

## Project Description

PurGen One is a commercial scale (nominal 750 MW) IGCC facility with carbon capture and storage (CCS) being developed at a former DuPont chemical plant site in Linden, New Jersey by SCS Energy, LLC. The project book provides extensive background on the project and the development team, with an emphasis on the following major points.

- **Scale.** The \$5.2 billion PurGen One project is the first privately developed, commercial-scale IGCC plant, with a nominal 750 MW of electric generating capacity, 10 million tons in annual carbon transport capacity (4.7 million tons will be captured and sequestered from PurGen One itself), and access to more than nearly one trillion tons of geologic storage capacity.
- **Business Model.** PurGen One's co-production model, in which hydrogen from the gasifier can be shifted in real time from electricity generation to fertilizer and other hydrogen commodity production, solves the economic challenge of creating a viable business model to cover the high capital costs of IGCC with CCS during periods of low electricity prices.
- **Performance:** PurGen One will sequester 90 percent of its carbon dioxide emissions, setting a new industry benchmark that will be incorporated into enforceable permit limits.
- **Infrastructure:** PurGen One's pipeline is being designed with the capacity to transport twice the amount of carbon produced at the anchor facility, creating the infrastructure for additional sequestration as post-combustion carbon capture technology is demonstrated.
- **Geology:** The offshore repository selected for PurGen One, seventy miles off New Jersey's coast, has been extensively characterized in the course of offshore oil and gas exploration, and presents a close analog to the geology of the Sleipner field in the North Sea, where geologic storage has been demonstrated to be safe and effective for more than a decade.
- **Policy:** PurGen One has been well received by NRDC and other national environmental groups, and promises to be a landmark demonstration of President Obama's message that we can create jobs, spur economic growth, and use domestic resources and innovation as we address the climate crisis.
- **Experience.** Purgen One is being developed by a company with a track record of successful projects presenting daunting challenges, and is supported by the resources and expertise to credibly finance, construct, and operate this project.
- **Ratepayer Impact.** PurGen One will be a price-taker in the electricity and other commodity markets, and so the only impact to ratepayers will be downward pressure on prices as a result of increased supply.
- **Timing.** Permitting for the project already has begun. A draft EIS will be filed with the Minerals Management Service (MMS) of the Department of the Interior in the fourth quarter of 2009, with a construction start anticipated in early 2011.