A Year in the Life of a *Backup Generator*

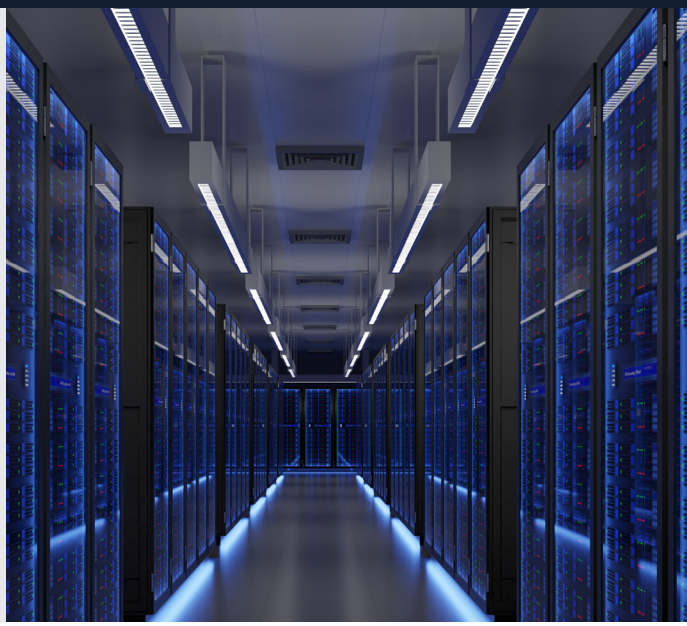
Demystifying Data Center Backup Power:
Emergency Readiness, Not Continuous Operation

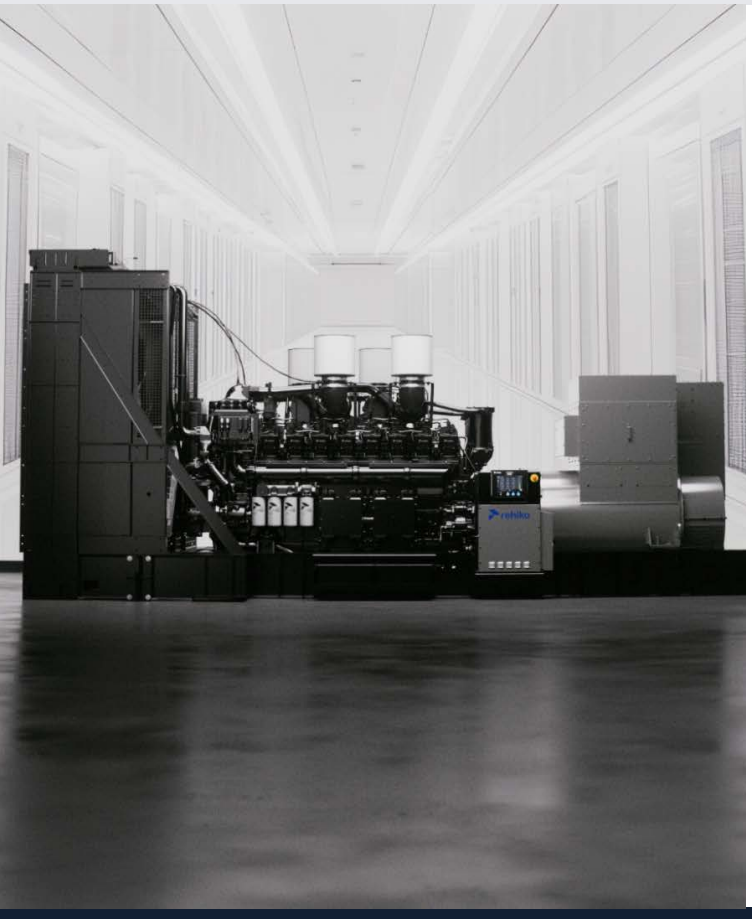
Debunking the *Runtime Myth*

- **Emergency Assets Only:** Data center backup generators are strictly emergency assets. They are not primary power sources. Routine testing is capped at 100 hours per calendar year.[1]

[1]See 40 C.F.R. § 63.6640(f). Actual limits depend on engine classification, permit conditions, and applicable regulatory requirements.

- **Under 1.5 Hours a Year:** Traditional standby testing on standard generators typically requires 360 minutes of runtime per year. When utilizing Rehlko's Conscious Care™ program, this runtime can be approximately 70 minutes depending on operating conditions and specifications.





Stewarding Responsibility: Smarter Testing, *Fewer Emissions*

Advanced Maintenance: Rehlko's Conscious Care™ program uses digital diagnostics and new maintenance protocols designed to help keep generators site-ready.

Up to 71%[2] Emissions Reduction: Conscious Care™ reduces greenhouse gas emissions during standard scheduled testing by up to 71%.

Up to 98%[3] Carbon Savings: Combining the Conscious Care with HVO fuel for annual scheduled maintenance tests slashes fuel lifecycle emissions by up to 98%.

Power Impact Intelligence Tool: Within the tool, operators can utilize Rehlko's Backup Power | EPD Carbon Calculator to access third-party verified, product-level lifecycle data, providing local planning boards with transparent carbon accounting.

[2] Rehlko's Conscious Care™ program, can reduce GHG emissions from scheduled maintenance testing by up to 71% compared with Rehlko's standard testing protocol. Actual reductions vary by generator, fuel, operating conditions, and maintenance requirements. See methodology and assumptions hereestimates are measured against specified baseline scenarios and are based on lifecycle methodologies where indicated.

[3] *Emission reduction estimates are based on internal calculations using modelled fuel consumption and CO_2 emission factors. The 98% reduction reflects the combined effect of extended exercise protocols and HVO, a renewable diesel alternative with significantly lower lifecycle CO_2 emissions. No third-party verification has been conducted. estimates are measured against specified baseline scenarios and are based on lifecycle methodologies where indicated.

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Unless otherwise noted, performance, runtime, emissions, and carbon-reduction figures are based on internal analyses, modeling, testing, or project-specific operating assumptions. Actual results will vary depending on generator configuration, duty cycle, fuel selection, maintenance practices, site conditions, applicable regulations, and operating environment. Carbon and emissions reduction estimates are measured against specified baseline scenarios and are based on lifecycle methodologies where indicated.