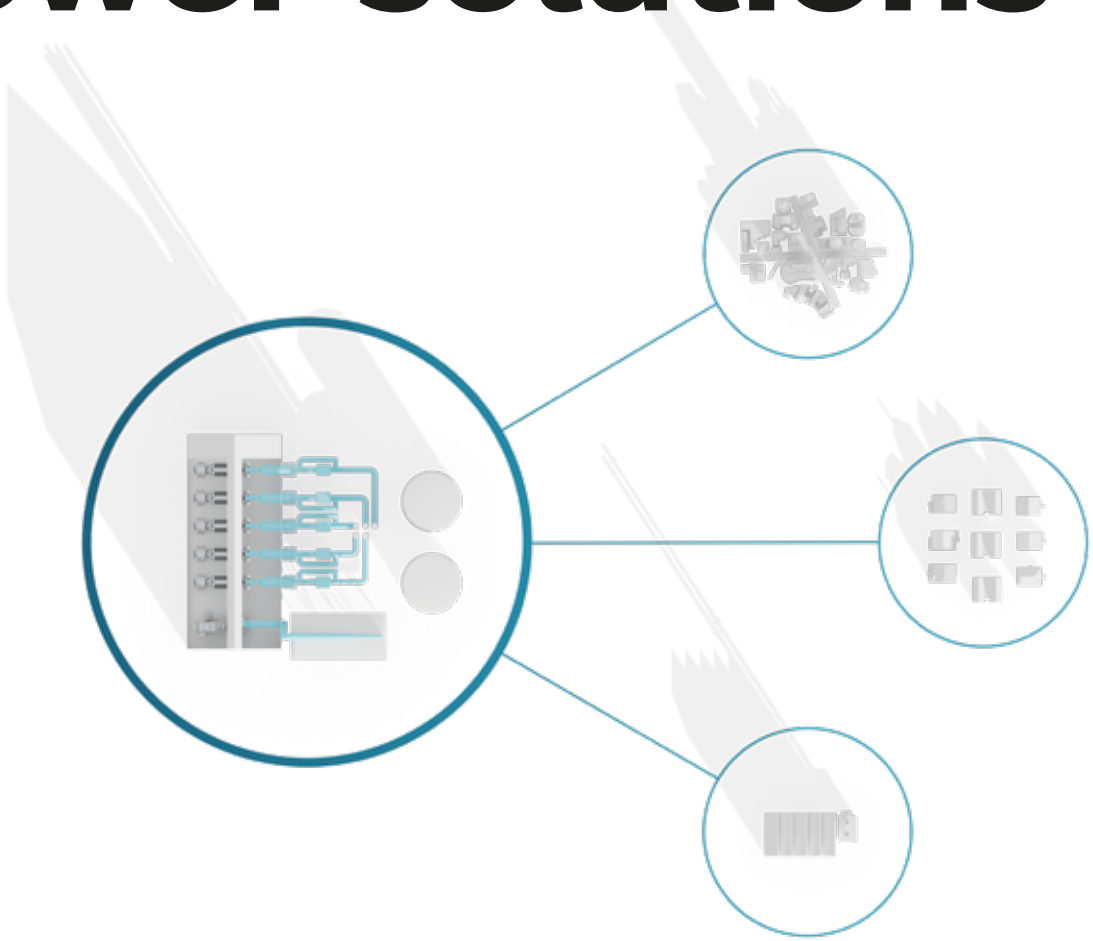
Base-load power solutions



Benefits at a glance

- Efficient multi-fuel gensets
- 25 % H_2 admixture & 100 % e-methane
- Fast power availability (start and stop capability) without impact on maintenance intervals
- Several options for low CO_2 footprint
- ECC boosts efficiency by up to 4.5 %
- No derating at high temperatures/altitudes

Everllence

Highly available **energy with low CO_2 footprint**

The world's growing cities and industries want more electricity. They also demand lower CO_2 emissions and affordable prices. The ideal base-load supply should have the flexibility to adapt to demand and to the fluctuations of fuel prices. Everllence provides decentralized, fuel-flexible, and highly efficient solutions for low-cost, lowcarbon base-load power generation.

Base-load applications

Base-load power plants are key assets for utilities, municipalities, independent power producers, industrial customers, and all those whose business is to produce reliable energy at low cost and with a low carbon footprint.

The ideal base-load supply allows for continuous full, part, and low load operation. The plant must be able to react quickly to changing load demands and have back-up for emergencies. Efficient power generation should not be compromised by difficult environments (high altitude, heat, and humidity).

Our base-load power solutions are compact, scalable, dynamic, part-load-capable, highly efficient, and flexible. Our engines are future-proof and capable of carbon-neutral operation. Our aim: highly available energy with a low CO_2 footprint.

Challenging conditions

Power producers face increasing fuel costs, stricter decarbonization targets, competitive pricing structures, and rapid changes in a decentralized energy market.

Everllence helps to confront these challenges with a full range of technologies and strategies. We believe fuel flexibility is key to protecting investments, maintaining a low cost of energy, and ensuring security of supply.

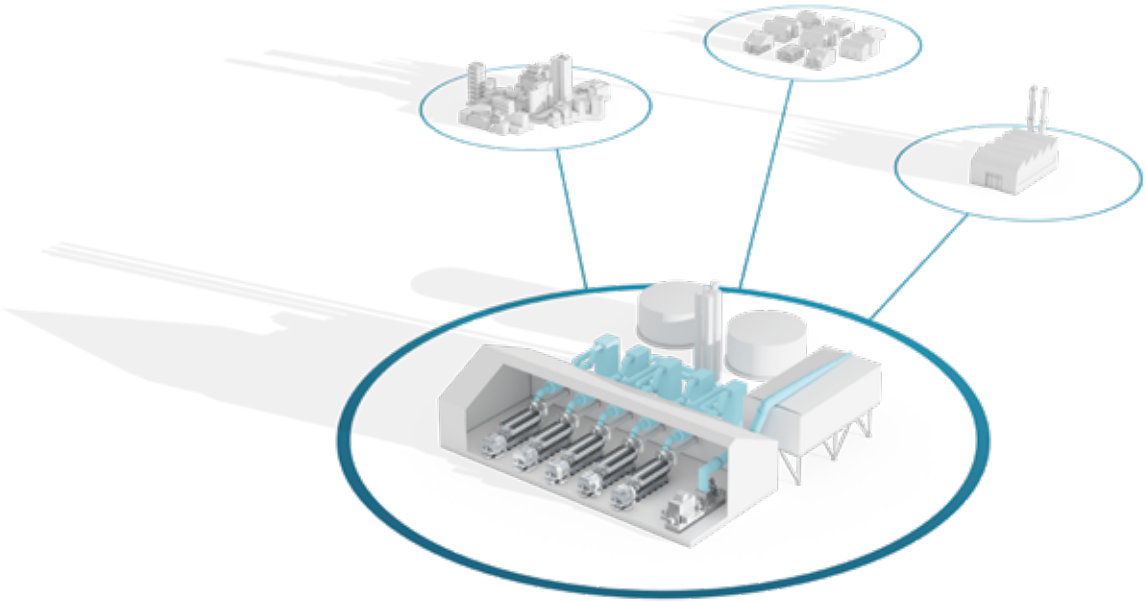
Dynamic and efficient operation are boosted by our fast-start engine with multiple start and stop capability and engine combined cycle (ECC) solutions. Our retrofit solutions add long-term flexibility by allowing you to adapt our engines to alternative fuels.

System solutions

Cost-effective power generation
We provide decentralized, flexible, and highly efficient solutions for base-load power generation. In a single-cycle system, our engines have a high energy efficiency of around 50 %. In an ECC with steam turbines, plant efficiency can be enhanced by another 4.5 %. In fact, the same amount of fuel will produce 9.5 % more electricity in a combined cycle with engines and steam turbines than in a single-cycle system with engines only.

Our base-load solutions allow for continuous part-load operation and low-load operation down to 15 % load. Load flexibility is enhanced by our modular plant concept in which the gensets are always operated at the optimum load.

High power density enables smaller locations, short plant erection times, and easy expansion. The modular and scalable nature of our base-load power system means it can be easily expanded to meet future demands.



Low-carbon alternatives

The Everllence range of engines includes liquid fuel, dual fuel and gas variants to ensure fuel flexibility for base-load plants. The options also include biofuels generated from organic waste. The gensets have extremely low exhaust gas emissions. Using our two-stage turbochargers lowers nitrogen oxide emissions by up to 20 %.

Everllence is also developing engines that run on alternative fuels, such as green hydrogen and its derivatives. We regard gas as a key component in the transition to a carbon-free future because it is easy to adapt existing gas-based equipment to carbon-neutral e-methane. Our gas engines are already capable of running with a 25 % admixture of hydrogen or on 100 % e-methane.

General competence

Complete systems
As a leading supplier with decades of expertise we can provide effective support wherever it is needed. We can be a complete engineering procurement construction (EPC) partner or step in where you need us. We can plan, prepare, and develop your power plant. Our expertise covers the entire project implementation phase. After commissioning, our PrimeServ service covers you 24/7, 365 days a year. We can also train your personnel or even operate your plant.

Emission compliance
Everllence power plant technology is developed to ensure full compliance so that your operations can meet or exceed emission regulations for CO_2, NO_x and sound.

Key components

- **Engines**
  Future-proof gas, dual fuel, and liquid fuel engines for high power density, efficiency, and excellent start-up behavior
- **Engine combined cycle solutions**
  ECC technology improves total plant efficiency by up to 4.5 %
- **Turbochargers**
  Two-stage turbochargers for highest efficiency
- **Exhaust gas treatment**
  Further optional emission and exhaust gas treatment solutions possible
- **Retrofits**
  Retrofits can be planned for future e-fuels

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