GREEN TECHNOLOGY GLOBAL
ESG SOLUTIONS

# GTG Data Center Power & Water — Overview

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## Summary

Green Technology Global (GTG) gives data center developers an independent path to power and water. Instead of waiting on a utility interconnection and municipal water allocation, a campus generates its own electricity with Portable Turbine Energy (PTE) natural-gas turbofans and its own water with GTG atmospheric water generators (AWGs) and vapor recovery, engineered to its MW, water demand and energization date.


## The problem: infrastructure timing is project timing

Power and water now decide data center viability, schedule and operating risk. Will power be available when the campus must energize? Can the site support the planned MW and water profile? A single grid connection or municipal source is a single point of failure, and for AI and defense-adjacent workloads that is a national-security concern. Host communities are also pushing back over power costs, aquifer draw and noise.

## Power: on-site PTE turbofan generation

Portable Turbine Energy (PTE) turbofan generators convert natural gas into electricity at the campus, forming an owner-operated micro-grid independent of utility infrastructure. Modular units add capacity as load grows, so energization follows the construction schedule rather than a transmission queue.

- **Underground installation:** turbofans can be installed below grade, keeping noise away from neighbors and freeing surface area.
- **Heat recovery:** exhaust heat is captured for reuse on the campus instead of being vented.
- **Emissions recovery:** exhaust is treated and captured to minimize environmental impact.

## Water: atmospheric generation and vapor recovery

GTG atmospheric water generators make water from the air instead of drawing on aquifers or municipal supply. Industrial AWG production can be scaled to thousands of gallons of fresh drinking water, with storage sized to match cooling and operating demand, water vapor recovery reclaims moisture from the facility, and closed-loop wastewater treatment completes GTG's 360 closed-loop approach. Power and water are engineered together as one system.

## Key benefits

| Benefit | What it means for the campus |
|---|---|
| Time-to-power | Energize on the project schedule, not the utility queue |
| Water independence | No reliance on aquifers or municipal allocations |
| Resiliency | Removes single points of failure in grid and water supply |
| Modular scaling | Add generation and water capacity as load grows |
| Community fit | Underground turbines, heat and emissions recovery, no aquifer draw |

## Assessment process and next steps

GTG reviews the **site and schedule**, **load profile** (MW, growth, utility status) and **water profile** (demand, source constraints, cooling, recovery potential), then recommends a feasibility study, engineering review or proposal. Solutions are modeled per project, with validation documents available for diligence.

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