business development support, investment teams, and introductions to global networks. The goal is to position cohort startups for impactful collaboration with Shell and Technip Energies' technology organizations. Each startup's journey will be tracked against its collaboration roadmap, with regular check-ins and clear decision points to ensure progress and alignment.

Further examples of potential collaborations of interest to Shell and Technip Energies with startups selected by this program include:

- Technical validation and feedback from Shell and Technip Energies subject matter experts.
- Pilot development, deployment and/or integration into Shell's and/or Technip

Energies' operations.
- Licensing-in to licensing-out within Shell and/or Technip Energies' portfolios, ideally integrated with existing technologies.
- Enabling testing and discovery activities that could be explored include proof-of-concept, application testing, customer discovery, TEA review, market research, team building, access to Shell and Technip Energies' global customer networks and value chain, and access to market and business expertise.

In addition, Shell is interested in the following:

- Collaborations for catalyst development, manufacturing scale-up, and manufacturing at scale, potentially leading to long-term dedicated catalyst supply arrangements for your catalyst technology.
- Collaborate with Shell to co-develop catalyst technology as part of a fully integrated solution, positioning your innovation at the core of a unique offering to the market.
- Advantaged access to Shell's open innovation models, such as Shell GameChanger, for accelerated derisking and Ventures for potential investment and scale-up support.

In addition, Technip Energies is interested in the following:

- Technology development for a catalytic process leading to future licensing.
- Engineering services for process development, reactor design and/or scale up with Technip Energies, including but not limited to R&D support at one of Technip Energies' multiple R&D labs.

This list is not exhaustive; all opportunities with Shell and Technip Energies and the selected startups will be explored and evaluated individually. Please note any other interesting potential collaborations in the program application.

ELIGIBILITY

- Ability to demonstrate scalable synthesis methods and readiness to pilot or commercially deploy.
- Submit your completed application through the online portal by March 10, 2026.
- Be available for virtual interviews after the application deadline, if selected for further rounds.
- Disclose the status of any intellectual property (IP) relevant to your submission. **Do not submit confidential information in the application process!**
- Applicants may apply from anywhere in the world.
- Executive or **founder-level in-person attendance at the Kickoff Event** at Greentown Labs Somerville or Greentown Labs Houston **is mandatory for participation.**

- A tentative program timeline is as follows:
    - **Application Opens:** January 6, 2026
    - **Application Deadline:** March 10, 2026
    - **Finalists Selected:** Mid-April, 2026
    - **Virtual Final Interviews Begin:** April 27, 2026
    - **Virtual Final Interviews End:** May 1, 2026
    - **In-Person Kickoff Event:** June 9, 2026
- Greentown is committed to increasing diversity, maintaining an inclusive community culture, and creating a more sustainable planet for all. We welcome applications from founders and teams of all backgrounds, regardless of their ethnicity, race, gender, religious beliefs, sexual orientation, age, marital status, veteran status, or whether or not they have a disability.

ABOUT GREENTOWN LABS

Greentown Labs is a 501(c)(3) nonprofit accelerating climatetech innovation and commercialization by empowering entrepreneurs and enabling collaboration. As the largest climatetech and energy startup incubator in the world—with locations in Somerville, Mass. and Houston, Texas—Greentown convenes the climatetech ecosystem to provide entrepreneurs the community, connections, and resources they need to thrive. The incubator offers lab space, shared office space, machine shops, electronics labs, tool shops, software and business resources, and a large network of corporate customers, investors, philanthropists, and more. Greentown is home to more than 200 startups and has supported more than 625 since its founding in 2011; these startups have collectively created more than 16,500 jobs and raised more than $9.6 billion in funding. For more information, visit www.greentownlabs.com or follow Greentown on LinkedIn.

ABOUT GREENTOWN GO

Greentown Labs' Greentown Go programs inject momentum and traction into startup-corporate collaborations to decarbonize the global economy, unlocking the power of climate solutions at scale. These open-innovation programs operate along five tracks, corresponding to the five major greenhouse gas-emitting sectors: Go Build (buildings), Go Energize (energy and electricity), Go Grow (food and agriculture), Go Make (manufacturing), and Go Move (transportation). Each track leverages the same proven Greentown Go framework that has delivered dozens of collaboration outcomes to date, including pilots, licensing agreements, investments, joint development agreements, and more.

ABOUT SHELL CATALYSTS & TECHNOLOGIES

Shell Catalysts & Technologies exists to provide Shell and non-Shell businesses with the tools, technologies and insights that are needed to navigate the energy transition.

We are pushing boundaries in the energy transition space. For decades, we have been developing game-changing technological innovations to solve seemingly insurmountable challenges. Now we have, or are developing, a wide range of differentiated solutions that

offer attractive decarbonization opportunities, including biofuels, carbon capture and decarbonised (blue) hydrogen technologies.

What sets us apart is the knowledge we have gained from Shell's corporate heritage as an operator of refineries and petrochemical plants around the world. It also gives us a unique perspective on how refiners can remain competitive.

Our world-class catalyst and research and development expertise has enabled us to establish an enviable track record for developing leading-edge zeolites and catalysts, advanced solvents and pioneering processes, and provides a strong foundation for our future technology development.

For more information, visit: https://www.shell.com/CT

ABOUT TECHNIP ENERGIES

Technip Energies is a global technology and engineering powerhouse. With leadership positions in LNG, hydrogen, ethylene, sustainable chemistry, and CO2 management, we are contributing to the development of critical markets such as energy, energy derivatives, decarbonization, and circularity.

Our complementary business segments, Technology, Products and Services (TPS) and Project Delivery, turn innovation into scalable and industrial reality. Through collaboration and excellence in execution, our 17,000+ employees across 34 countries are fully committed to bridging prosperity with sustainability for a world designed to last.

Technip Energies generated revenues of €6.9 billion in 2024 and is listed on Euronext Paris. The Company also has American Depositary Receipts trading over the counter.

For further information: www.ten.com

CONTACT

Dominick Protomastro, Program Manager, Partnerships, dprotomastro@greentownlabs.com