

Gas Turbine Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

Industry: Nuclear & Thermal Power Generation

URL: <https://www.mordorintelligence.com/industry-reports/global-gas-turbine-market>

Gas Turbine Market Size and ShareMarket OverviewStudy Period | 2021 - 2031 |

Market Size (2026) | USD 21.11 Billion |

Market Size (2031) | USD 28.84 Billion |

Growth Rate (2026 - 2031) | 6.44 % |

Fastest Growing Market | Asia-Pacific |

Largest Market | Asia-Pacific |

Market Concentration | Medium |

Major Players*Disclaimer: Major Players sorted in no particular order

Image © Mordor Intelligence. Reuse requires attribution under CC BY 4.0.

Image © Mordor Intelligence. Reuse requires attribution under CC BY 4.0.
Select A
nother GeographyAsia[<https://www.mordorintelligence.com/industry-reports/asia-pacific-gas-turbine-market>]Europe[<https://www.mordorintelligence.com/industry-reports/europe-gas-turbine-market>]North America[<https://www.mordorintelligence.com/industry-reports/north-america-gas-turbine-market>]

Gas Turbine Market Analysis by Mordor IntelligenceThe Gas Turbine Market size is projected to expand from USD 20.25 billion in 2025 and USD 21.11 billion in 2026 to USD 28.84 billion by 2031, registering a CAGR of 6.44% between 2026 to 2031.

Structural shifts are accelerating demand as Asia-Pacific utilities pivot from coal to gas, petrochemical complexes embed cogeneration at the design stage, and island grids adopt mobile aeroderivative sets that avoid lengthy permitting. Hydrogen-readiness mandates are also steering procurement toward turbines capable of burning alternative fuels, while OEMs are increasing digital-twin deployments that boost efficiency by 2% to 3%. Competitive strategies now revolve around certifying 100% hydrogen combustion, shortening lead times for hot-gas-path components, and expanding long-term service agreements that lock in recurring revenue. These trends collectively support sustained capacity additions even as battery storage challenges peaking assets in deregulated markets.

Key Report Takeaways* By capacity, the above 120 MW segment led with 58.3% of gas turbine market share in 2025, while the 30-120 MW band is projected to expand at a 6.8% CAGR to 2031.

* By operating cycle, combined-cycle plants accounted for 74.9% of installations in 2025 and are forecast to post a 7% CAGR through 2031.

* By fuel type, natural gas captured 90.2% share of the 2025 gas turbine market size; hydrogen and other alternative fuels are set to rise 16.1% annually from 2026 to 2031.

* By end-user, power generation held 69.8% of the 2025 total, with the sector expanding 6.9% yearly.

* By geography, Asia-Pacific commanded 59.5% of 2025 revenues and is advancing at a 7.3% CAGR, the fastest worldwide.

Note: Market size and forecast figures in this report are generated using Mordor Intelligence's proprietary estimation framework, updated with the latest available data and insights as of January 2026.

Market Trends and InsightsDrivers Impact Analysis of Gas Turbine Market*Driver | (~) % Impact on CAGR Forecast | Geographic Relevance | Impact Timeline |

Asia-Pacific Coal-to-Gas Transition Accelerating Utility Orders | +1.8% | APAC core (China, India, ASEAN), spill-over to South Asia | Medium term (2-4 years) | LNG-linked Island Grids in SEA Driving Mobile Aeroderivative Demand | +1.2% | Southeast Asia, Caribbean, Pacific Islands | Short term (≤ 2 years) | Petrochemical Cogeneration Build-out in Middle East | +1.5% | Middle East (Saudi Arabia, UAE, Qatar), North Africa | Medium term (2-4 years) | Disaster-Relief Leasing Surge for Aeroderivative Sets in Caribbean | +0.7% | Caribbean, Central America, disaster-prone coastal regions | Short term (≤ 2 years) |

Source: Mordor Intelligence |

Asia-Pacific Coal-to-Gas Transition Accelerating Utility Orders Large-scale conversions from coal to gas are driving record turbine procurement. Malaysia awarded a 1,400 MW combined-cycle contract in 2024, and Vietnam commissioned more than 2,700 MW of LNG-to-power capacity in 2025. China cleared 12 GW of new gas capacity in 2025 to complement intermittent renewables, with domestic OEMs winning the bulk of orders. Thailand signed a 5,300 MW framework that specifies hydrogen-ready units capable of 30% blends. Singapore brought a 670 MW hydrogen-capable plant online in 2025, strengthening the city-state's decarbonization pathway. [1] Editorial Board, "Hydrogen-Ready Turbines Gain Traction," ft.com

LNG-Linked Island Grids in SEA Driving Mobile Aeroderivative Demand Island grids are fast-tracking mobile aeroderivative sets to avoid expensive fixed infrastructure. The Bahamas restored post-hurricane supply with four TM2500 units in 2024, leased under 72-hour redeployment clauses. Indonesia's PLN ordered 20 similar units in 2025 for scattered mining and agro-processing hubs. Puerto Rico and several Caribbean nations adopted multi-year leasing pools that integrate rental, fuel logistics, and O&M in single contracts, compressing timelines from three years to under one.

Petrochemical Cogeneration Build-out in Middle East Greenfield petrochemical complexes are embedding cogeneration from day one. Saudi Aramco added 475 MW of capacity at SATORP in 2024, achieving 85% CHP efficiency. ADNOC ordered 1,200 MW of turbines in 2025 to supply steam and power under a 25-year tolling structure. Qatar Energy's North Field expansion adopted a multi-OEM sourcing model that spreads technology risk and accelerates delivery.

Disaster-Relief Leasing Surge for Aeroderivative Sets in Caribbean Climate-driven outages have made sub-24-hour mobilization a procurement prerequisite. Puerto Rico leased 360 MW of aeroderivative turbines in 2024 under contracts allowing redeployment to neighboring islands within two days. The Bahamas and the Dominican Republic structured regional "turbine-sharing pools," while Haiti restored 80 MW of capacity with World Bank-backed leases in 2025.

Restraints Impact Analysis of Gas Turbine Market* Restraint | (~) % Impact on CAGR Forecast | Geographic Relevance | Impact Timeline |

Gas-price Volatility Post-Ukraine War Curtailing EU Projects | -0.9% | Europe (Germany, UK, Italy, Spain), Eastern Europe | Medium term (2-4 years) |

Utility-scale Battery Storage Displacing Peaking Turbines (US/Australia) | -1.1% | North America (US, Canada), Australia, select EU markets | Short term (≤ 2 years) |

ESG-driven Financing Restrictions under EU Taxonomy | -0.6% | European Union, UK, select institutional investors globally | Long term (≥ 4 years) |

Super-alloy Supply-Chain Shortages for Large-Frame Hot-gas-path Parts | -0.8% | Global, acute in North America and Europe | Medium term (2-4 years) |

Source: Mordor Intelligence |

Gas-Price Volatility Post-Ukraine War Curtailing EU Projects Persistent gas-price swings are eroding project economics. Germany's RWE delayed 1,800 MW of projects in 2024, and Italy's Enel withdrew a 1,200 MW plant in 2025 after failing to secure PPAs above EUR 80 per MWh. Spain redirected capital to batteries, while the UK capacity market cleared at lower prices as imports rose.

ESG-Driven Financing Restrictions under EU Taxonomy The European Investment Bank

rejected EUR 2.3 billion of gas projects in 2024 for failing to meet emissions limits, and Germany's KfW withdrew from a 900 MW loan in 2025 without a carbon-capture commitment.[2]European Investment Bank, "2024 Annual Report," eib.org Sixty percent of institutional investors now exclude unabated gas, cutting the available capital pool by GBP 15 billion.

*Our forecasts treat driver/restraint impacts as directional, not additive. The impact forecasts reflect baseline growth, mix effects, and variable interactions

Gas Turbine Market Segment AnalysisBy Capacity:Mid-Range Units Capture Modular DemandMid-range turbines between 30 and 120 MW recorded the fastest growth at a 6.8% CAGR through 2031, reflecting demand for modular projects that avoid multi-year permitting. Above 120 MW machines still represented 58.3% of 2025 installations, but grid-connection bottlenecks and environmental reviews are tempering new orders. The gas turbine market size for the 30 to 120 MW bracket is expected to surpass USD 18 billion by 2031, underpinned by fast-track approvals in Southeast Asia. Regulatory fast-track schemes, such as the Philippines' nine-month permitting window for sub-100 MW plants, underline this momentum.

Project sponsors prefer mid-range sets for incremental expansion. GE's LM6000 secured 18 orders in 2024, citing 12-month delivery schedules.[3]GE Vernova, "Investor Presentation 2024," ge.com Siemens Energy's SGT-400 continues to dominate emergency back-up throughout the Caribbean disaster-relief segment. Large-frame developments still proceed in Asia-Pacific, but developers increasingly split capacity into multiple 120 MW blocks to mitigate construction risk and align with financing milestones.

Image © Mordor Intelligence. Reuse requires attribution under CC BY 4.0. By Operating Cycle:Combined Cycle Dominates Efficiency RaceCombined-cycle plants controlled 74.9% of the gas turbine market share in 2025 and are forecast to grow at a 7% CAGR to 2031. The gas turbine market size accruing to combined-cycle configurations is projected to add USD 21 billion between 2026 and 2031 as operators pursue 63% net electrical efficiency benchmarks.[4]Siemens Energy, "Technical Whitepaper 2024," siemens-energy.com Simple-cycle machines retain value in peaking and ancillary-service markets, but their share is declining as batteries claim frequency-regulation revenues.

Coupling turbines with desalination is reinforcing combined-cycle economics in the Middle East. UAE's 2,400 MW Hassyan plant pairs power generation with 120 million gallons per day of water production, halving water costs versus standalone reverse-osmosis. Concessional financiers like the Asian Development Bank now use ISO 50001 certification as a gatekeeper for gas-power loans above USD 200 million, further standardizing high-efficiency designs.

By Fuel Type:Hydrogen Blending Reshapes Market DynamicsNatural gas retained a 90.2% share in 2025, yet hydrogen, biogas, and RNG are expanding at a 16.1% CAGR, the fastest of any fuel category. The gas turbine market size for hydrogen-capable equipment is forecast to reach USD 14 billion by 2031 as OEMs race for full-hydrogen certification. GE Vernova's 7HA.03 achieved 100% hydrogen firing in Ohio in 2024, and Siemens Energy booked eight hydrogen-ready units across Germany and the Netherlands in 2025.

Liquid fuels remain essential in remote and offshore contexts where pipeline gas is impractical. Baker Hughes' dual-fuel NovaLT12 enables rapid fuel switching, ensuring resilience for drilling and mining operations. The EU Renewable Energy Directive III requires 5% renewable content in turbine fuels by 2030, likely pushing biogas adoption across agricultural regions.

Image © Mordor Intelligence. Reuse requires attribution under CC BY 4.0. By End-

User Industry:Oil & Gas Monetizes Stranded GasPower generation absorbed 69.8% of 2025 demand, yet the oil-and-gas sector is the swing buyer, directing cogeneration units to monetize associated gas and cut diesel consumption. Baker Hughes turbines at Saudi Arabia's Jafurah field saved USD 85 million annually by replacing diesel in 2024. ExxonMobil's Guyana offshore project deployed LM2500 units to capture flare gas, while Shell's Prelude FLNG in Australia reduced emissions 40% after installing SGT-400 turbines.

Industrial users such as data centers and chemicals are adopting on-site generation for energy security. Microsoft and Google each ordered distributed turbines in 2024 configured for renewable natural gas blends, underscoring demand diversification.

Geography AnalysisAPAC Gas Turbine MarketAsia-Pacific generated 59.5% of global revenue in 2025 and is set to expand at a 7.3% CAGR through 2031, cementing its lead in the gas turbine market. China approved 12 GW of new gas capacity in 2025, with local OEMs securing 70% of orders. India projects 25 GW of additions by 2030, incentivizing joint ventures that localize high-value components. LNG-to-power pipelines totaling 14 GW across Southeast Asia will enter construction before 2028 with multilateral financing support.

North America and Europe Gas Turbine MarketNorth America market growth focused on data-center backup power, LNG export cogeneration, and hydrogen pilots. The United States added 4.8 GW in 2024, and Mexico awarded 2.4 GW of combined-cycle contracts in 2025. Canada's LNG Canada project relies on 1.2 GW of GE turbines for liquefaction, highlighting the role of gas generation in energy exports. Stricter EPA emissions thresholds from 2025 raise capital costs by 8% due to required selective catalytic reduction systems. Europe is facing headwinds from volatile gas prices and ESG financing limits. Germany and Spain deferred combined-cycle projects in 2024, while the UK opted for hydrogen-ready units to meet decarbonization goals. Southern Europe accelerated battery storage approvals, reducing gas peaker prospects.

MEA and South America Gas Turbine MarketThe Middle East and Africa market is propelled by petrochemical cogeneration and water-plus-power projects. Saudi Arabia commissioned 3.8 GW in 2024, and Egypt placed Africa's largest single turbine order in 2024 for 4.8 GW. South Africa pilots aeroderivative peakers to stabilize coal-heavy grids with African Development Bank support. South America captured 5% of revenue in 2025, leveraging turbines to offset hydropower variability. Brazil and Chile see peaker installations aligned with renewable integration roadmaps.

Image © Mordor Intelligence. Reuse requires attribution under CC BY 4.0.

Regulatory LandscapeIn the United States, emissions compliance for new and modified gas-turbine installations tightened in January 2026 when the US Environmental Protection Agency finalized amendments to the New Source Performance Standards (NSPS) for stationary combustion turbines and stationary gas turbines (40 CFR Part 60, subpart KKKKa), effective 15 January 2026. The rule applies to facilities constructed, modified, or reconstructed after 13 December 2024 and sets NOX requirements based on best system of emission reduction, including combustion controls for most turbines and selective catalytic reduction for specified subcategories. This raises the importance of OEM-certified emissions packages and the related permitting documentation.

In Europe, Industrial Emissions Directive 2.0 (as amended by Directive 2024/1785) entered into force on 4 August 2024, strengthening the industrial emissions control framework and increasing scrutiny on combustion sources. Member states must

t transpose the amended directive into national law by 1 July 2026, creating a compliance timeline that lifts demand for upgrade kits, monitoring solutions, and higher-efficiency configurations. These changes also feed into permit renewals and financing screens tied to emissions performance.

Competitive Landscape

Five global OEMs controlled 68% of 2025 revenue, yet regional manufacturers are gaining ground by meeting local-content rules in the Asia-Pacific. Hydrogen readiness now defines competitive parity. GE's HA series won 100% hydrogen certification in 2024, Siemens Energy achieved 75% blending thresholds, and Mitsubishi Power targets full hydrogen firing by 2027. Digital-twin applications reduce forced outages by 30%, creating defensible service revenue as equipment margins compress.

White-space innovation focuses on microgrids, offshore platforms switching from diesel, and disaster-relief leasing pools. Niche players like Solar Turbines and Capstone Green Energy exploit sub-10 MW opportunities with fast-start microturbines. Patent filings underscore strategic direction, with 14 GE patents on hydrogen combustion, nine Siemens filings on additive manufacturing, and six Mitsubishi patents on ammonia co-firing during 2024.

Gas Turbine Industry Leaders* Mitsubishi Heavy Industries Ltd

- * General Electric Company
- * Siemens Energy AG
- * Rolls-Royce Holdings plc (Aeroderivative)
- * Ansaldo Energia SpA

* *Disclaimer: Major Players sorted in no particular order
Image © Mordor Intelligence. Reuse requires attribution under CC BY 4.0. Gas Turbine Market Companies Covered in this Report* General Electric Company

- * Siemens Energy AG
 - * Mitsubishi Heavy Industries Ltd.
 - * Kawasaki Heavy Industries Ltd.
 - * Ansaldo Energia SpA
 - * MAN Energy Solutions SE
 - * Wartsila Oyj Abp
 - * Rolls-Royce Holdings plc
 - * Solar Turbines Incorporated
 - * Capstone Green Energy Corporation
 - * Doosan Skoda Power
 - * IHI Corporation
 - * Bharat Heavy Electricals Limited
 - * Harbin Electric Co. Ltd.
 - * Shanghai Electric Group Co. Ltd.
 - * OPRA Turbines BV
 - * Baker Hughes Company
 - * Vericor Power Systems LLC
 - * Zorya-Mashproekt
 - * Nanjing Turbine & Electric Machinery Group
- Read Analysis of Gas Turbine Companies

Market Opportunities and Future Outlook

Fuel-flexible combustion and alternative-fuel certifications are creating a retrofit and newbuild pathway for turbines that can operate beyond conventional natural gas. In March 2026, GE Vernova and IHI demonstrated 100% ammonia combustion in a full-scale F-class gas turbine at a purpose-built test facility, adding technical proof points for ammonia co-firing roadmaps in power and industrial applications. On the marine and offshore side, Baker Hughes received RINA Type Approval in June 2026 for the NovalT 16 gas turbine to operate on natural gas and up to 100% hydrogen for marine propulsion, which broadens the addressable equipment and service scope where fuel switching and compliance are procurement requirements.

Supply-chain capacity and lead-time compression are another opportunity area. As project developers and non-utility buyers look for faster delivery and modular execution, OEM moves to lift output, including GE Vernova targeting 20 GW of annual production capacity by mid-2026, support whitespace in factory-assembled aeroderivative packages, fast-track mid-range blocks, and modernization programs that improve output and efficiency on the installed fleet. With alternative-fuel demonstrations and upgrade activity rising alongside tightening emissions thresholds, operators have more room to expand recurring MRO and uprate revenue as they align assets with hydrogen-readiness specifications.

Recent Industry Developments in Gas Turbine Market* July 2026: Siemens Energy agreed to supply technology, including six F-class gas turbines, for the Misfah and Duqm combined-cycle power plants in Oman, totaling about 2.6 GW. The award points to the continued role of large-frame combined-cycle projects in grid expansion programs and supports long-cycle equipment and long-term service opportunities for OEMs.
* June 2026: GE Vernova received an order from RG Engineering for six LM2500 XPR ESS aeroderivative gas turbine packages for Puerto Rico power plants managed by Genera PR. The contract highlights demand for modular, rapidly deployable packages used to stabilize constrained grids and expands the aeroderivative installed base that supports aftermarket services.
* February 2024: GE Vernova completed 100% hydrogen firing for its 7HA.03 gas turbine in Ohio. The milestone reinforced OEM qualification credentials for hydrogen-capable procurement and accelerated development and testing activity around higher hydrogen blends across the large-frame fleet.

Table of Contents for Gas Turbine Industry Report1. Introduction

- * 1.1 Study Assumptions & Market Definition
- * 1.2 Scope of the Study
- 2. Research Methodology
- 3. Executive Summary
- 4. Market Landscape
 - * 4.1 Market Overview
 - * 4.2 Market Drivers* 4.2.1 LNG-linked Island Grids in SEA Driving Mobile Aeroderivative Demand
 - * 4.2.2 Petro-chemical Cogeneration Build-out in Middle East
 - * 4.2.3 Disaster-Relief Leasing Surge for Aeroderivative Sets in Caribbeans
 - * 4.3 Market Restraints* 4.3.1 Gas-price Volatility Post-Ukraine War Curtailing EU Projects
 - * 4.3.2 Utility-scale Battery Storage Displacing Peaking Turbines (US/Australia)
 - * 4.3.3 ESG-driven Financing Restrictions under EU Taxonomy
 - * 4.3.4 Super-alloy Supply-Chain Shortages for Large-Frame Hot-gas-path Parts

- * 4.4 Supply-Chain Analysis
- * 4.5 Regulatory Landscape
- * 4.6 Technological Outlook
- * 4.7 Porter's Five Forces Analysis* 4.7.1 Bargaining Power of Suppliers
- * 4.7.2 Bargaining Power of Consumers
- * 4.7.3 Threat of New Entrants
- * 4.7.4 Threat of Substitute Products and Services
- * 4.7.5 Intensity of Competitive Rivalry

5. Market Size & Growth Forecasts

- * 5.1 By Capacity* 5.1.1 Below 30 MW
- * 5.1.2 30 to 120 MW
- * 5.1.3 Above 120 MW
- * 5.2 By Type* 5.2.1 Combined Cycle
- * 5.2.2 Simple/Open Cycle
- * 5.2.3 Cogeneration/CHP
- * 5.3 By Fuel Type* 5.3.1 Natural Gas
- * 5.3.2 Liquid Fuels (Diesel/Kerosene/LPG)
- * 5.3.3 Other Fuel Types (Hydrogen, Biogas)
- * 5.4 By End-User Industry* 5.4.1 Power
- * 5.4.2 Oil and Gas
- * 5.4.3 Other End-user Industries (Industrial, Marine)
- * 5.5 By Geography* 5.5.1 North America
- * 5.5.1.1 United States
- * 5.5.1.2 Canada
- * 5.5.1.3 Mexico
- * 5.5.2 Europe
- * 5.5.2.1 United Kingdom
- * 5.5.2.2 Germany
- * 5.5.2.3 France
- * 5.5.2.4 Italy
- * 5.5.2.5 Spain
- * 5.5.2.6 Russia
- * 5.5.2.7 Rest of Europe
- * 5.5.3 Asia-Pacific
- * 5.5.3.1 China
- * 5.5.3.2 India
- * 5.5.3.3 Japan
- * 5.5.3.4 South Korea
- * 5.5.3.5 ASEAN Countries
- * 5.5.3.6 Rest of Asia-Pacific
- * 5.5.4 South America
- * 5.5.4.1 Brazil
- * 5.5.4.2 Argentina
- * 5.5.4.3 Chile
- * 5.5.4.4 Rest of South America
- * 5.5.5 Middle East and Africa
- * 5.5.5.1 Saudi Arabia
- * 5.5.5.2 United Arab Emirates
- * 5.5.5.3 South Africa
- * 5.5.5.4 Egypt
- * 5.5.5.5 Rest of Middle East and Africa

6. Competitive Landscape

- * 6.1 Market Concentration

- * 6.2 Strategic Moves (M&A, Partnerships, PPAs)
- * 6.3 Market Share Analysis (Market Rank/Share for key companies)
- * 6.4 Company Profiles (includes Global level Overview, Market level overview, Core Segments, Financials as available, Strategic Information, Products & Services, and Recent Developments)* 6.4.1 General Electric Company
- * 6.4.2 Siemens Energy AG
- * 6.4.3 Mitsubishi Heavy Industries Ltd.
- * 6.4.4 Kawasaki Heavy Industries Ltd.
- * 6.4.5 Ansaldo Energia SpA
- * 6.4.6 MAN Energy Solutions SE
- * 6.4.7 Wartsila Oyj Abp
- * 6.4.8 Rolls-Royce Holdings plc
- * 6.4.9 Solar Turbines Incorporated
- * 6.4.10 Capstone Green Energy Corporation
- * 6.4.11 Doosan Skoda Power
- * 6.4.12 IHI Corporation
- * 6.4.13 Bharat Heavy Electricals Limited
- * 6.4.14 Harbin Electric Co. Ltd.
- * 6.4.15 Shanghai Electric Group Co. Ltd.
- * 6.4.16 OPRA Turbines BV
- * 6.4.17 Baker Hughes Company
- * 6.4.18 Vericor Power Systems LLC
- * 6.4.19 Zorya-Mashproekt
- * 6.4.20 Nanjing Turbine & Electric Machinery Group

7. Market Opportunities & Future Outlook

- * 7.1 White-space & Unmet-Need Assessment

Gas Turbine Market Report Scope and Research Methodology
Market Definition and Coverage
 This market tracks the revenue generated from industrial gas turbines used across major end users worldwide, covering equipment sold for new builds and replacements and the service activity linked to the installed fleet.

Scope exclusions: We exclude aviation-only turbines, microturbines below 1 MW, and non-gas turbine technologies such as steam turbines and wind turbines.

Segments Covered in This Report* By Capacity* Below 30 MW

- * 30 to 120 MW
- * Above 120 MW

- * By Type* Combined Cycle
- * Simple/Open Cycle
- * Cogeneration/CHP

- * By Fuel Type* Natural Gas
- * Liquid Fuels (Diesel/Kerosene/LPG)
- * Other Fuel Types (Hydrogen, Biogas)

- * By End-User Industry* Power
- * Oil and Gas
- * Other End-user Industries (Industrial, Marine)

- * By Geography* North America* United States
- * Canada
- * Mexico

- * Europe* United Kingdom
- * Germany
- * France

- * Italy
- * Spain
- * Russia
- * Rest of Europe
- * Asia-Pacific* China
- * India
- * Japan
- * South Korea
- * ASEAN Countries
- * Rest of Asia-Pacific
- * South America* Brazil
- * Argentina
- * Chile
- * Rest of South America
- * Middle East and Africa* Saudi Arabia
- * United Arab Emirates
- * South Africa
- * Egypt
- * Rest of Middle East and Africa

Data Sources, Market Sizing, and ValidationDesk Research

Desk research was used to build the market map, set realistic ranges, and anchor key demand signals before the model was finalized. We relied on public infrastructure and energy datasets such as those from the International Energy Agency, the US Energy Information Administration, the World Bank, and the UN Comtrade database, which help in understanding electricity demand, fuel trends, and cross-border equipment flows.

To convert those signals into market dollars, we also reviewed company annual reports, investor presentations, and reputable industry and association publications that discuss order pipelines, outages, and fleet additions. Where available, patent databases and shipment-level import and export datasets were referenced to cross-check technology activity and trade intensity by region. These sources are illustrative only, and many other public sources were also used for data collection, validation, and clarification during the work.

Primary Interviews and Surveys

Primary work was used to pressure-test what we saw in public data and to close gaps on pricing, typical project timing, and service attachment patterns. We spoke with a mix of OEM-facing stakeholders, project developers, EPC-side experts, operators, and service ecosystem participants across APAC, EMEA, and the Americas, and we used follow-ups when assumptions moved materially.

Responses were compared across roles so that fleet operators and procurement views could be weighed against supplier-side perspectives, and then the inputs were normalized into a single set of model ranges.

Distribution of primary research fieldwork respondents

Company type | Respondent position | Region |
 Top tier: 38% | CXOs: 14% | APAC: 50% |
 Mid tier: 41% | Functional/Unit leaders: 28% | EMEA: 30% |
 Smaller Players: 21% | Managers: 58% | Americas: 20% |

Market-Sizing & ForecastingSizing was built using a top-down and bottom-up logic, where power and industrial demand indicators were first used to reconstruct the addressable turbine and service spend, and then totals were checked against su

supplier-side and fleet-side approximations. For the top-down build, we connected region-level power additions, gas-fired generation trends, and industrial capacity cycles to expected turbine deployments, and then applied realistic mix and price bands by capacity and cycle.

To keep the model grounded, a selective bottom-up pass was run using sampled unit activity and typical ASP ranges, followed by service revenue estimates tied to the installed base and maintenance intervals. Inputs tracked include planned and announced gas power capacity additions, retirement and replacement rates, combined-cycle versus open-cycle mix, gas price and supply security signals that influence dispatch economics, and the service share tied to outage frequency and long-term service agreements. Forecasts were produced with scenario analysis around new-build timing and replacement cycles, and then smoothed using trend continuity checks so one-off project spikes did not overstate the run-rate.

Data Validation & Update Cycle Outputs were validated by checking whether implied unit volumes, average prices, and service ratios stayed consistent with independent demand signals such as capacity additions and installed-base growth. When a region showed an outlier jump, we rechecked assumptions on project delays, currency conversion timing, and mix shifts, and then we re-contacted sources if the variance stayed unresolved.

Before sign-off, the model goes through a multi-step analyst review where assumptions, math links, and segment totals are reconciled so that add-ups match and year-over-year changes have a clear reason. The report is refreshed annually, and interim updates are made when material events occur, such as policy shifts, large project cancellations, or major changes in gas-to-power economics. Right before delivery, a final review pass is completed so clients receive the most current view available.

Mordor Intelligence's Global Gas Turbine Market Estimate Compared With Other Published Estimates Published market sizes for gas turbines often do not line up because the scope lines are drawn differently, and each publisher selects its own timing for prices, currencies, and what counts as recurring revenue. Even when two estimates use the same label, the included turbine types and the treatment of service can change the total by a noticeable amount.

The main gap comes from whether service revenue and non-industrial turbine demand are counted, and then how quickly pricing assumptions are refreshed when order flow changes. In Mordor Intelligence's model, the total stays tied to industrial gas turbine sales plus MRO linked to the installed fleet, which keeps the number from being inflated by aviation-related demand or adjacent turbine technologies.

Benchmark comparison

Source	Market Size	Gaps in Research Methodology
--------	-------------	------------------------------

Mordor Intelligence	USD 21.11 B (2026)	
---------------------	--------------------	--

Global Consultancy A	USD 24.70 B (2026)	Uses a broader turbine universe that can blend industrial and aeroderivative demand across sectors, and it does not clearly separate equipment-only versus service-inclusive revenue in the stated total.
----------------------	--------------------	---

Industry Publisher B	USD 19.56 B (2024)	Anchors on an earlier base year and applies a lower-growth path, and it provides limited clarity on whether MRO is included, which can pull the starting value down versus service-inclusive totals.
----------------------	--------------------	--

The spread in the table is mainly explained by what is counted and when it is counted, especially around service attachment and turbine type coverage. By keeping the drivers explicit, including installed-base linked service and capacity-driven unit demand, the resulting baseline can be traced back to repeatable inputs and reviewed step by step when conditions change.

Key Questions Answered in the ReportWhat is the current value of the global gas turbine market? It stands at USD 21.11 billion in 2026 and is projected to grow at a 6.44% CAGR to 2031.

Which region leads demand for gas turbines through 2031? Asia-Pacific dominates with 59.5% of 2025 revenue and a 7.3% forecast CAGR.

How fast is the hydrogen-capable turbine segment growing? Alternative fuels, including hydrogen, are expanding at a 16.1% CAGR between 2026 and 2031.

Why are combined-cycle configurations favored? They deliver up to 63% net efficiency, lowering fuel costs and emissions, which drives a 7% CAGR through 2031.

Which capacity bracket is expanding the quickest? Turbines rated 31 to 120 MW show the fastest growth at a 6.8% CAGR due to modular deployment advantages.

Related ReportsGlobal Hermetic Motor IndustryIndustrial Gas Turbine Market Share
Turbines IndustryIndustry Outlook of Wind Turbine ShaftAeroderivative Gas Turbine Market