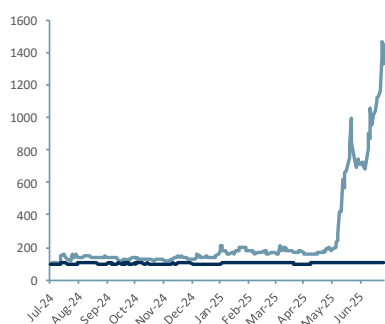


INITIATION

Value Range

GBp 52.3 – 55.0



MAST.L (lighter line) vs. FTSE 350 price relative

Tuesday, 15 July 2025

Intrinsic Price GBp	53.67
Value Range Low	52.33
Value Range High	55.02
Implied MCAP (£m)	116.54
Implied EV (£m)	115.97
Standard List	MAST
Financial YE	31-Dec
Currency	GBP

Business Activity

Utilities Renewable
Energy

Key Metrics

Close Price GBp	55.00
MCAP (£m)	5.86
Net Debt (Cash) (£m)	-0.57
EV (£m)	5.29
52 Wk Hi GBp	75.60
52 Wk Lo GBp	4.40
Key Ratios	
Net Cash /	9.68%
Shareholder Equity %	
FX Rate USD/GBP	0.86

Utility Sector Research

LSE Main Market Index

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Mast Energy Developments

Lights On, Engines Revving

Mast Energy Developments plc (MAST.L, LSE Standard List) is a flexible power generation plant owner, developer and operator targeting >300 MW of new, grid critical, generation for the UK flexible power market by 2030. *We value the first 150 MW.* MAST's refocused cash-first, modular scale-up strategy has monetised Pyebridge, is de-risking Hindlip (£5m Powertree JV) and locking-in attractively priced high-visibility Capacity-Market (CM) cash flows. The UK power grid faces a 10-12 GW flexibility gap by 2030 as wind-and-solar (intermittent generation) penetration accelerates. Small-scale, fast-ramping gas power plants, convertible to H₂ feedstock, are the lowest-cost and lowest carbon emitting solution available at scale, they complement BESS (battery) flexible power and contribute critically to grid stability (BESS cannot).

- Cash-generating – Pyebridge £737k YE24 revs on 10m run-time ;
- Record T-4 CM £65/kW/yr YE27-28 clearing price is new build floor;
- Strategic £5m Hindlip Powertree JV materially derisks capex;
- Competitive moat – CM's index-linked CFs unavailable to batteries;
- Valuation – EV £0.6m/MW vs. 0.3-0.8m/MW private transactions

Our value range is based on the first 150 MW of the medium term project of 300 MW and our price per share value range is based on expected full dilution(Exp D) of 217m shares based on our meta-analysis of warrants typically exercised.

GBp (m)	MCAP	EV	ROIC %	RoE %	NCO	FCF
TTM	5.06	5.01	-55.15%	-139.75%	-1.22	-2.00
Multiples						
	EV/Revs	P/ S	Trail PE	BV/ S	P/ B	Current
TTM	733x	722x	-46.20x	0.00x	55.76x	0.19x

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Investment Case

Summary Metrics (m)	2023A	2024A
Revenue	0.34	0.74
EBTIDA	-3.37	-0.77
EBIT	-3.49	-0.94
EBT	-3.54	-1.10
NI	-3.54	-1.10
EPS (Dil)	-0.02	0.00
FCFE	0.10	4.86

	NoSh	Fully diluted
NoSh (m)	10.66	10.66
Implied price GBp	1093	1093
NoSh (m) expected dilution (Exp D)	156.47	217.13
Implied Exp D intrinsic prices GBp	74.46	53.65

NoSh (m) full theoretical dilution	417.13
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Key Metrics	GBp	adj.
MCAP (m)	5.9	5.9
Net Debt (Cash) (m)	(0.6)	(0.6)
EV (m)	5.3	5.3
52 Wk Hi	75.60	75.60
52 Wk Lo	4.40	4.40
Free Float	92.0%	32.5%
Effective Free Float	91.2%	31.7%
M-Score	N/A	N/A

*Key Metrics FCF adj.	2023A	2024A
CPS (\$)	-0.07	-0.27
CPS (Exp D) (\$)		-0.01
CPS (FD) (\$)		-0.01
P/CPS	-806.2x	-204.4x
P/CPS (Exp D)	NM	-4164.3x
P/CPS (FD)	NM	-8000.1x

Our value range is based on the first 150 MW of the medium term project of 300 MW and our price per share value range is based on expected full dilution(Exp D) of 217m shares based on our meta-analysis of the proportion of warrants typically exercised from warrant packages and our subsequent median estimate of ~20% - see warrant section below).

MAST develops small unobtrusive packets of under-utilised industrial land into distributed, grid critical, 5-10 MW Reciprocating Gas Turbine (RGT) plants (currently using Jenbacher 2.7 MW engines) reaching full load in under thirty seconds. At any one time the engines are monetised against 3 of 4 stacked revenue channels – the Statkraft power-purchase agreement (PPA) with potential uplift from embedded-benefits and the Capacity-Market (CM) and related secondary trading market potential revenues. The diversified revenue stack smooths volatility. The capacity market (CM) payments provide a long-run annuity spine.

The 8.1 MW Pyebridge site is the first within the MAST portfolio to become revenue generating and the two recently refurbished Jenbacher engines (gensets) are generating 5.4 MW, ~£86k pcm or ~£109/MWh, which is around 50% above the 2024 UK day-ahead average power price.

Whilst current CM contracts at Pyebridge are for 12 months because of the refurbishment process, future contracts, we expect, will be for 15 years. Our model scenarios suggest FCF breakeven between 12 MW and 14.6 MW production. Pyebridge is generating at 5.4 MW and there are a further 17.6 MW in the MAST portfolio that could switch on within 12-18 months. We also anticipate the development portfolio will rise by a further 50 MW to 73 MW by 1H26E. MAST is targeting 300 MW of generation mid-term.

Market Opportunity - National Energy System Operator (NESO, formerly National Grid ESO) forecasts UK demand-side flexibility must rise from 2 GW to 10-12 GW by 2030 to achieve a zero-carbon grid by 2035. With RGT capacity projected to double to 15 GW over the same period, the addressable UK market exceeds GBP 5bn of estimated capital investment opportunities.

Differentiation & IP - MAST's Statkraft PPA with real-time trading algorithms optimises dispatch, extracting a 40% price premium vs. the market for MAST.L's Pyebridge plant. Pyebridge's refurbished Jenbacher engines meet The Medium Combustion Plant Directive (MCPD) emissions standards, keeping carbon intensity below 400 g/kWh. Hydrogen/biogas feedstock convertibility extends CM eligibility beyond 2040.

Catalysts

1. Bordesley commissioning & CM registration 4Q25E. **2.** Site acquisition targets of 50 MW by 1H26E. **3.** FCF breakeven during YE26E. **4.** Government CM rule changes favouring hydrogen-capable engines (consultation decision expected 2026).

Operational Strategy

MAST.L will use the same Original Equipment Manufacturer (OEM) Jenbacher turbines and Engineering Procurement and Construction (EPC) for Hindlip and Bordesley.

MAST has a 48 hour service level agreement with Jenbacher and INNIO.

In the UK, G99 refers to Engineering Recommendation G99, a standard set by the Energy Networks Association (ENA) that governs the connection of generation equipment to the distribution network (11 kV to 132 kV). It is critical for all generation projects from 16 A per phase (~3.68 kW) up to 50 MW and includes the rules for sites below 10 MW.

E-methane (electro-methane) or synthetic methane, is produced by combining captured CO₂ with green hydrogen to create methane CH₄ (natural gas). Wind or solar power are used to produce hydrogen through electrolysis.

Capacity market payments create a revenue spine for MAST.L

Management has cut corporate overheads by 19% YE24A vs YE23A and installed ESG-aligned governance under the QCA Code. Hindlip EPC start (4Q25E) and pipeline bolt-ons funded via RiverFort's £4m accordion facility (accordion facilities use the same already agreed and signed lending structure) that can accommodate future capital requirements. Execution of this capital-light roll-up should lead to positive FCF during YE26E and accelerate NAV accretion.

Phase-gate refurbishment: MAST is pursuing both new engine and refurbishment strategies. Engine refurbishment requires lower capex and is a faster route to revenue generation, minimizes downtime and so maintains cash flow continuity/predictability. New gensets by contrast incorporate the most up to date technology, have a longer lifespan, enhanced reliability (lower maintenance costs and better warranties) and potential customizations. MAST aims to self-fund capex from future FCF, thereby avoiding continuous equity dilution.

Cookie-cutter roll-out: Hindlip and Bordesley will broadly replicate the Pyebridge template, whilst capturing learning-curve savings for the control-room architecture.

Supply-chain resilience: Spare-parts from Jenbacher and INNIO are stored in a regional warehouse; critical components are available on a 48-hour SLA.

Grid-connection priority G99 derisks offtake: Sites below 10 MW are fast-tracked under ENA Engineering Recommendation G99; MAST is able to pre-book gas-grid exit capacity (ability to draw gas from the grid) via a regional Gas Distribution Network (GDN) e.g. Cadent, rather than via National Gas (formerly National Grid Gas Transmission) to derisk offtake.

Carbon and ESG: MAST's engines are certified to run on a 25% hydrogen blend, with plans to transition to e-methane where pipeline specification allows, targeting a 40% emissions-intensity reduction by 2030.

Revenue stack: The combination of the Statkraft PPA, embedded benefits, Capacity-Market and potential CM secondary trading payments generate a stable cash yield with upside - Statkraft intraday algorithms capture volatility upside. Capacity-Market payments are index-linked to consumer-price inflation (CPI).

Exhibit 1: Product Pipeline & Milestones

Site	MW	Status	Capacity-Market Contract	Next Catalyst
Pyebridge	8.1	Operating	T-1 2024-25 (£35.8k/MW) + T-1 2025-26 £20k/MW + T-4 2026-27 £63k/MW + T-4 2027-28 (£65k/MW) + T-4 2028-29 (£60k/MW)	3 rd genset live 3Q25E
Hindlip	7.5	FID / Powertree JV	T-1 2025-26 targeted	EPC award 4Q25E
Bordesley	5.0	Shovel-ready	T-4 2025-40 (£30.6k/MW)	Debt or JV funding
Pipeline	300+	Lol stage	N/A	M&A news-2025-26

Sources: ACF Equity Research; Company Reports.

People and systems: Based on industry indicators we infer 3 staff per 100 MW suggesting 9-10 staff for MAST's currently targeted 300 MW portfolio. In due course, we expect MAST to consider automated Supervisory Control & Data Acquisition (SCADA) with improved predictive-maintenance via artificial-intelligence. SCADA +AI may have potential to reduce unplanned downtime between 20-40% year-on-year. Whilst our inferences are based upon the activities and data from Inter Pipeline (Canada) and Siemens global activities, we suggest that SCADA benefits could accrue for operators with anything from 10-50 MW generation capacity.

Shoulder season - In UK flexible power generation, the shoulder season refers to the transitional periods September and early November and March to May between winter and summer, when electricity demand and system stress are typically lower and more variable. Operational focus switches to fewer run hours with higher value dispatch rather than frequent cycling, making the ideal time for planned asset maintenance.

Execution playbook ("refurbish-then-replicate") - MAST standardises every project around a 12-18-month cycle:

(i) Phase-0 due-diligence to ensure grid & gas offers, planning consent and CM pre-qualification;

(ii) Phase-1 refurbishment / commissioning – historically led by Clarke Energy and Cooper Östlund, using Jenbacher J620 turbine engine modules that can be swapped or craned out in <48 hrs; and

(iii) Phase-2 optimisation via software and engine overhauls every 25–30k running hours. Flagship Pyebridge followed this template—two gensets overhauled in 2024, lifting average power prices to £109/MWh (c. 50 % above UK mean) and securing uninterrupted CM cover to 2029. Each overhaul is scheduled for the 3Q shoulder season, minimising lost dispatch revenue.

Asset-level scalability - All sites can theoretically be engineered with expandable balance-of-plant bays: However there are, in practice, grid connection limitations. Bordesley is therefore currently limited to 5 MW. There is a fleet-wide telemetry layer connected through dual-path comms (fibre + Starlink) to reduce the probability of single-point failures.

Supply-chain discipline - EPC & O&M: Currently, **Clarke Energy** delivers turnkey EPC at all UK sites and provides 96% availability guarantees; **Cooper Östlund** supplies mobile service teams for rapid call-outs.

Fuel & Trading: Statkraft has signed 7–15 year "Flex PPAs" for each MAST.L SPV and procures gas through Corona Energy, which is shipped to Pyebridge via Northern Gas Networks' pipes, the local GDN. The advantage for MAST.L is that its relationship with Statkraft unlocks access to aggregated buying power and algorithmic trading.

Financing stack: For MAST.L build capex sits at the SPV level and is funded using a debt : equity ratio 70% debt : 30% equity. Lenders include RiverFort project loans (up to £4m per asset) and Close Brothers term debt. Powertree has committed up to £5m for Hindlip. The Powertree commitment means the Hindlip rollout is fully funded. MAST retains a 25% equity interest in Hindlip at the SPV level.

DSCR – Debt Service Coverage Ratio - a widely recognised lending associated abbreviation – In the UK flexible power market, a DSCR lender covenant is a financial metric used by lenders to ensure that a project generates sufficient cash flow to cover its debt obligations. The DSCR is calculated by dividing the project's net operating income (or FCF) by its total debt service (principal + interest payments).

A DSCR covenant typically requires the project to maintain a minimum DSCR of 1.25x of better. This means the project must generate at least 1.25x the cash flow needed to cover its debt payments (interest + principle), providing a buffer to ensure the project can meet its financial obligations even if revenues fluctuate. In investment research, flavours of this ratio are often used as covenant breach tests are FCFF/ Net Interest payable or EBITDA/ Net Interest payable.

These covenant ratios act as a safeguard for lenders and warning signals for investors, in respect of the financial viability of the project, i.e. does the project remain capable of repaying its debt throughout its lifespan.

Commercial model (“five-way revenue stack”) - Revenue is intentionally diversified:

- Capacity-Market (CM) cash flows (up to 15-yr, index-linked; ~80% capex recovered);
- Secondary trading market potential revenues;
- PPA wholesale power trading via Statkraft’s real-time algorithms;
- Embedded benefits (Triads, GDUoS), which can be significant;
- Optional storage arbitrage / hydrogen premia from future retrofits.

Across the MAST.L fleet of gas peaker generators this currently produces a blended gross-margin profile of 45–55% even under low spark-spread scenarios (Spark spread = Electricity price – (Gas price x Heat rate)), while CM floors protect lender DSCR covenants. Because covenants are underpinned the market should be inclined to reduce the risk adjustment on the MAST.L WACC, thereby positively impacting NPV and so valuation.

Risk-responsive controls – MAST employs redundant internet links, backup gas compressors and has upgraded its CCTV to enhance site resilience against outages and security events (implemented at Pyebridge in 2024). A central control room dispatches assets against live intraday spreads and automatically curtails output during gas-price spikes, reducing exposure to volatile input costs.

Scale roadmap

- **Phase 1** (2025-26): commission Bordesley, complete Hindlip FID, add 30 MW operating capacity.
- **Phase 2** (2026-28): roll up operating sites ≥300 MW, portfolio refinancing.
- **Phase 3** (2028-30): integrate 100 MWh of Battery Energy Storage Systems (BESS) and pilot 20% hydrogen (or 80% biogas) blend, extending CM eligibility beyond 2040.

The combination of repeatable engineering, contract-backed revenues and SPV-level leverage underpins the funding of MAST’s goal of >300 MW of generation while limiting parent-company dilution for shareholders.

Exhibit 2: MAST current portfolio

Projects 4	Total 23 MW
Pyebridge	8.1
Bordesley	5
Hindlip	7.5
Stather	2.4

Sources: ACF Research Estimates; Company Reports

Outlook UK Grid Critical Gas Peaker Market

Fundamental demand drivers after 2025 – Gas peakers remain indispensable

The UK will still need 4-5 GW of new fast-start gas peakers before 2030, provided power projects continue to be designed for low-carbon fuel conversion.

Gas peakers remain strategically critical/indispensable for the foreseeable future and the transition to renewables and batteries on the grid. They are also critical in stabilising the grid and offering peak power for example for energy hungry AI data centres.

Gas peakers remain strategically critical/indispensable for the foreseeable future. For example, gas peakers are pivotal in facilitating the grid's renewable energy transition and are an equally essential strategic complement (and not a competitor) to utility scale batteries. The UK drive to lead the global AI data centre market requires grid consistency that batteries and renewables can only deliver in a cost effective way in combination with gas peakers (already able to use hydrogen and biogas feedstocks).

The UK Government is currently focussed on growing the proportion of renewable energy on the UK electricity grid. The government's target to reach electricity grid carbon net zero by 2035 is a crucial milestone towards the UK's economy wide 2050 target to reduce greenhouse gas emissions to net zero.

According to DESNZ statistics, released March 2025, renewable generation at 50.8% of UK electricity in 2024 is the first time low inertia renewables dominated the generation stack contributing more than 50% of annual UK electricity generation. Wind was the single largest contributor at ~30%.

Gas peakers delivered just 0.1% of annual electricity in 2024. However gas peakers remain **indispensable to the electricity grid** presently and its future development:

- i) for converting sudden loss of in-feed electricity and responding to price spikes;
- ii) filling multi-day energy gaps (multi-day wind lulls) as opposed to the few hours delivered by batteries;
- iii) guaranteeing capacity adequacy at a fraction of the capital cost of building extra wind or battery capacity sized for the same 'once-a-year' event;
- iv) as synchronous machines - reciprocating engines provide grid critical supply inertia, short-circuit current and voltage support that renewables and batteries do not;
- v) acting as insurance against modelling error for renewables on the grid;
- vi) bridge to low carbon molecules (all modern gas peakers are hydrogen and biogas ready);
- vii) black-start and grid restoration (the grid needs a critical number of plants that self-energise without an external supply. Reciprocating-engine peakers (recips) paired with on-site diesel for initial ignition are ideal for this grid critical role.

1) Renewables intermittency: with wind capacity heading for 60 GW by 2030, week-long ‘lulls and slews’ become more frequent; fast-acting gas plant remains the only proven option able to start cold in seconds and sustain multi-day output.

2) Electrification of heat and data-centre load: National Grid’s 2024 Future Energy Scenarios see winter peak demand approaching 70 GW by the early-2030s, or +44.9% vs. ~48.3 GW today. ESOs electricity demand growth forecast is driven by heat pumps, EV chargers and hyperscale data centres (AI).

3) System-operability needs: ESO’s Operability Strategy indicates that synchronous plant providing inertia, voltage and fault-level cover will still be required through the 2030s.

4) Project speed: a <50 MW recip (gas fired reciprocating engines) site can reach operation in under 24 months and can accept active-network-management constraints to connect sooner under the new queue rules. In other words, smaller plants are far faster to get through planning consents and grid connection queues.

5) Policy and economic signals - Capacity-Market reform (April-2025) locks in higher clearing-price caps but tightens decarbonisation rules: combustion plant seeking 15-year contracts from 2026 must be hydrogen-ready or CCS-capable. Our site verification visit and C-suite interviews allowed us to infer that the Pyebridge refurbished gensets meet these criteria.

The Review of Electricity Market Arrangements (REMA) will introduce zonal wholesale pricing before 2028; demand-heavy southern zones lacking flexible plant may therefore see richer spreads. Draft EN-1 (June-2025) proposes CfD-style support for hydrogen-to-power and gas-CCS. Fuel-price volatility remains material, with European LNG prices spiking on Norwegian outages.

6) Residual capacity requirement - Security-of-supply modelling in Future Energy Scenarios (FES) 2024, published by National Grid (ESO) suggests Britain will need 3-5 GW of fast-start thermal capacity on top of existing flexibility by 2030, rising to about 8 GW in severe weather years. Retirements will remove ~1 GW of pre-2000 OCGTs, while only 0.3 GW of new OCGTs currently hold CM contracts.

Synchronous inertia in power grids refers to the kinetic energy stored in the rotating masses of synchronous generators, such as those found in conventional power plants (coal, gas, nuclear, and hydropower). This stored energy provides an automatic and instantaneous response to changes in grid frequency, helping to stabilize the power system.

When there's an imbalance between power supply and demand, the rotating masses of these generators either speed up or slow down, absorbing or releasing energy to counteract the imbalance.

With the increasing integration of renewable energy sources, which typically do not provide synchronous inertia, maintaining grid stability has become more challenging.

For the UK power market, the de-rated margin is a measure used to assess the reliability and adequacy of electricity supply. It represents the amount of excess supply above the forecast peak demand, adjusted to reflect the expected availability of different types of power generation. For example, renewable sources like wind and solar might have lower availability factors compared to conventional sources like gas or nuclear.

The de-rated margin measure helps ensure that there is enough capacity to meet peak demand, even under adverse conditions. It is a critical metric for maintaining the security of electricity supply.

Where the market stands in mid-2025 - At the end of 2024 the fast-start gas fleet (OCGTs and distribution-connected reciprocating (recip) engines (MAST.L market)) amounted to just under 8 GW. National Grid ESO's non-Balancing-Mechanism dataset shows about 5.5 GW of active gas recip, while a separate transmission-level listing adds roughly 2.1 GW of OCGT/recip capacity.

The recip and OCGT units typically run only a few hundred hours a year yet underpin winter adequacy margins. The June-2025 Seasonal Outlook counted on gas peakers, batteries and interconnectors to deliver a 6.6 GW de-rated margin for the coming winter.

New build continues at a trickle: the March-2025 T-4 Capacity-Market auction (delivery 2028/29) cleared at £60/kW-yr but only 240 MW of fresh OCGT capacity secured 15-year contracts, versus 1.8 GW of batteries.

Planning consents nevertheless remain live for larger schemes such as the 620 MW Thurrock Flexible Generation project, which may proceed once grid-connection and tolling terms are established.

Strategic conclusions

Approximately 4 GW to be financed, consented and connected before winter 2030/31. Longer term, 5-7 GW of gas-CCS or 100 %-hydrogen peakers remain in the 2035 clean-power pathways.

- Deal structures are shifting from pure merchant to hybrid tolling; the same model emerging for peakers offers fixed fuel-plus-dispatch services to large power buyers.
- The technology mix will bifurcate: <50 MW reciprocating-engine clusters for distribution grids, and 150-400 MW OCGTs at transmission nodes where synchronous inertia is scarce, sold as 'hydrogen-ready'.
- Financial discipline matters: assuming 8-9 % real WACC, a 15-year CM strip at £55-65/kW-yr still delivers low-teens IRRs for sub-£500/kW recip projects if the hydrogen retrofit is priced in.

Reciprocating Gas Turbines – Why Invest

A gas fired reciprocating engine (also called a piston engine) uses pistons that move up and down inside cylinders. This motion is converted into rotational energy via a crankshaft (similar to a car engine)

- Gas combustion occurs within the cylinder.
- The piston compresses the air-fuel mixture, ignites it, and the explosion pushes the piston down.
- This up-and-down motion is referred to as reciprocating motion.

OCGT - open cycle gas turbine is a type of continuous combustion engine.

- Air is compressed by a compressor.
- Fuel is injected and combusted in a combustion chamber.
- The hot gases expand through a turbine, spinning it to generate power.
- The exhaust gases are released directly into the atmosphere (hence “open cycle”).

Lower Heating Value (LHV) measures the efficiency of fuel conversion in power generation systems. LHV represents the amount of heat released by a unit of fuel when it is completely combusted, excluding the latent heat of vaporization of water

Recip projects (industry shorthand for gas-fired reciprocating-engine power projects) are small- to mid-scale generating plants that use multiple high-speed internal-combustion engines—*large versions of marine or locomotive engines*—optimised to run on natural gas or, increasingly, hydrogen blends or biogas. Within the UK flexible-power gas market recip gas turbines complement open-cycle gas turbines (OCGTs) and batteries by providing ultra-fast start-up, high cycling capability and synchronous grid services.

How they work

- **Technology:** Each Jenbacher engine module in MAST’s case, is a spark-ignition or lean-burn four-stroke reciprocating (piston) engine. Other gas fired reciprocating engine OEMs in the 2MW to 20MW range include **MTU** (A Rolls-Royce (RR.L) brand) **Wärtsilä’s** (WRT1V.HE) **34SG and 50DF** and **Siemens** (SIE.DE) **E-series**.
- **Configuration:** Sites often aggregate several ~2.5–20 MW engines into total capacities of 5–100 MW, new and refurb installs increasingly use containerised packages for rapid installation.
- **Start-up and ramping:** Hot starts occur in tens of seconds; cold starts in two to three minutes, with full load achievable in under 30 seconds.
- **Efficiency window:** Gas fired reciprocating engines electrical efficiency is roughly 43% (LHV) at full load—higher than small open cycle gas turbines (OCGTs) and resilient at part-load.

Exhibit 3: Why developers choose reciprocating (recip) engines

Attribute	Benefit in UK context
Modularity & speed to build	<50 MW sites progress from planning to operation in 12–18 months and can connect at distribution voltage <132kV, bypassing the transmission connection queue, that is currently several years long.
Low minimum stable load	Engines can idle at 10–15% output, allowing plants to track Balancing Mechanism instructions without shutting down.
Rapid cycling capability	Hundreds of start-stop cycles per year with limited maintenance penalties—ideal for frequency response and price-spike capture.
Black-start & islanding	Synchronous generators supply inertia and can self-energise a dead grid, valuable for ESO restoration services.
Scalable CAPEX	All-in capital cost around £850–660/kW remains economic at sub-50 MW scale where turbine economics weaken.
Fuel flexibility	Modern engines accept up to 25% hydrogen blends today and can be converted to 100% hydrogen (or biogas), satisfying future CM decarbonisation rules.

Sources: ACF Equity Research

Typical revenue stacks in the UK reserve power market

1. Capacity Market (CM) – In the UK the primary auctions are the T minus 1 (T-1), held one year ahead of the required delivery year and T minus 4 (T-4) auctions, held four years ahead of the required delivery year. In the UK the T-4 contract duration is up to 15-years. T-1 contract durations are more typically for 12 months.

The UK auction and contract structure is designed to encourage smaller participants, such as MAST.L, into the market. The CM contracts provide a fixed £/kW revenue floor for providers and guaranteed capacity if and when needed for the grid.

Investors should note that MAST's Pyebridge site does not currently have a 15-year CM contract. This is because MAST has deployed a genset refurbishment strategy. Nevertheless MAST's Pyebridge development has secured revenues out to 2029 totalling ~£1.728m gross profit. There is a reasonable expectation that the next auction will lead to a 15 year contract for MAST's Pyebridge site.

2. Balancing Mechanism (BM) / Balancing Reserve Market (BR) – Acceptance of offers to pay for generation during tight demand periods that can yield high £/MWh spreads for those that respond to the offers.

In practice, BM/BR calls come in throughout the day and require short engine runs, i.e. a lot of start-up calls for the engines. Engines tend to be less well suited to this type of usage when compared with batteries.

Investors should note that MAST has withdrawn from the UK BM/BR market to reduce thermal and mechanical plant wear and increase longevity of the gensets. MAST is not the only UK flexible power market generator to have made this decision for longevity reasons.

3. Ancillary and reserve products – Fast start enables participation in Dynamic Moderation/Regulation and future Standard Balancing Reserve auctions.

4. Wholesale and imbalance trading – Operators dispatch against day-ahead and intraday price volatility.

Project examples

- Creyke Beck, East Riding (49.9 MW) – six Wärtsilä 20V34SG engines developed by Statera Energy, co-located with a 150 MW battery.
- Burwell, Cambridgeshire (50 MW) – Clarke Energy EPC using Jenbacher engines; distribution-connected to manage East Anglia constraints.
- Centrica Kings Lynn Peaking Plant (32 MW) – MTU gas engines offering Balancing Mechanism and ESO restoration services.

Role in the future mix

ESO, The National Grid Electricity System Operator, responsible for balancing real-time supply and demand and maintaining grid stability in the UK, has published security-of-supply modelling. ESO's security of supply modelling retains 2–4 GW of fast-start thermal capacity into the early 2030s to cover multi-day wind lulls and supply synchronous services.

Recip projects, because of their modularity, robust cycling characteristics and hydrogen/biogas-conversion pathway, are expected to deliver a significant share of that requirement, particularly at distribution nodes where larger turbines are impractical.

Management Team

➤ CEO & Executive Director, Pieter Krügel.



CEO Pieter Krügel brings fifteen years of energy-finance and project-development experience, having previously held a range of executive positions in public (including wealth management) and private companies. A chartered accountant with IFRS and debt-structuring expertise, he led MED's 2021 IPO and the more recent funding rounds including the critical GBP 4m RiverFort facility, thereby steering MAST.L through its 2023 turnaround. Pieter negotiated the Statkraft PPA and record price Capacity

Market (CM) contracts. Under Pieter's leadership Gross Margins rose 6pp to 40% YE24 and underlying cash operational costs fell >42% against rising Pyebridge revenues, up 116%. Pieter is an accounting graduate from the University of Johannesburg, South Africa, and member of a range of professional bodies including the ICAEW.

➤ Head of Finance, Tanya Zwemstra.



Tanya Zwemstra is the financial manager at Mast Energy Developments (MED). Tanya gained over 18 years of experience at KPMG, in both private and public client financial management and counsel across a range of industries including mining, healthcare, transport, education and entertainment. Tanya has sophisticated relevant international project management and asset allocation experience. Tanya has provided services to large NGOs, government agencies and foundations in which she assessed the

financial planning, operational and procedure audits of potential grant recipients. Tanya is a chartered accountant registered with the South African Institute of Chartered Accountants (SAICA).

➤ Head of Operations, Ivan Wentzel.



Ivan is responsible for the operational planning and profit maximisation of MAST's power generation engines at Pyebridge and its shovel ready sites (not yet power producing). Ivan has worked as a Project Engineer at various well-known and respected global engineering project houses and consultancy firms. In 2015, Ivan founded his first company, which was focused on industrial automation and project engineering and sold in 2017. In 2017, Ivan co-founded an IoT business, selling his stake in 2022. In 2019, he

co-founded a project engineering company based in Mauritius but closed it in 2020 due to COVID-19. Ivan holds a B.Eng. (Electrical & Electronic) from the University of Johannesburg, South Africa and has been registered with the Engineering Council of South Africa (ECSA) since 2010.

Risks

Risk	Impact	Probability	Mitigation
Regulatory changes and tighter emissions rules	Revenue loss or higher capital cost	Medium	Active consultations and hydrogen/biogas-ready retrofits
Funding constraints or dilution	Project delays	Medium	RiverFort accordion, Powertree equity and asset-level debt, FCF project funding. Huge warrant packages rarely exercised >20% (ACF meta-analysis).
Gas and carbon-price volatility	Margin squeeze	Medium-Low	Fuel-cost pass-through and optional hydrogen blending
Battery storage cannibalisation	Cashflow variability	Low	Dual-fuel capability and standby Balancing-Mechanism fees / reserve power market still needed
Engine failure or outage	Earnings disruption	Medium	Predictive maintenance and OEM long-term service agreements, exercise revenue protection clauses
Community or planning opposition	Permit delays	Low	ISO 14001 compliance, local benefit funds and transparent ESG reporting

Valuation

Exhibit 4: Mast Energy Development Cash Flow Model

MAST - Cash Flow Model															
in £m	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E	2035E	2036E	2037E	2038E	
Capacity Assumption (MW)	150														
Revenue Capacity Market	4.50	6.75	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	
Revenue StattKraft	11.34	17.61	36.45	37.73	39.05	40.42	41.83	43.29	44.81	46.38	48.00	49.68	51.42	53.22	
Cost of Sales	8.41	12.80	25.99	26.38	26.77	27.18	27.58	28.00	28.42	28.84	29.28	29.72	30.16	30.61	
Operating Cost	1.21	1.22	1.24	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.40	1.42	1.44	1.46	
Net Ip	1.21	1.22	1.24	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.40	1.42	1.44	1.46	
Working Capital	0.28	0.44	0.91	0.94	0.98	1.01	1.05	1.08	1.12	1.16	1.20	1.24	1.29	1.33	
Capex	35.60	35.60	35.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cash flow pre-tax	-29.91	-25.96	-14.04	22.40	23.27	24.18	25.38	26.38	27.41	28.50	29.63	30.80	32.03	33.31	
Taxes	0.00	0.00	0.00	-4.48	-4.65	-4.84	-5.08	-5.28	-5.48	-5.70	-5.93	-6.16	-6.41	-6.66	
Cash flow after-tax	-29.91	-25.96	-14.04	17.92	18.62	19.34	20.31	21.10	21.93	22.80	23.70	24.64	25.63	26.65	
FCF Margin %	NM	NM	NM	35.0%	35.4%	35.9%	36.7%	37.2%	37.6%	38.1%	38.5%	39.0%	39.5%	39.9%	
NPV	-27.23	-21.52	-10.60	12.31	11.64	11.02	10.53	9.96	9.42	8.92	8.44	7.99	7.57	7.16	
Total NPV 5-Yr DCF + TV £m	116														

Exhibit 5: Mast Energy Development WACC, DCF and Value Range

WACC Calc

Pre-tax cost of debt	-2.6%
ETR	20.0%
After-tax cost of debt	-2.1%
Current Leverage	78.1%
Debt/(Cash)	4.6
Equity	5.9
Target Leverage	23.9%
D / (D+E)	19.3%

ACF β adj levered	2.00
rf	0.57%
ERP	5.5%
Cost of equity	11.6%
Risk adj.	0.9%
WACC	9.84%

Note: Successful execution of projects and raises my reduce WACC.

Valuation Range

Projects 150 MW	NPV (£m)	WACC	Risk Adj.	Stake (%)	MAST Share (£m)	
MAST NPV 5-Yr + TV	116.0	9.84%	0.9%	100.00%	116.0	
Total NPV FCF (£m)					116.0	
Net Debt/(Cash)					-0.6	
Fair Value (£m)					116.5	
NoSh (m)					11	
NoSh (diluted) (m)					217	
Intrinsic Value Per Share GBp					53.67	
Close Price GBp					55.00	
VR (low - high)					52.33	55.02
VR Spread					5.00%	
Implied VR Return (low - high)					-4.9%	0.0%

Note: implied value range in this ACF research note is based upon diluted shares in issue at the date of this note.

Warrants – The General Failure to Exercise

The generalised growing insistence by investors on large warrant packages—followed by frequent failure to exercise those warrants (we estimate that a median of 20% of warrants in a warrant package are exercised) —can be explained by a confluence of behavioural, structural, and financial factors that we describe below:

ACF meta-analysis and fundamental analysis of warrant packages. Our analysis suggests that median execution of warrant packages is 22% of warrants issued. We see this trend deteriorating as warrant packages rapidly get richer (increase in size). We forecast median warrant execution at ~20% of total warrants issued. In the case of MAST this suggests around 50m new shares and £2m additional investment inflow from warrants over and above the 125m pre-paid warrants that are treated as extant equity in most scenarios rather than balance sheet liabilities.

1. Perceived upside without immediate capital commitment - Warrants are provide investors with “free optionality.” They offer the right but not the obligation to buy more shares at a fixed price, usually at a premium. This structure appeals to **i)** investors who want upside exposure without deploying more capital immediately; **ii)** risk-averse funds seeking exposure with capped downside. *If the share price doesn’t exceed the strike price meaningfully (accounting for opportunity cost or illiquidity), the warrants lapse.*

2. Short-term dilution aversion - Investors negotiate warrant coverage to compensate for near-term dilution from capital raises. However, many investors then avoid exercising these warrants because **i)** exercising the warrants adds further capital exposure; **ii)** the underlying share price underperforms / does not accelerate; **iii)** the original investment thesis or management execution deteriorates post-placement.

3. Poorly designed strike prices and timeframes - Many warrants **i)** have strike prices that are too high relative to realistic valuation scenarios; **ii)** expire too soon (18–24 months) before the company issuer delivers material catalysts; **iii)** lack anti-dilution protections, making them less valuable if further equity is raised below the strike. *Inevitable misalignments between warrant terms and future market conditions leads to a high rate of unexercised warrants.*

4. Fundamental follow-through - Investors may insist on warrants to protect downside or to enhance potential IRRs—but then fail to continue supporting the company fundamentally by **i)** declining to engage in follow-on buying; **ii)** limited continued management engagement; **iii)** no or little effort to support broader capital markets visibility. *Weak secondary market support because of poor fundamental follow through softens the share price, thereby reducing the warrant’s intrinsic value and so probability it will be exercised.*

5. Portfolio accounting and risk metrics - Some funds treat warrants as **i)** “Free” additions with no cost basis on the balance sheet; **ii)** as tools to enhance or inflate IRR via mark-to-models; **iii)** portfolio managers are restricted from exercising warrants unless portfolio weightings and liquidity thresholds are met. *This institutional inertia causes many warrants to expire despite being modestly in the money.*

Summary - Warrant packages are often negotiated as psychological or structural “sweeteners,” but rarely remain aligned with the capital deployment incentives of the investor post-transaction. ***Unless the core equity story accelerates dramatically, warrant execution rates tend to remain low, we estimate a median of 20% —even among the original backers who demanded them.***

Investment Conclusions

We have valued the first half of the medium term project target of MAST's 300 MW portfolio, i.e. the first 150 MW.

The recent 40:1 consolidation followed by the £5m equity raise and warrant package analysis lead us to expect full dilution of ~217m shares vs. full theoretical warrant based dilution of 417m shares. Our expected full dilution of 217m shares is based on an ACF meta-analysis (we reviewed currently available academic research) and ACF's own experience of warrant packages.

This analysis suggests that median execution of warrant packages is 22% of warrants issued. We see this trend deteriorating as warrant packages rapidly get richer (increase in size). We forecast median warrant execution at ~20% of total warrants issued.

Key investment take-aways

- Flexible power market reciprocal engine sub-segment is critical to UK grid strategy
- Reciprocating gas turbines are critical for renewable and battery grid conversion.
- Grid energy demand is rising aggressively (note expected growth in AI demand).
- Pyebridge cash flow validates the MAST model and could fund organic growth.
- Record Capacity-Market prices secure index-linked annuity streams.
- Hindlip joint-venture accelerates portfolio expansion without shareholder dilution.
- Hydrogen/Biogass-ready assets and ESG compliance future-proof exit multiples.
- Market valuation at £0.77m per MW of our forecast 150 MW by 2028E versus £0.35-0.80m per MW private transactions implies significant re-rating potential.

Investment conclusions – MAST.L provides investors with leveraged exposure to UK flexible-power infrastructure at a point when contracted cash flow is about to inflect upwards. **Catalyst path:** Upcoming milestones—Hindlip EPC launch and further acquisitions—should compress MAST.Ls valuation discount. **Valuation and upside:** Applying an FCF terminal valuation (TV) multiple of 14x to a funded 150 MW (50% of the current MAST programme) implies an EV and equity value of at least £116m (MAST is effectively debt free at the date of this note).

Strategic relevance and M&A exit: Consolidators of flexible power capacity are actively sourcing hydrogen-ready assets; MED's cluster of permitted sub-ten-megawatt sites is therefore a potentially attractive bolt-on for larger platforms.

Exhibit 6: Valuation & Peer Snapshot

Peer / Deal	Geography	MW	EV (£m)	EV/MW (£m)	EV/EBITDA
Capital Power PJM deal	USA	2200	1766	0.80	7x
MAST current	UK	150	116	0.77	N/A
West Burton B TotalEnergies	UK	1300	450	0.35	N/A

Sources: ACF Estimates

Exhibit 7: Valuation Scenario Analysis - Bear Base Bull

Scenario MAST.L MW build out rate	2028E MW online	Group FCF 2029E (£m)	EV/MW (£m)	DCF FV Intrinsic p/s (GBp)
Bear slow build	23	2.15	0.37	0.91
Base	150	18.61	0.77	53.67
Bull JV ramp	200	25.23	0.79	73.70

Sources: ACF Estimates

Financial Metrics Historical

MAST.L Financial Metrics H	2021	2022	2023	2024	TTM	2Q23	3Q23	4Q23	1Q24	2Q24
Capital & Debt										
Debt Ratio	49.5%	54.2%	114.8%	130.7%	130.7%	114.8%	114.8%	115.8%	115.8%	130.7%
Debt to Equity	66.5%	103.0%	-525.9%	-369.8%	-369.8%	-525.9%	-525.9%	-362.1%	-362.1%	-369.8%
Short Term Debt / Equity	59.0%	75.1%	-337.5%	-159.1%	-159.1%	-337.5%	-337.5%	-290.7%	-290.7%	-159.1%
LT Debt /Equity	7.5%	27.9%	-188.4%	-210.7%	-210.7%	-188.4%	-188.4%	-71.4%	-71.4%	-210.7%
Debt <=1yr/ Gross Debt	88.7%	72.9%	64.2%	43.0%	43.0%	64.2%	64.2%	80.3%	80.3%	43.0%
Debt>1yr/Gross Debt	11.3%	27.1%	35.8%	57.0%	57.0%	35.8%	35.8%	19.7%	19.7%	57.0%
Debt>1yr/Net Inv. Capital	53.6%	595.5%	-29.8%	-299.5%	-299.5%	44.2%	-29.8%	32.7%	-14.4%	-299.5%
Assets/Equity	198.2%	218.1%	-676.6%	-326.0%	-326.0%	-676.6%	-676.6%	-632.1%	-632.1%	-326.0%
NCO/Gross Debt	-29.7%	-58.9%	-36.0%	-26.9%	-26.7%	-5.8%	-12.2%	-11.9%	-17.7%	-8.0%
SR Liquidity										
Quick	0.6x	0.2x	0.1x	0.2x	0.2x	0.1x	0.1x	0.2x	0.2x	0.2x
C&CE/ Current Liabs	0.5x	0.1x	0.0x	0.1x	0.1x	0.0x	0.0x	0.1x	0.1x	0.1x
NCO / Total Current Liabs	-0.2x	-0.7x	-0.3x	-0.5x	-0.5x	-0.1x	-0.1x	-0.1x	-0.1x	-0.1x
TCA/ Avg. Daily Costs	5.6x	0.2x	0.1x	0.4x	-1.2x	0.1x	-0.1x	-0.5x	0.6x	0.8x
Turnover x										
Avg. Inventories/Revs	-28.0x	-0.2x	-0.2x	0.0x	0.0x	0.0x	-0.6x	-0.6x	0.0x	0.0x
Revs/TA	0.0x	0.2x	0.1x	0.2x	0.0x	0.0x	0.0x	0.0x	0.1x	0.1x
Revs/LTA	0.0x	0.2x	0.1x	0.2x	0.0x	0.0x	0.0x	0.0x	0.1x	0.1x
Revs/WCAP	0.0x	-0.7x	-0.2x	-0.3x	0.0x	0.0x	0.0x	0.0x	-0.1x	-0.1x
Margins										
EBIT M%	-24598.8%	-138.2%	-1023.1%	-127.5%	-127.5%	-1881.3%	-228.4%	-228.4%	-89.4%	-89.4%
Levered FCF M%	-1501.4%	253.0%	28.1%	659.7%	0.0%	0.0%	23.7%	45.2%	0.0%	938.9%
Unlevered FCF M%	-84970.3%	-489.2%	-205.9%	-392.7%	0.0%	0.0%	-146.5%	-1229.2%	-91.1%	-485.9%
NCO M%	-23411.2%	-123.9%	-213.1%	-167.0%	-166.0%	-163.9%	-243.8%	-243.8%	-136.6%	-136.6%
NI M%	-40438.9%	-387.9%	-1037.3%	-148.8%	-149.0%	-1937.1%	-243.3%	-243.3%	-113.3%	-113.3%
EBT M%	-43419.4%	-263.6%	-1037.3%	-148.8%	-149.0%	-1937.1%	-243.3%	-243.3%	-113.3%	-113.3%
EBIAT M%	-21618.2%	-262.5%	-1023.1%	-127.5%	-132.9%	-1881.3%	-267.8%	-228.4%	-89.4%	-89.4%
EBITDA M%	-41689.2%	-247.8%	-989.1%	-105.0%	-99.3%	-367.7%	-174.0%	-174.0%	-71.0%	-71.0%
SGA M%	23641.0%	88.9%	276.1%	103.7%	103.7%	328.7%	154.6%	154.6%	84.5%	84.5%
GP M%	-957.7%	24.9%	34.4%	40.1%	-6.1%	-52.6%	-34.0%	-34.0%	4.5%	4.5%
Returns										
RoA	-17.2%	-87.1%	-136.0%	-27.2%	-27.2%	-53.2%	-9.5%	-6.8%	-8.4%	-7.5%
RoE	-34.1%	-190.0%	920.5%	88.6%	88.7%	359.6%	64.0%	43.1%	53.1%	24.5%
RoIC	-130.1%	-2748.0%	143.8%	107.9%	112.5%	-82.0%	11.2%	-18.6%	8.5%	27.4%
CRoIC	-475.5%	-1720.0%	29.9%	329.2%	229.7%	-7.1%	10.2%	-19.8%	26.7%	86.5%
RoCE	-19.3%	-52.9%	-1027.3%	-68.6%	-68.6%	-395.2%	-68.0%	-20.6%	-21.3%	-17.4%
GP/Total Assets	-0.4%	5.6%	4.5%	7.3%	-1.1%	-1.4%	-1.3%	-1.0%	0.3%	0.3%
Efficiency										
Inventory days	-1933.9	-64.1	0.0	0.0	0.0	0.0	-330.3	0.0	0.0	0.0
DPO	2759.8	140.8	1535.6	575.4	324.8	3155.1	2535.8	1670.0	885.9	994.3
Cash Cycle	-4693.7	-204.9	-1535.6	-394.9	-144.4	-3155.1	-2866.1	-1194.6	-706.1	-496.9
Price										
P/B	374.2x	175.6x	-335.0x	-48.1x	-15128x	-35020x	-49294x	-33191x	-32804x	-15128x
P/TBV	294.9x	131.7x	58.4x	14.7x	4641x	6110x	8601x	5901x	5832x	4641x
P/NCAV		131.7x	58.4x	14.7x	4641x	6110x	8601x	5901x	5832x	4641x
P/NCO	-1896.1x	-289.4x	-177.1x	-48.3x	-15311x	-115083x	-76876x	-76876x	-51294x	-51294x
P/FCF	-561.8x	-218.2x	-177.1x	-20.8x	-9362x	-115083x	-76876x	-76876x	-24849x	-24849x
EV										
EV/Sales		360.5x	383.4x	86.8x	25419x	188662x	187444x	187442x	70050x	70060x
EV/EBITDA	-1065.3x	-145.5x	-38.8x	-82.6x	-25598x	-51309x	-107705x	-107704x	-98605x	-98618x
EV/EBIT	-1805.5x	-260.9x	-37.5x	-68.0x	-19934x	-10028x	-82061x	-82060x	-78389x	-78400x
EV/FCF	-562.0x	-219.4x	-179.9x	-22.3x	-9365x	-115100x	-76884x	-76883x	-24851x	-24855x
FCF										
EV/FCF	-56204.8%	-21943.4%	-17990.8%	-2230.2%	-9365x	-115100x	-76884x	-76883x	-24851x	-24855x
uFCF/EV	-0.2%	-1.4%	-0.5%	-4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
IFCF/MCAP	0.0%	0.7%	0.1%	8.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Sources: Refinitiv

Notes [Intentionally Blank]

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