

# 2022

# Full Year Results

23 February 2023

drax

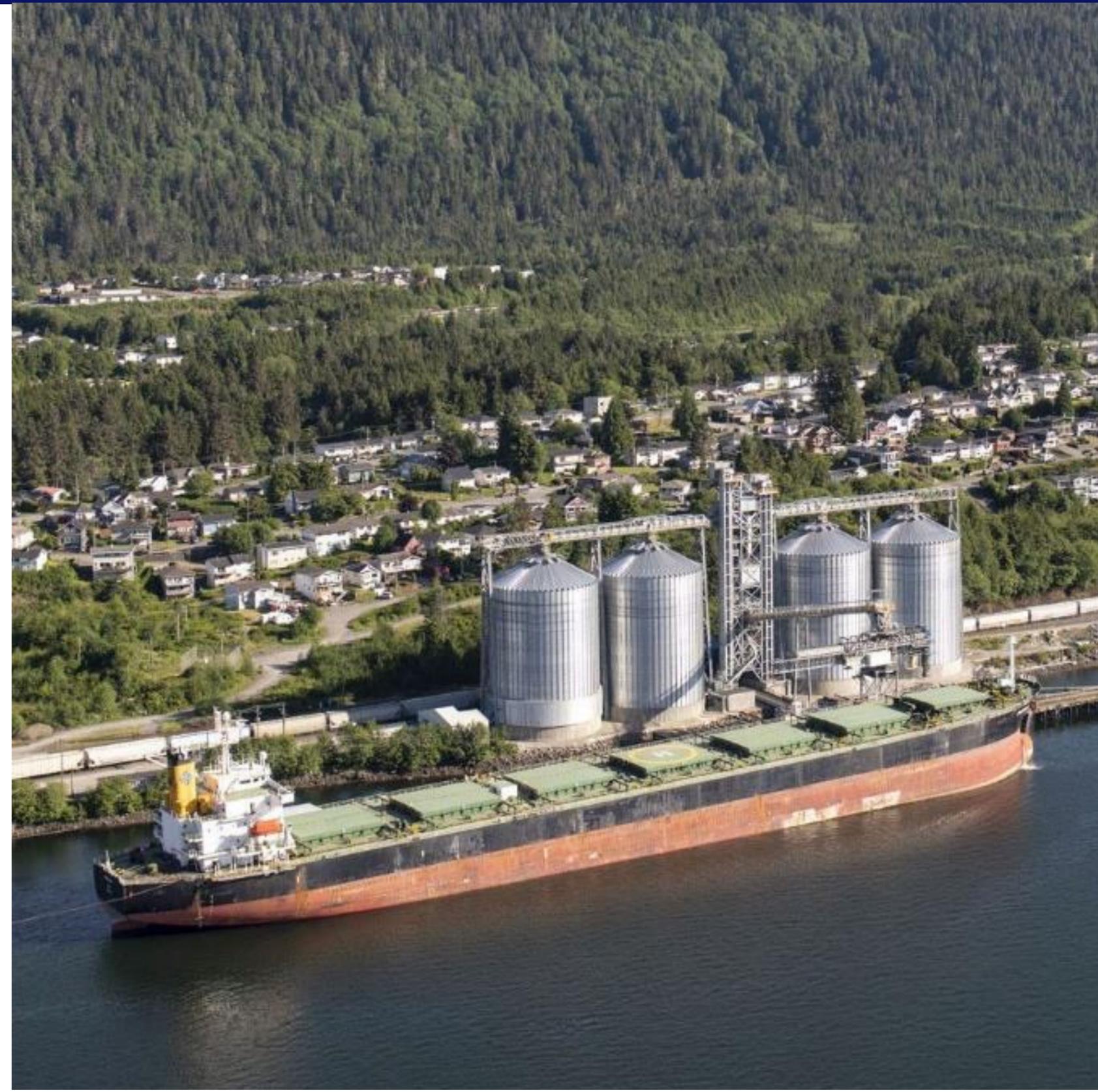
## Presenters



**Will Gardiner**  
Chief Executive Officer



**Andy Skelton**  
Chief Financial Officer



## Agenda

- **Future Positive**
- **Operational Review**
- **Financial Review**
- **Strategy Update**



## Forward Looking Statements

This presentation may contain certain statements, expectations, statistics, projections and other information that are or may be forward-looking. The accuracy and completeness of all such statements, including, without limitation, statements regarding the future financial position, strategy, projected costs, plans, beliefs and objectives for the management of future operations of Drax Group plc (“Drax”) and its subsidiaries (the “Group”), are not warranted or guaranteed. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that may occur in the future. Although Drax believes that the statements, expectations, statistics and projections and other information reflected in such statements are reasonable, they reflect the Company’s current view and no assurance can be given that they will prove to be correct. Such events and statements involve risks and uncertainties. Actual results and outcomes may differ materially from those expressed or implied by those forward-looking statements. There are a number of factors, many of which are beyond the control of the Group, which could cause actual results and developments to differ materially from those expressed or implied by such forward-looking statements. These include, but are not limited to, factors such as: future revenues being lower than expected; increasing competitive pressures in the industry; uncertainty as to future investment and support achieved in enabling the realisation of strategic aims and objectives; and/or general economic conditions or conditions affecting the relevant industry, both domestically and internationally, being less favourable than expected including the impact of prevailing economic and political uncertainty. We do not intend to publicly update or revise these projections or other forward-looking statements to reflect events or circumstances after the date hereof, and we do not assume any responsibility for doing so.

## Our Purpose

Enabling a zero carbon, lower cost energy future

## Our People

Are valued members of a winning team with a worthwhile mission

## Our Ambition

To be a carbon negative company by 2030

## 2022 Highlights

Strong financial and generation performance, progressing strategy to develop global opportunities for carbon removals

### Strong financial performance

- 84% increase in Adjusted EBITDA
- Leverage reduced to 1.6x Net debt to Adjusted EBITDA
- 11.7% increase in dividend

### Optimisation of biomass supply chain and generation to create value for Group

- Security of supply, system support, and renewable power generation
- Strong pumped storage and hydro performance
- >99% of generation from renewables – biomass, hydro and pumped storage

### Progressing strategy

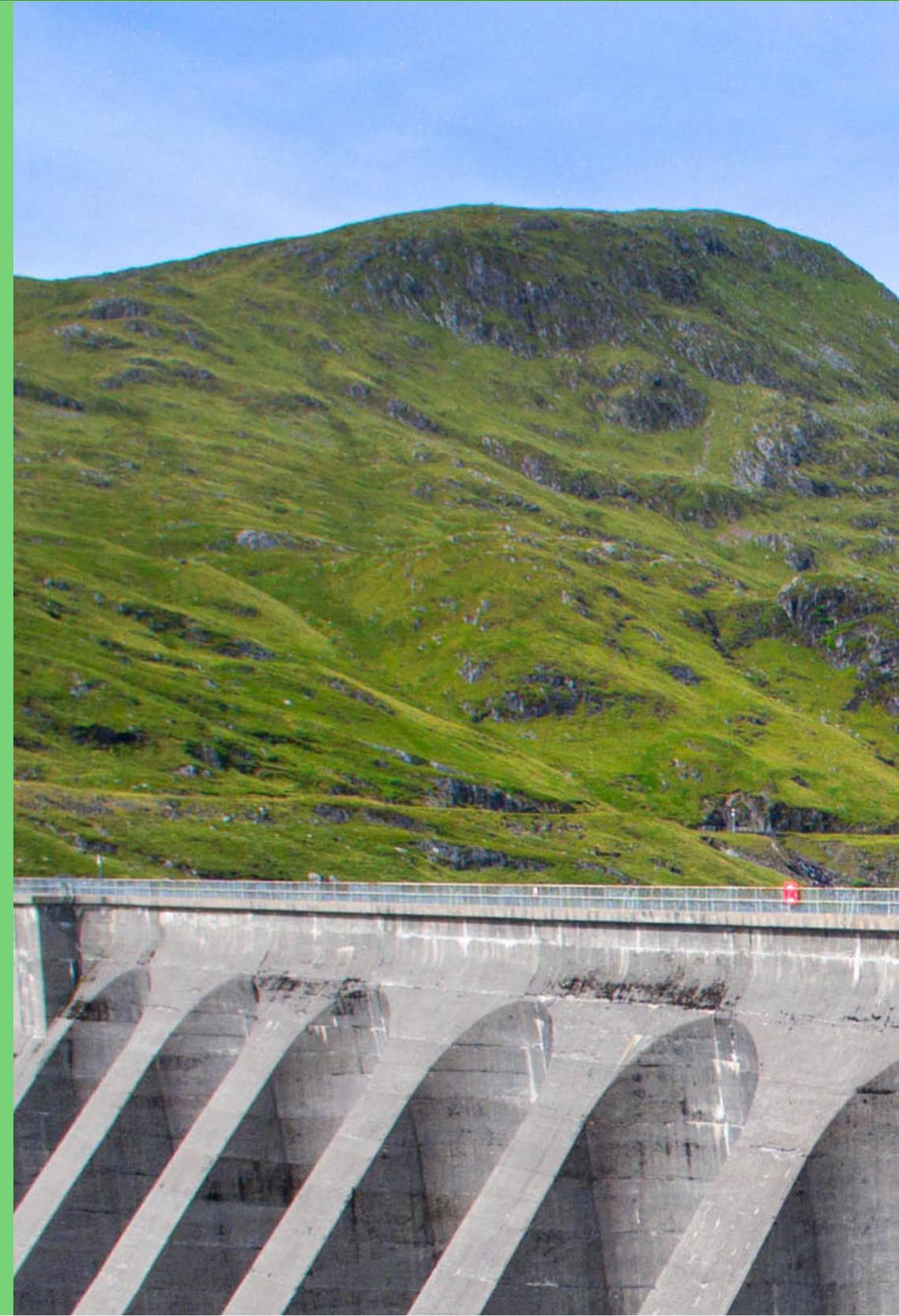
- US policy development supportive of BECCS
- Growing project pipeline for US BECCS

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# Future Positive

The need for urgent action to address climate change is widely recognised and the role which sustainable biomass can play is becoming increasingly appreciated

By investing in positive climate, nature and people outcomes, Drax aims to deliver a wider range of ESG goals



## Future Positive

Investing in climate, nature and people positive outcomes

### Climate Positive



- >99% of generation from renewables<sup>(1)</sup>
- >95% of Adjusted EBITDA from renewables<sup>(1)</sup>
- >90% of capital investment 2023-2030 expected to be in renewable<sup>(1)</sup> projects
- Exiting gas sales in Customers SME business
- Forum for the Future – independent recommendations for BECCS

### Nature Positive



- Regulation, third-party verification and strong internal policies supporting the use of sustainable biomass
- Development of Nature Positive framework

### People Positive



- Launch of Drax Foundation to deliver initiatives that support education and skills development in STEM, and support Climate Positive, Nature Positive, and People Positive outcomes for our local communities

### ESG credentials



## Sustainable Biomass Sourcing

A highly regulated and sustainable source of renewable energy

### UK Government policy covers all sustainable biomass used in UK

- ROC and CfD contingent on compliance with Land and GHG criteria

### Third-party verification of biomass and forests

- Typically supported by SBP, SFI, FSC® (FSC® 119787), PEFC Chain of Custody certification (PEFC/16-37-1769) in respect of woody biomass for use at Drax Power Station

### Strong internal policies and controls

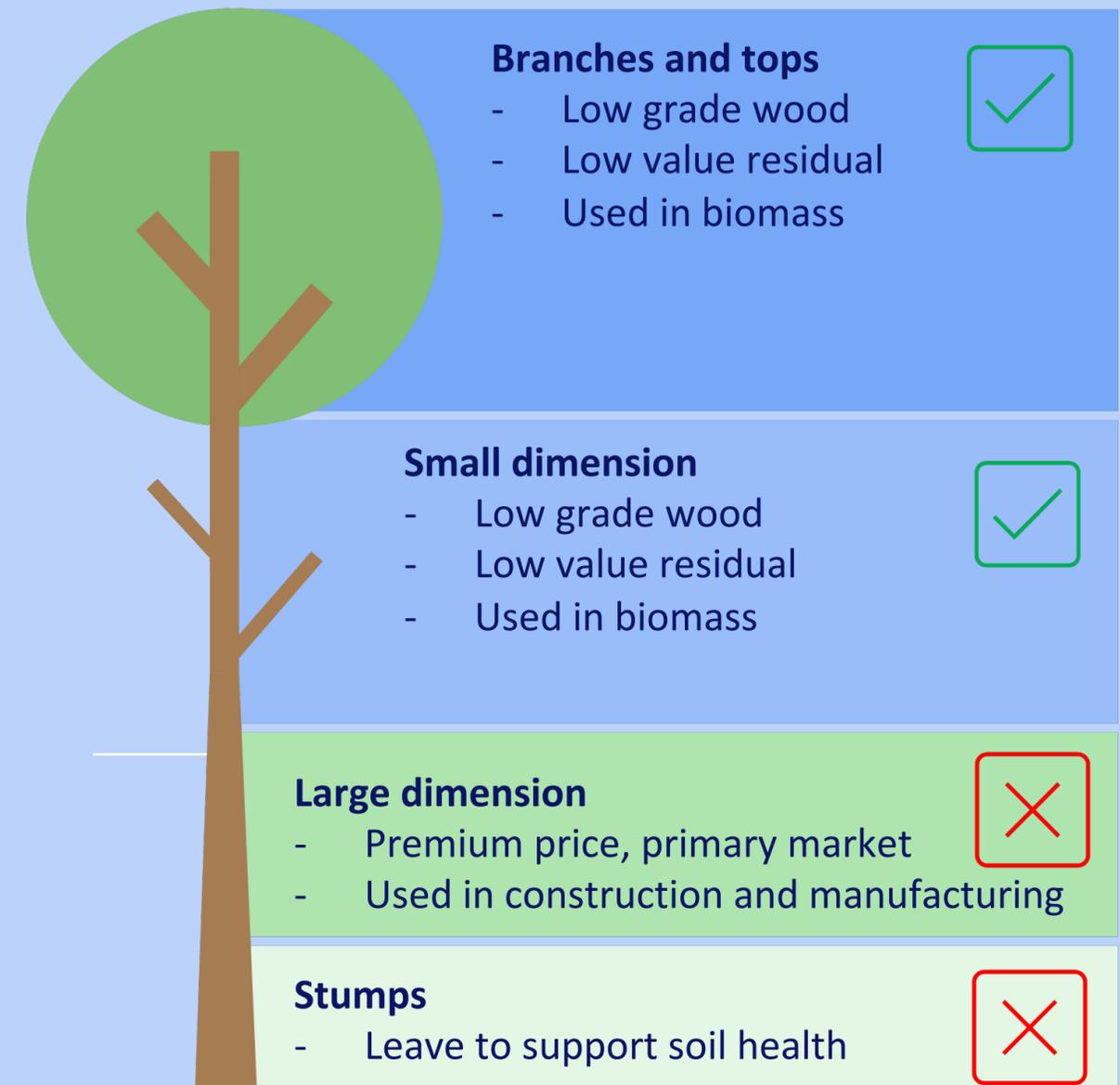
- Catchment area analysis – carbon and forest stock, pricing and deforestation
- Responsible sourcing policy
- Independent Advisory Board

### Evolution of policies to support BECCS

- Forum for the Future – independent recommendations for BECCS
- Developing policies to support positive climate, nature and people outcomes

## Forestry economics support sustainable sourcing

- Sawlogs are the primary economic driver of commercial forestry – used in construction and manufacturing
- Biomass typically uses low-grade material not merchantable to sawmills



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# Operational Review

A strong performance utilising the Group's flexible, vertically-integrated biomass supply chain and dispatchable generation assets to support UK security of supply and value creation for the Group



## Pellet Production – Overview

Highly diversified supply chain supporting flexible operations and security of supply

**17 operational pellet plants with capacity of c.5Mt**

**Access to three major North American fibre baskets**

- British Columbia, Alberta and US southeast

**Four deep water ports with access to Atlantic and Pacific routes**

**Targeting 8Mt of production capacity and 4Mt of third-party sales by 2030**

- Continued development of project pipeline and opportunities

### BC and Alberta



### US southeast

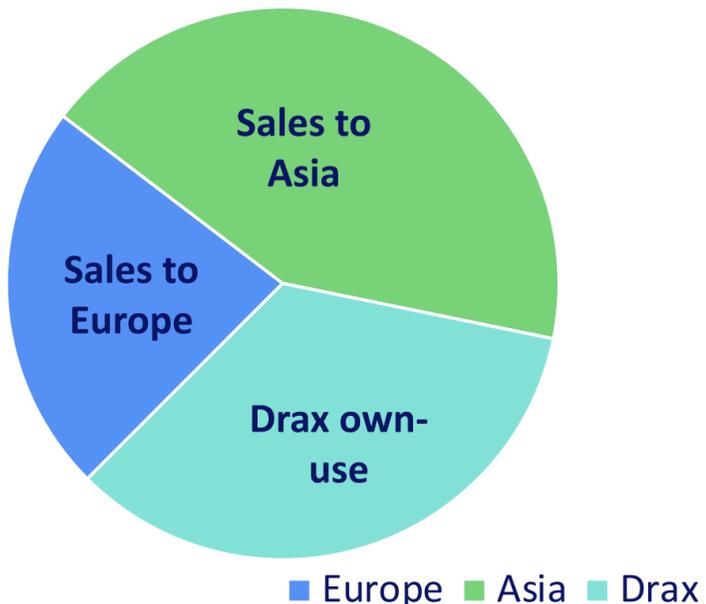


### Strong long-term third-party order book

- >\$4bn of contracted sales
- >20Mt extending to mid-2030s
- High quality Asian and European counterparties



### Diversified long-term offtake



## Pellet Production – Operations

Flexible production and sales to support UK security of supply and value creation

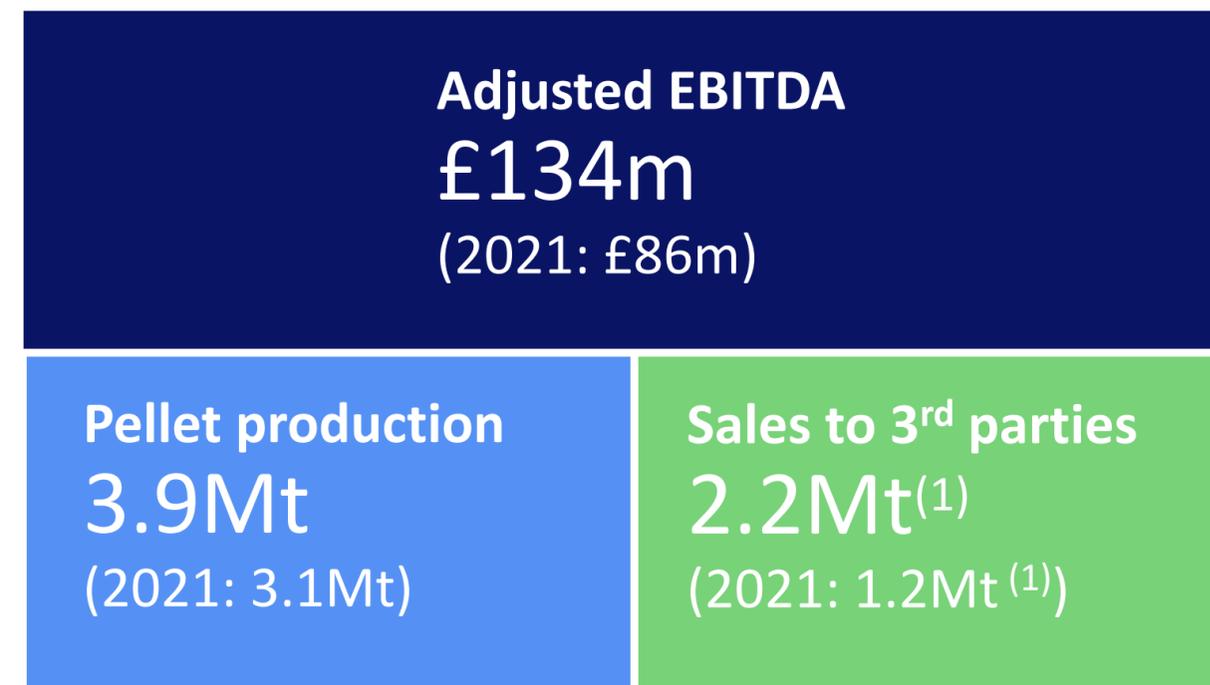
### 56% increase in Adjusted EBITDA

- 26% increase in production

### Optimisation of supply chain supports value for Group

- Flexible production to support generation
- Sales to third parties under long-term contracts
- Spot sales and purchases to enable flexible operations

Cost increases reflect inflation, supply chain optimisation of pellet supplies, commissioning delays and US rail restrictions



Fibre sources	2022	2021
Sawmill residues	63%	62%
Branches, tops and bark	7%	3%
Thinnings	16%	18%
Low-grade round wood	14%	15%
Agricultural residues	-	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>

## Pellet Production – Developments

Targeting 8Mt of production capacity by 2030

### 0.5Mt of new capacity commissioned through 2022

- New plants at Demopolis, Leola and Russellville
- Acquisition of Princeton plant

### FID on 0.6Mt of new capacity in 2022, \$300m investment

- 450kt Longview plant and port facility, and 130kt Aliceville expansion
- Operational 2025, contributing to reduction in average cost of production

### Continued development of project pipeline

### New 450kt plant and port facility – Longview (Washington State)

- Adds a fourth major fibre basket and fifth port in North America
- Strong commercial forestry industry supports sustainable fibre sourcing
- Co-located at port for direct loading for shipment to Asia or Europe
- Proximity to British Columbia supports greater operational resilience
- Operational design supports lower cost operations and lower carbon footprint

Demopolis, Alabama



Aliceville, Alabama



Princeton, BC



Russellville, Arkansas



## Generation – Operations

Strong renewable and system support performance

### Strong renewable performance

- UK’s largest source of renewable power by output
- >99% of generation from renewables<sup>(1)</sup>
- Up to 70% of UK’s in-day peak renewable generation

### Biomass performance

- Optimisation of generation and logistics to support UK security of supply
  - Buyback power when not required and sale of biomass to other users
  - Additional optimisation, biomass and system costs
- Strong commercial availability

### Pumped storage and hydro

- Increased power generation and system support services

### Coal

- Winter contingency contract until end of March 2023
- No coal operations since January 2022

Adjusted  
EBITDA<sup>(2)</sup>  
**£696m**  
(2021: £372m)

System  
support<sup>(3)</sup>  
**£175m**  
(2021: £160m)

Biomass  
availability<sup>(4)</sup>  
**87%**  
(2021: 88%)

Biomass  
generation  
**12.7TWh**  
(2021: 14.8TWh)

Hydro  
generation<sup>(5)</sup>  
**0.6TWh**  
(2021: 0.5TWh)

CO<sub>2</sub> intensity  
**0.02t/MWh**  
(2021: 0.03t/MWh)

% of UK  
renewables  
**11%<sup>(6)</sup>**  
(Q4 2020 to  
Q3 2021: 12%)

% of UK  
renewables  
**19% at peak**

% of UK  
renewables  
**Up to 70% of  
in-day peak**

1) Biomass, hydro and pumped storage.  
 2) 2021 includes £20m of discontinued operations – gas.  
 3) Balancing mechanism, Ancillary Services and portfolio optimisation.  
 4) Equal weighting given to all four biomass units.  
 5) Gross output from pumped storage and hydro schemes.  
 6) Measured by output Q4 2021 to Q3 2022.

## Generation – Pumped Storage and Hydro

Strong system support and renewable performance

### Key drivers of performance

- Wide range of earnings opportunities – ancillary services, balancing market, power market and capacity market
- Increase in demand for services, power generation and volatility

### UK's transition to net zero will drive increased volatility and long-term value opportunity for dispatchable generators

- Increase in power demand
- Increase in intermittent and inflexible generation
- Retirement of dispatchable fossil fuel plants

### Pumped Storage – Cruachan

- Large-scale storage and flexible generation
- 440MW
- Long duration storage – operation of all units for over 16 hours
- Option for 600MW expansion of Cruachan – planning application submitted



### Run-of-River Hydro – Lanark and Galloway

- 126MW – combined run-of-river and storage

1) Gross output from pumped storage and hydro schemes.

## Customers & Drax Energy Solutions

Renewable power and decarbonisation services to high-quality I&C and Corporate customers

### Strong operational and financial performance

- Continued improvement in Adjusted EBITDA
- Sale of forward hedged power not required by customers

### 100% renewable supply offering

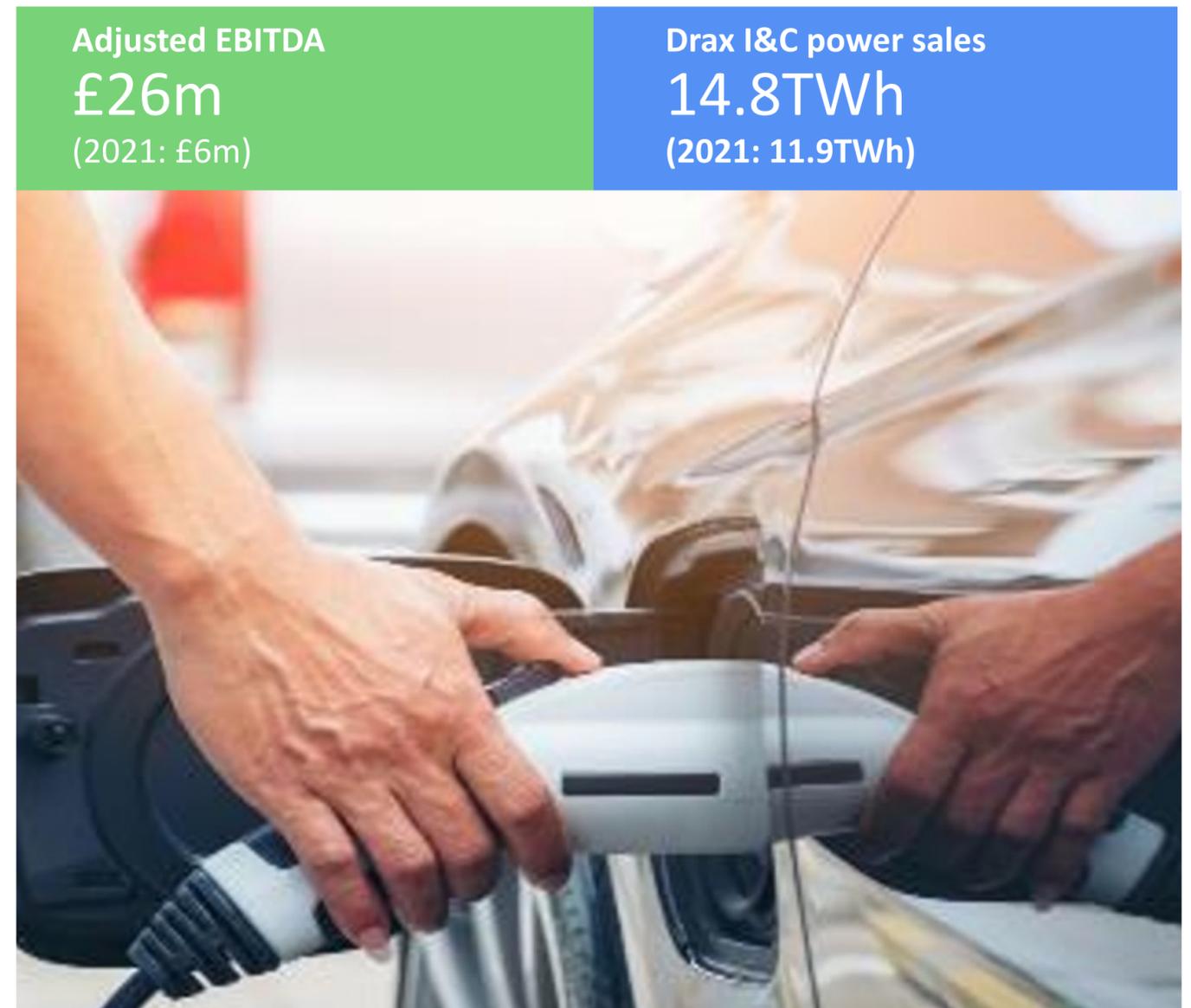
- Efficient route to market for large volumes of Drax power generation
- 24% increase in I&C supply volumes versus 2021 – growing portfolio of high consuming customers with strategic value

### Developing portfolio of decarbonisation products

- Route-to-market for over 2,000 renewable generators
- Increasing demand for Electric Vehicle charge point services
- Second largest provider to the Demand Flexibility Service – helping grid stability and creating value for customers

### I&C alignment with Group strategy

- Alignment with Group strategy and customers who share Drax ESG ambitions
- Potential route-to-market for carbon removals from future projects



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# Financial Review

A strong performance utilising the Group's flexible, vertically-integrated biomass supply chain and dispatchable generation assets to support UK security of supply and value creation for the Group

Increased clarity on the Electricity Generator Levy

Investment to support growth opportunities

Committed to capital allocation policy and a sustainable and growing dividend



## Financial Summary

Strong financial performance

**Adjusted  
EBITDA<sup>(1)</sup>**

**£731m**  
(2021: £398m<sup>(2)</sup>)

**Total Cash and  
Committed Facilities**  
£698m  
(2021: £549m)

**Cash Generated  
from Operations**  
£320m  
(2021: £354m)

**Net Debt  
December 2022<sup>(3)</sup>**  
£1,206m  
(2021: £1,108m)

**Net Debt to  
Adjusted EBITDA**  
1.6x  
(2021: 2.8x)

**Adjusted  
Basic Earnings Per  
Share<sup>(1/2)</sup>**  
85.1p/share<sup>(1/2)</sup>  
(2021: 26.5p/share)

**Proposed Final  
Dividend**  
12.6p/share  
(£50m)  
(2021: 11.3p/share, £45m)

**Total Dividend**  
21.0p/share  
(£84m)  
(2021: 18.8p/share, £75m)

**Net Debt to  
Adjusted EBITDA  
(excl. collateral)**  
1.3x  
(2021: 3.2x)

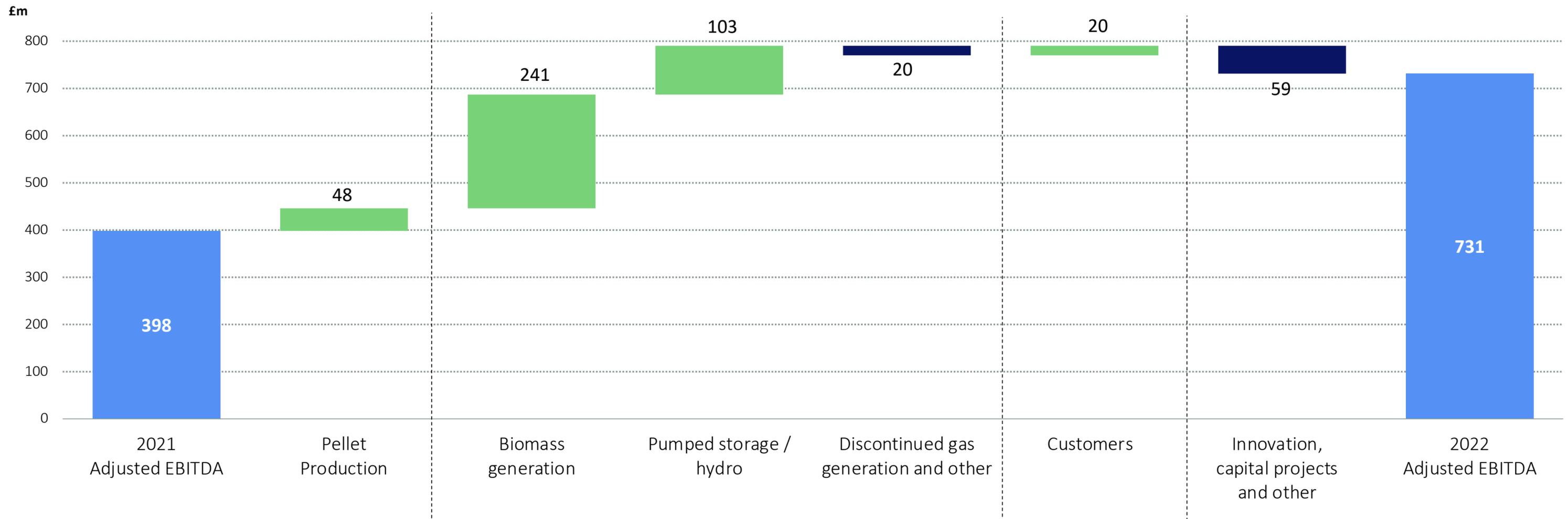
1) Financial performance measures prefixed with “Adjusted” are stated after adjusting for one-off exceptional items that, by their nature, do not reflect the trading performance of the Group (revaluation of deferred tax balances reflecting future increases in UK CT rates, acquisition costs, gain on sale of CCGT generation assets (2021), restructuring costs, debt restructuring costs and asset obsolescence charges and impairments), and certain remeasurements on derivative contracts. Adjusted EBITDA and EPS measures exclude amounts attributable to non-controlling interests.

2) Includes continuing and discontinued operations (2021: £20m of discontinued operations – CCGT generation assets).

3) Cash and short-term investments of £238m less borrowings of £1,444m (less impact of hedging instruments within borrowings of £2m, less NCI share of cash of £1m).

## Adjusted EBITDA Bridge

84% increase in Adjusted EBITDA



**Pellet Production**  
2022: £134m  
2021: £86m

**Generation**  
2022: £696m  
2021: £372m  
(incl. £20m discontinued)

**Customers**  
2022: £26m  
2021: £6m

**Innovation, Capital Projects and Other**  
2022: £(125)m  
2021: £(66)m

## Pellet Production

Increased volumes of production and shipments drove higher earnings

**3.9Mt produced (2021: 3.1Mt), 4.7Mt shipped (2021: 3.2Mt)**

**6% production cost increase to \$152/t (2021: \$143/t)**

- Inflation impact on utility costs (>35%) and fuel surcharges (barge and rail transport to port (>20%))
- Delays achieving full production at new plants and North American rail restrictions

**Optimisation of supply chain – value creation for Group offsetting additional biomass cost**

- Flexibility in production and delivery profile to support periods of higher value power generation
- Purchase and sale of certain biomass cargoes at spot

## Outlook

- Incremental production at existing sites and addition of new capacity
- Continued headwind from inflation in 2023
- Ongoing focus on cost reduction
  - New long-term sugar cane (bagasse) residue contract agreed
  - c.£10m R&D investment in a biomass sugar extraction plant
- Expect improved earnings profile of Pellet Production

**Sugars R&D plant, Morehouse, Louisiana**



## Generation – Trading and Optimisation

Optimisation of biomass generation to support UK security of supply

### Strong contracted power sales on ROC and Hydro 2023-2025

- 23.3TWh contracted at £152.8/MWh

### 2023 includes buyback of forward sold Q1 biomass power sales

- Mild weather, lower demand and lower spot power price
- Reduces operational risk, crystallises margin on bought back position and creates options for use of biomass – reprofile generation or sale
- Forward sold pumped storage peaks

### 2023 outlook

- Continued optimisation of biomass supply chain and generation
- Baseload ROC generation, plus two planned major outages
- CfD unit held in reserve – dispatch subject to good ROC unit operational performance and market conditions
- Biomass generation cost >£100/MWh

Contracted power sales 17 February 2023	2023	2024	2025
Net ROC, hydro and gas (TWh) <sup>(1/2)</sup>	12.4	9.0	1.9
-Average achieved £ per MWh	158.1	149.2	135.7

1) Includes structured power sales in 2024 and 2025 (forward gas sales as a proxy for forward power), transacted for the purpose of accessing additional liquidity for forward sales from ROC units and highly correlated to forward power prices. 2024: 1.5TWh, 2025: 0.3TWh, presented net of cost of closing out gas positions at maturity and replacing with power.  
 2) 2023 includes forward selling of pumped storage generation (0.1TWh) resulting in higher captured prices but lower system support availability.

## Capital Investment

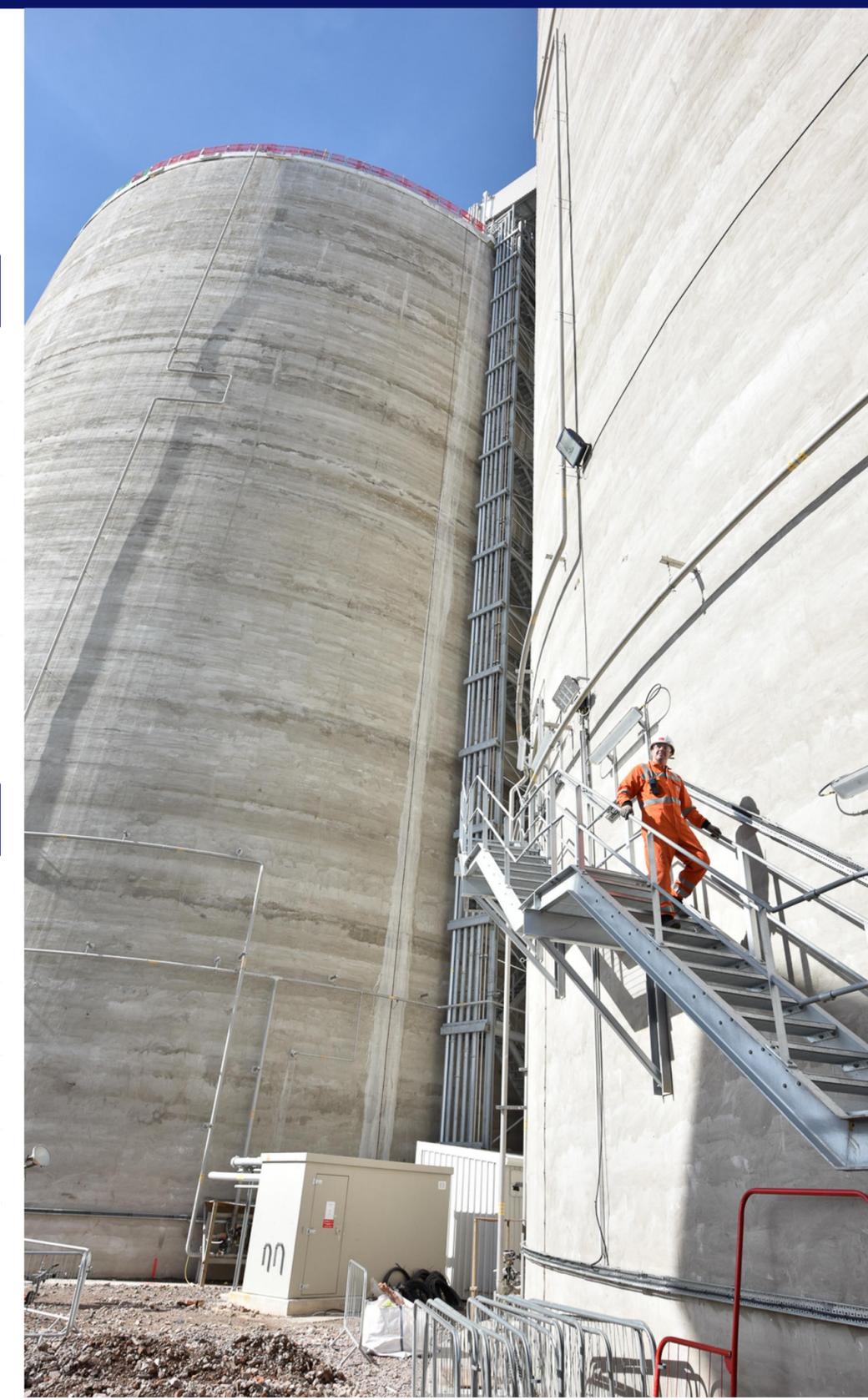
Investment to drive operational efficiency, strategic initiatives and growth

2022 actual	Key areas	Investment
Maintenance	Maintain operational performance	£79m
Enhancement	Efficiency and operational improvements	£27m
Strategic and growth	UK BECCS, biomass and OCGT <sup>(1)</sup>	£127m
Other	Health, safety, environment and IT	£22m
<b>Total</b>		<b>£255m</b>

2023 estimate	Key areas	Investment
Maintenance	Maintain operational performance (includes two major planned biomass outages)	£120m
Enhancement	Efficiency and operational improvements	£30m
Strategic and growth	Biomass, OCGT <sup>(1)</sup> and UK BECCS <sup>(2)</sup>	£430m
Other	Health, safety, environment and IT	£20m
<b>Total</b>		<b>£570-630m</b>

1) OCGT cost in 2022 c.£90m and in 2023 c.£220m.

2) Level of UK BECCS investment subject to shortlisting for Track 1 status.



## Balance Sheet

Increased liquidity and deleveraging while managing collateral requirements of higher power prices

### Facilities in place to support growth and decarbonisation

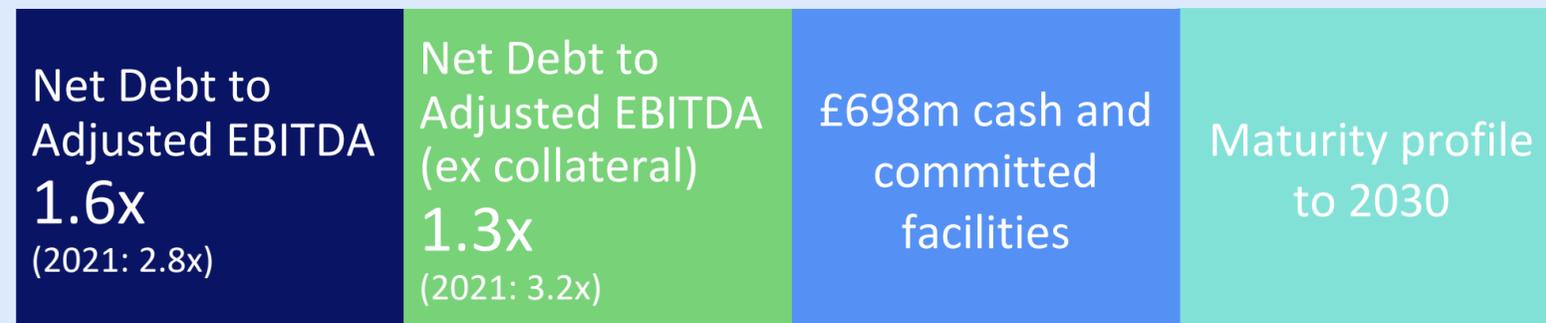
- Infrastructure facilities extend maturity profile to 2030
- ESG facilities with margin linked to carbon emissions
- New £200m facility – adds liquidity to undrawn £300m RCF

### Group cost of debt <4.2%

- Repayment of £35m index-linked term loan in 2022

### Strong credit profile

- S&P/Fitch (BB+ stable) and Fitch senior secured rating
- DBRS investment grade rating (BBB low stable)



Instrument	Maturity	Description
<b>Infrastructure facilities</b>	2024-2030	£587m <sup>(1)</sup>
<b>Bonds</b>	2025	\$500m
	2025	€250m
<b>ESG Revolving Credit Facility</b>	2025	£300m (undrawn)
<b>Liquidity facility<sup>(2)</sup></b>	2023	£200m (undrawn)
<b>ESG term-loan</b>	2024	C\$300m

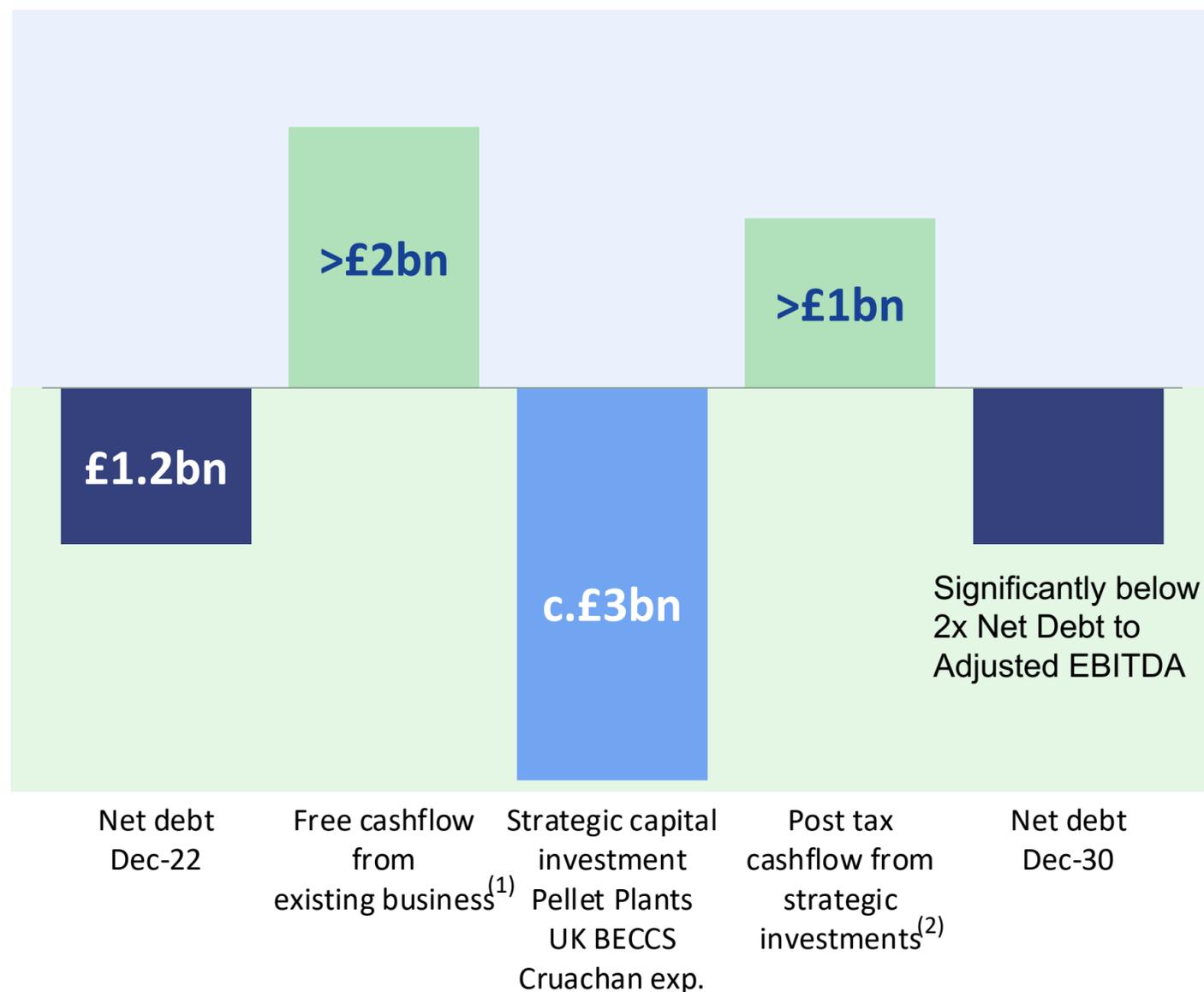
1) Includes c.£213m – €25m in 2024 (£23m), €70m (£63m) in 2026, £45m in 2027, £53m in 2028 and €31.5m (£29m) in 2030.

2) In December 2022, Drax agreed a new £200m credit facility with banks within its lending group. The facility provides an additional source of liquidity to the Group's undrawn £300m revolving credit facility over the next 12 months.

## Sources and Uses of Cash

Investment funded by existing cash generation and Adjusted EBITDA growth

Net debt to Adjusted EBITDA <2x in 2030, inclusive of impact of Electricity Generator Levy



### £3bn of strategic capital investments

- Pellet plants, UK BECCS, Cruachan expansion
- Investments backed by long-term contracted cashflows
- No new equity, funding from cash generation and debt
- High-quality portfolio provides range of options for financing
- Net debt to Adjusted EBITDA <2x in 2030, inclusive of impact of EGL
- Target high single to low double-digit returns depending on risk profile and proportion of contracted earnings

### Global BECCS

- Free cashflow available to support investment
- Development of investment and funding options through 2023

### Remain committed to current dividend policy

- Average growth rate over last 5 years of 11%

1) Free cashflow from existing business = Adjusted EBITDA less interest, tax, Electricity Generator Levy, dividend and maintenance capex.

2) Post tax cashflow from strategic investments = Adjusted EBITDA less tax and interest.

## Clear Capital Allocation Policy

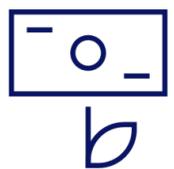
Implemented in 2017, designed to support strategy



1. Maintain credit rating



2. Invest in core business



3. Sustainable and growing dividend



4. Return surplus capital beyond investment requirements

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# Strategy Update

Positioning Drax for growth opportunities linked to global renewable energy and decarbonisation initiatives

Objective 1: to be a global leader in sustainable biomass pellets

Objective 2: to be a global leader in carbon removals

Objective 3: to be a UK leader in dispatchable, renewable power



## Strategic Milestones in 2022

Excellent progress in 2022

### Pellet Production

- ✓ - Final investment decision on 0.6Mt of new capacity
- ✓ - Establishment of Tokyo field office
- Establishment of European business development
- ✓ - Expansion of international affairs capability
- Continued reduction in pellet production costs
- Approve new fuels, expanding fuel mix to deliver >100kt of lower cost sustainable biomass

### UK BECCS

- ✓ - Investment in FEED and site preparation – delayed coal-associated plant removal to April 2023
- ✓ - Planning application submitted and DCO hearing completed
- ✓ - Government shortlist for gas CCS, industrial CCS and hydrogen projects complete
- ✓ - Government initiated selection process for BECCS and other greenhouse gas removal projects in priority CCS clusters
- Government to publish Bioenergy Strategy Review

### Global BECCS

- ✓ - MoU agreed with Respira for sale of 2Mt of carbon removals from new-build BECCS plants
- ✓ - Programme of government engagement
- ✓ - Site location filtering
- ✓ - Progress discussions on renewable power and carbon removals packages
- ✓ - Commence detailed CO<sub>2</sub> storage evaluation programme
- ✓ - Refine technical concepts

### Pumped Storage

- ✓ - Submission of Cruachan expansion planning application to Scottish Government
- UK Government consult on investment support mechanism
- ✓ - Connection agreement secured from National Grid

✓ Milestone reached

## Growing Scientific Support for Carbon Removals

BECCS has an important role to play



All the illustrative mitigation pathways assessed in the IPCC's latest report use significant volumes of CDRs, and specifically BECCS as a key tool for mitigating climate change. **Globally between 0.5-9.5bn tonnes of CDRs via BECCS will be required**



Even with rapid investment in emission reductions, the **United States could need to remove about 2bn tonnes** of CO<sub>2</sub> per year by midcentury to reach net-zero



**10–20bn tonnes of CO<sub>2</sub> removals needed every year** if we are to keep warming below Paris Agreement thresholds



The IEA's Sustainable Development Scenario **requires BECCS and DACs to remove c.3bn tonnes of CO<sub>2</sub>eq in 2070**

## Global Policies Supporting Increased Investment in Carbon Removals

UK has an opportunity for leadership, but the US and Europe are moving fast



### **Inflation Reduction Act (IRA) and Bipartisan Infrastructure Bill includes BECCS as an eligible technology**

- \$369bn funding package for climate and green energy policies
- 45Q tax credit valued at \$85/t of CO<sub>2</sub> captured through BECCS
- Other tax credits aimed at renewable power generation and hydrogen
- \$40bn loan fund for projects which utilise innovative technology to reduce, avoid or sequester carbon
- \$26bn Greenhouse Gas Reduction Fund
- Department of Energy mandated to create a competitive purchasing programme for carbon removals

### **US States developing incentives for clean energy technologies**

- Louisiana Congress approved a bill classifying biomass as carbon neutral and BECCS as carbon negative
- Massachusetts and California have announced legislation to develop in-state carbon removal markets
- California's net zero strategy identifies carbon removal technologies as an important tool to deliver its climate targets  
California Air Resources Board to deploy 75Mt of carbon removals, including BECCS, by 2045



- EU Commission launching a 'Green Deal Industrial Plan', including up to €250bn for clean energy manufacturing and investment support schemes for production of strategic net-zero technologies
- Aims to simplify EU regulatory framework, fast-track permitting and access to finance
- France, Belgium, Hungary, Denmark, Sweden all include BECCS as part of their net zero strategies



- UK remains in a strong position to lead in the creation of new green industries, including BECCS
- But, caught between US and EU schemes
- Electricity Generator Levy – no allowances or offsets for renewable generators to investment in net zero technologies

# Development of UK BECCS

Drax Power Station – targeting 8Mt pa of carbon removals using BECCS by 2030, on track for FID in 2024

## Good progress in 2022

### Technology

- FEED study progressing well
- Early stage site preparation commenced

### Planning

- Planning application submitted May 2022
- DCO hearing completed

### Government

- Consultations on Power BECCS business model and on GGR business models

### Transportation and storage – East Coast Cluster

- Route of onshore CO<sub>2</sub> pipeline from Drax published
- Pipeline FEED studies initiated by Northern Endurance Partnership
- Pipeline DCO consultation completed

## 2023 milestones

### Technology

- Completion of FEED study
- Coal “winter contingency” contract fulfilled
- Site preparation work resumed from April 2023

### Transportation and storage – East Coast Cluster

- DCO application to be submitted for Humber onshore pipeline
- FEED studies for the Humber pipeline to be completed

### Government

- Confirmation of shortlisted “Track 1” GGR project
- Development of draft heads of terms
- Launch of GGR expert group to support policy development
- Publish Bioenergy Strategy Review
- Progress Review of Energy Market Arrangements (REMA)

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# A Global Leader in Carbon Removals

Ambition to deliver 4Mt pa of carbon removals outside of UK by 2030, with a primary focus on North America

The US Inflation Reduction Act is creating an enlarged investment opportunity for BECCS and Drax aims to be a part of it

Drax is developing a pipeline of project options in North America to provide long-term large-scale carbon removals opportunities and create attractive investment opportunities for the Group



## Progress with Global BECCS

Ambition to deliver 4Mt pa of carbon removals outside of UK by 2030, with a primary focus on North America

### US prioritised

- Political and regulatory support
- Proximity to fibre
- Geology and CCS infrastructure

### Development of project pipeline for long-term growth

- First new-build site chosen
- >10 sites under evaluation
- MoU signed with large timberland owner to work together to develop a pipeline of BECCS opportunities – fibre and storage

### Policy and regulation

- IRA includes BECCS as an eligible technology providing access to 45Q tax incentive for carbon capture and storage

### CDR and power sales

- MoU signed with Respira for sale of 2Mt of carbon removals

## Options for BECCS

### New-build BECCS power stations

- >300MW each
- 2TWh of renewable power
- >2Mt of carbon removals

### Pellet plant with carbon capture

- Smaller scale, located on existing pellet plant
- Earlier deployment

### BECCS on existing non-Drax generation assets

- Large fleet of existing coal and other generating assets in North America
- Opportunity for Drax engineering, supply chain and coal conversion expertise and IP

## Milestones for 2023

### Pellet Production

- Development of project pipeline and options for expansion towards target of 8Mt pa by 2030
- New contracts for third-party supply, working towards target of 4Mt pa of third-party sales by 2030
- Development of opportunities for innovation and cost reduction

### UK BECCS

- Government confirmation of shortlisted “Track 1” GGR project
- Government to develop draft heads of terms
- Continuation of early stage site preparation and demolition of coal infrastructure
- Completion of FEED study
- Government to publish Bioenergy Strategy Review

### Global BECCS

- Development of a wider project pipeline to support opportunities for long-term growth

### Pumped Storage

- Secure necessary consents for Cruachan expansion
- Agree technical specifications for FEED study
- BEIS consult on investment support mechanism

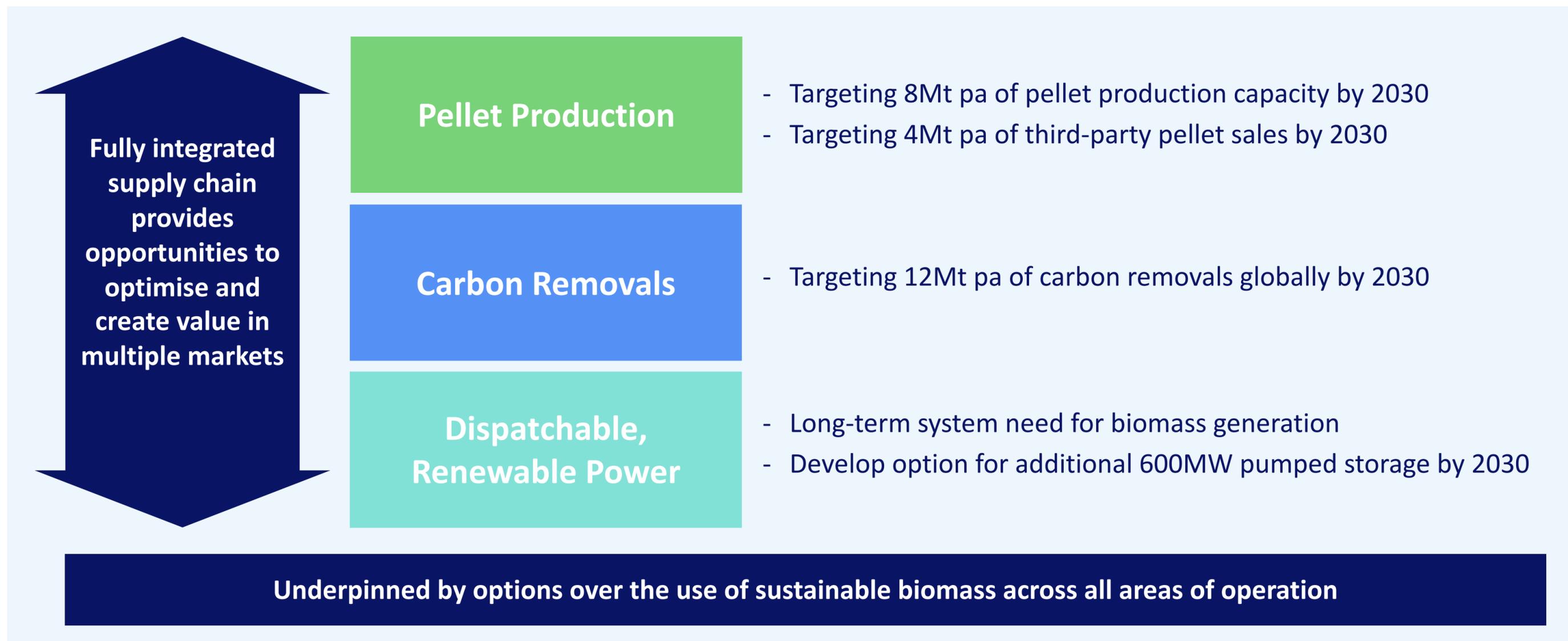
### Long-term Biomass Generation

- Reach agreement with UK Government on long-term role for biomass generation not operating as BECCS

## Strategic Positioning

Strategic objectives closely aligned with climate solutions

Attractive opportunities for long-term growth and value creation for stakeholders



# 2022

# Full Year Results

23 February 2023

drax

## Appendices

**Group Adjusted EBITDA**

**Group Income Statement – Continuing Operations**

**Group Income Statement – Adjusted Results  
– Continuing and Discontinued Operations**

**Consolidated Adjusted EBITDA  
– Continuing and Discontinued Operations**

**Pellet Production – Adjusted EBITDA**

**Generation – Adjusted EBITDA  
– Continuing and Discontinued Operations**

**Customers – Adjusted EBITDA**

**Group Cash Flow Statement  
– Continuing and Discontinued Operations**

**Group Net Debt Bridge**

**Electricity Generator Levy**

**Global BECCS Workstreams**

**Merchant Forward Commodity Prices**

**Merchant Forward Carbon Prices**

**Merchant Forward Spreads**

## Group Adjusted EBITDA

High-quality, enduring earnings from a multi-technology portfolio and integrated supply chain

Business unit	Assets	Capacity	2022 Adjusted EBITDA (£m)	2021 Adjusted EBITDA (£m)
<b>Pellet Production</b>	18 pellet plants and developments in Canada and US Access to five deep water ports (with control of 2)	>5MtMt	<b>134</b>	<b>86</b>
<b>Generation</b>	Drax Power Station – biomass and legacy coal	2.6GW/1.3GW <sup>(1)</sup>	<b>525</b>	<b>284</b>
	Hydro Cruachan Pumped Storage Lanark and Galloway hydro schemes Daldowie – energy from waste	0.6GW	<b>171</b>	<b>68</b>
	Gas 4 x gas CCGTs		<b>-</b>	<b>20</b>
<b>Customers</b>	I&C, Corporate and SME supply		<b>26</b>	<b>6</b>
<b>Innovation, Capital Projects and Other</b>			<b>(125)</b>	<b>(66)</b>
<b>Total</b>			<b>731</b>	<b>398</b>

## Group Income Statement – Continuing Operations

In £m	2022			2021		
	Adjusted	Exceptional	Total	Adjusted	Exceptional	Total
Revenue	8,159	(384)	7,775	5,174	(86)	5,088
Cost of sales	(6,838)	86	(6,752)	(4,331)	134	(4,197)
<b>Gross profit</b>	<b>1,322</b>	<b>(298)</b>	<b>1,023</b>	<b>843</b>	<b>48</b>	<b>891</b>
Operating and administrative expenses	(543)	-	(543)	(449)	(21)	(470)
Impairment losses on financial assets	(48)	-	(48)	(16)	-	(16)
<b>Adjusted EBITDA from continuing operations</b>	<b>731</b>	<b>n/a</b>	<b>n/a</b>	<b>378</b>	<b>-</b>	<b>-</b>
Depreciation	(208)	-	(208)	(164)	-	(164)
Amortisation	(31)	-	(31)	(34)	-	(34)
Impairment losses on non-current assets	(17)	(25)	(42)	-	-	-
Other losses	(6)	-	(6)	(10)	-	(10)
Income from associates	1	-	1	-	-	-
<b>Operating profit</b>	<b>469</b>	<b>(323)</b>	<b>146</b>	<b>170</b>	<b>27</b>	<b>197</b>
Foreign exchange gains	15	(4)	11	1	(5)	(4)
Net interest charge	(79)	-	(79)	(71)	-	(71)
<b>Profit before tax</b>	<b>405</b>	<b>(327)</b>	<b>78</b>	<b>100</b>	<b>21</b>	<b>121</b>
Tax	(67)	72	4	(12)	(54)	(66)
<b>Net result from continuing operations</b>	<b>338</b>	<b>(256)</b>	<b>83</b>	<b>88</b>	<b>(33)</b>	<b>55</b>

## Group Income Statement – Adjusted Results – Continuing and Discontinued Operations

In £m	2022			2021		
	Continuing	Discontinued	Total	Continuing	Discontinued	Total
Revenue	8,159	-	8,159	5,174	52	5,226
Cost of sales	(6,838)	-	(6,838)	(4,331)	(32)	(4,363)
<b>Gross profit</b>	<b>1,322</b>	-	<b>1,322</b>	<b>843</b>	<b>20</b>	<b>863</b>
Operating expenses	(543)	-	(543)	(449)	-	(449)
Impairment losses on financial assets	(48)	-	(48)	(16)	-	(16)
<b>Adjusted EBITDA</b>	<b>731</b>	-	<b>731</b>	<b>378</b>	<b>20</b>	<b>398</b>
Depreciation	(208)	-	(208)	(164)	-	(164)
Amortisation	(31)	-	(31)	(34)	-	(34)
Impairment losses on non-current assets	(17)	-	(17)	(10)	-	(10)
Other losses	(6)	-	(6)	-	-	-
Income from associates	1	-	1	-	-	-
<b>Operating profit</b>	<b>469</b>	-	<b>469</b>	<b>170</b>	<b>20</b>	<b>190</b>
Foreign exchange gains	15	-	15	1	-	1
Net interest charge	(79)	-	(79)	(71)	-	(71)
<b>Profit before tax</b>	<b>405</b>	-	<b>405</b>	<b>100</b>	<b>20</b>	<b>120</b>
Tax	(67)	-	(67)	(12)	(3)	(15)
<b>Profit for the period</b>	<b>338</b>	-	<b>338</b>	<b>88</b>	<b>17</b>	<b>105</b>
<b>Adjusted basic earnings per share (pence)</b>	<b>85.1</b>	-	<b>85.1</b>	<b>22.3</b>	<b>4.2</b>	<b>26.5</b>

## Consolidated Adjusted EBITDA – Continuing and Discontinued Operations

2022 £m	Power Generation	Discontinued	Pellet Production	Customers	Adjustments <sup>(1)</sup>	Consolidated
Segment Adjusted EBITDA	696	-	134	26	(10)	845
Innovation, Capital Projects and Other						(114)
<b>Consolidated Adjusted EBITDA</b>						<b>731</b>

2021 £m	Power Generation	Discontinued	Pellet Production	Customers	Adjustments <sup>(1)</sup>	Consolidated
Segment Adjusted EBITDA	352	20	86	6	6	470
Innovation, Capital Projects and Other						(72)
<b>Consolidated Adjusted EBITDA</b>						<b>398</b>

1) Intercompany eliminations

## Pellet Production – Adjusted EBITDA

In £m	2022	2021
Revenues	803	450
Cost of sales	(502)	(267)
<b>Gross profit</b>	<b>301</b>	<b>183</b>
Operating costs	(167)	(97)
<b>Adjusted EBITDA</b>	<b>134</b>	<b>86</b>

### Revenues

- FOB price for biomass at Drax US and Canadian ports
- Generation business incurs cost of ocean freight, UK port and rail costs

## FOB total cost

US\$	2022	2021
Cost of sales (\$m)	602	367
Operating costs (\$m)	202	132
<b>Total cost (\$m)</b>	<b>804</b>	<b>499</b>
Third-party pass through volumes (\$m) <sup>(1)</sup>	(129)	(23)
Freight cost on CIF contracts (\$m)	(58)	(34)
Other adjustments (\$m) <sup>(2)</sup>	(23)	2
<b>Underlying production cost (\$m)</b>	<b>594</b>	<b>444</b>
Drax pellet production (Mt)	3.9	3.1
<b>Cost per tonne (\$/t)<sup>(3)</sup></b>	<b>152</b>	<b>143</b>

1) Increase in third-party volumes consolidated by Drax.

2) Removal of inventory movements, non-controlling interest adjustments, other non-production costs and FX.

3) Cost per tonne stated at a constant CAD:USD rate of 1.30.

## Generation – Adjusted EBITDA – Continuing and Discontinued Operations

In £m	2022	2021
<b>Revenue</b>		
Power sales	5,603	3,274
System support and optimisation	243	197
ROC sales	1,278	881
CfD payment/income	(29)	231
Capacity Market income	12	39
Gas sales to Customers business	122	73
Fuel sales	125	26
Other income	5	13
	<b>7,358</b>	<b>4,734</b>
<b>Cost of sales</b>		
Generation fuel costs	(1,363)	(1,338)
Cost of system support and optimisation	(68)	(37)
Fuel sold	(100)	(11)
ROC support	639	645
Carbon	(11)	(23)
ROCs sold or utilised	(1,275)	(858)
Cost of power purchases	(4,167)	(2,419)
Grid charges	(136)	(113)
	<b>(6,479)</b>	<b>(4,164)</b>
<b>Gross profit</b>	<b>879</b>	<b>570</b>
Operating costs	(184)	(198)
<b>Total Adjusted EBITDA<sup>(1)</sup></b>	<b>696</b>	<b>372</b>

### System support and optimisation

£m	2022	2021
<b>System support and optimisation</b>		
System support and optimisation revenues	243	197
System support and optimisation cost of sale	(68)	(37)
<b>Margin from system support and optimisation</b>	<b>175</b>	<b>160</b>

### Average achieved power price

	2022	2021
Gross power sales (£m)	5,603	3,274
Cost of power purchases (£m)	(4,167)	(2,419)
<b>Net power sales (£m)</b>	<b>1,436</b>	<b>855</b>
Net power sales (TWh)	13.2	16.3
<b>Average achieved price (£/MWh)</b>	<b>108.8</b>	<b>52.5</b>

1) 2021 includes £20m of discontinued operations – gas.  
Drax 2022 Full Year Results Presentation

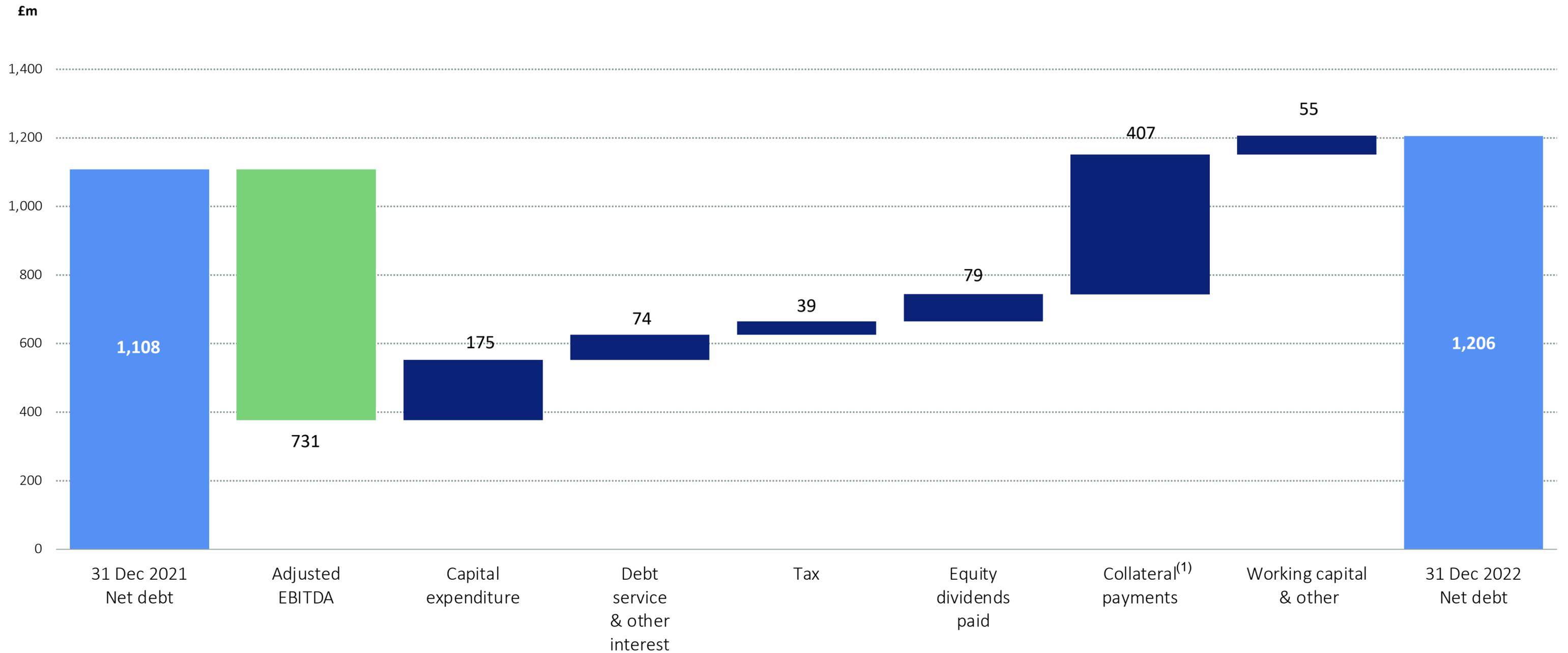
## Customers – Adjusted EBITDA

In £m	2022	2021
Revenue	4,143	2,360
<b>Cost of sales</b>		
Cost of power and gas purchases	(2,607)	(1,098)
Grid charges	(731)	(510)
Other costs	(647)	(648)
	<b>(3,985)</b>	<b>(2,256)</b>
<b>Gross profit</b>	<b>158</b>	<b>104</b>
Operating costs	(84)	(82)
Bad debt charge	(48)	(16)
<b>Adjusted EBITDA</b>	<b>26</b>	<b>6</b>

## Group Cash Flow Statement – Continuing and Discontinued Operations

In £m	2022	2021
Adjusted EBITDA <sup>(1)</sup>	731	398
Working capital and other	(411)	(44)
<b>Cash generated from operations</b>	<b>320</b>	<b>354</b>
Debt service and other interest	(74)	(60)
Tax	(39)	12
<b>Net cash from operating activities</b>	<b>208</b>	<b>306</b>
Capital investment	(175)	(209)
Disposal of subsidiary	-	184
Acquisition of business	(8)	(204)
Net refinancing	(16)	34
Equity dividends paid	(79)	(71)
Other	(16)	(13)
<b>(Decrease) / increase in cash and cash equivalents</b>	<b>(85)</b>	<b>27</b>
Cash and cash equivalents at the beginning of the period	317	290
Net cash flow	(85)	27
Effect of changes in foreign exchange rates	6	-
<b>Cash and cash equivalents at the end of the period</b>	<b>238</b>	<b>317</b>

## Group Net Debt Bridge



## **Electricity Generator Levy**

**A levy on renewable and low-carbon generators**

**Applies to the three biomass units operating under the Renewable Obligation scheme and run of river hydro operations**

**The levy will not apply to Drax's CfD biomass unit, pumped storage hydro and coal generation**

**Structured as a levy on power sales above a benchmark of £75/MWh (indexed to CPI from April 2024)**

**Includes an allowable exceptional fuel cost element which increases the benchmark and is calculated retrospectively based on the actual cost above a baseline fuel cost of £65/MWh or historical levels, whichever is lower**

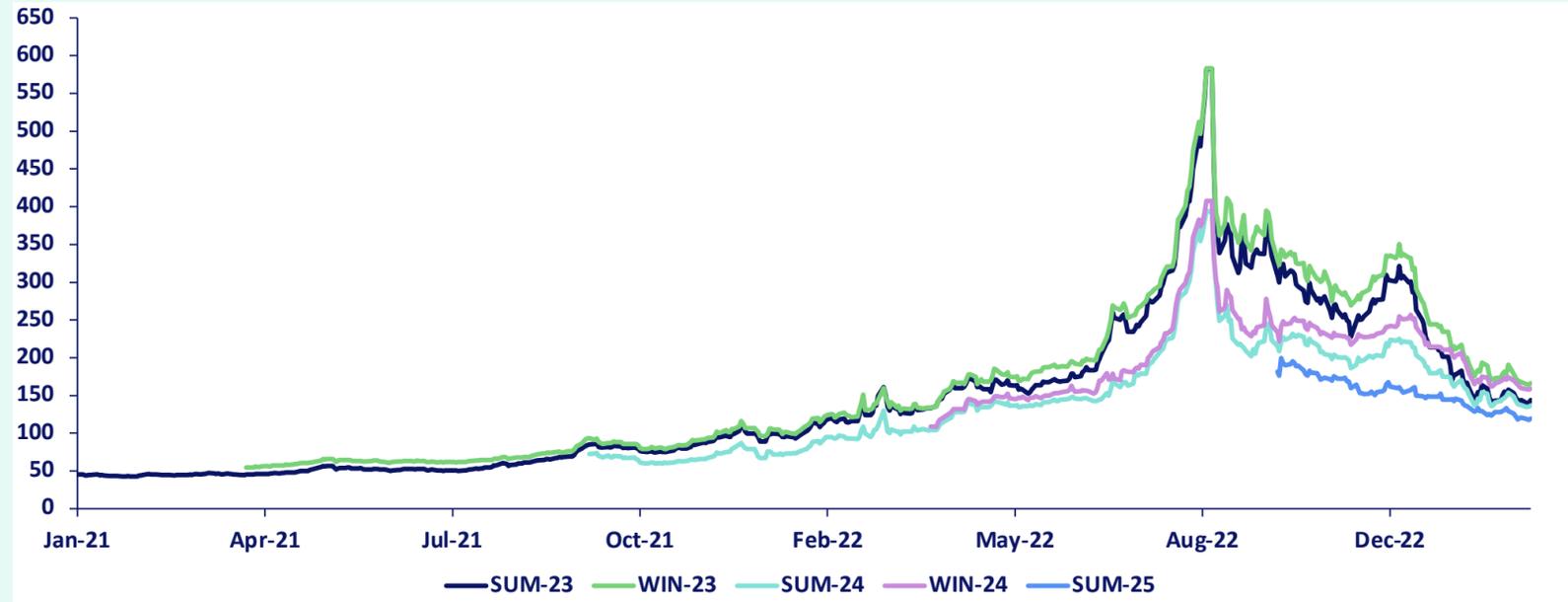
**No change to policy to pay a sustainable and growing dividend**

## Global BECCS Workstreams

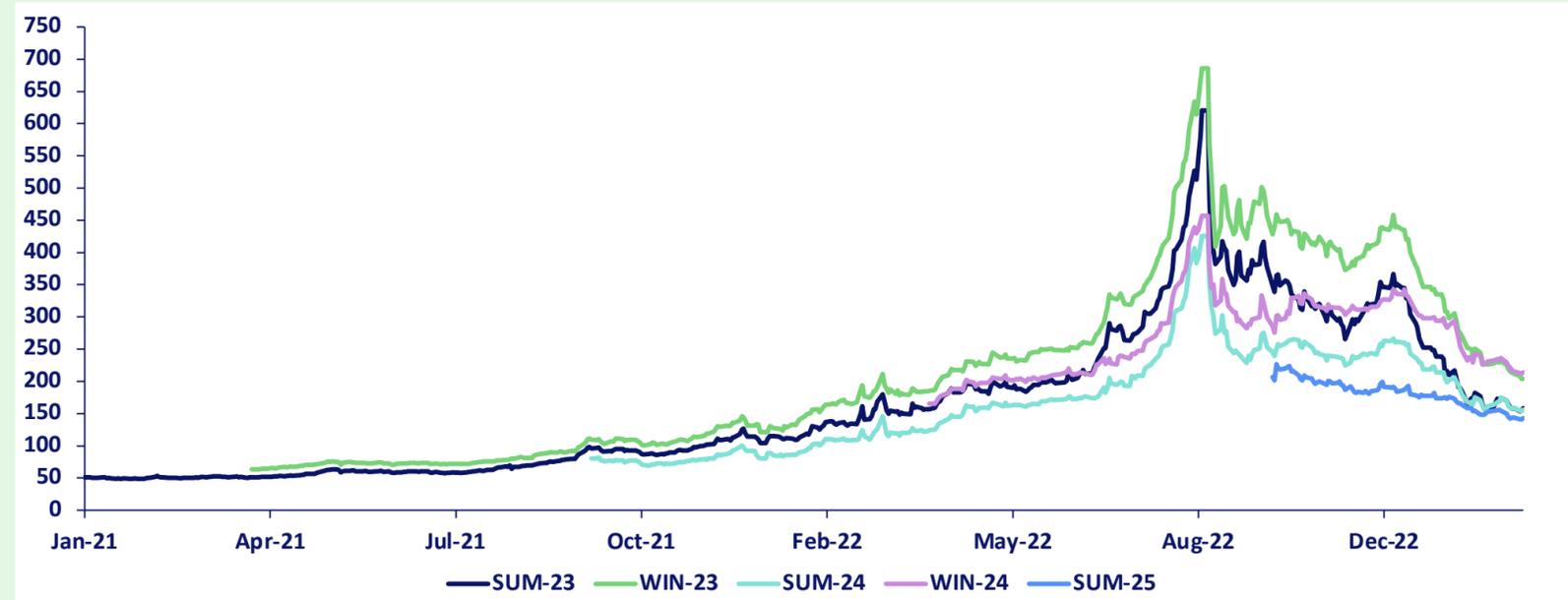
Project Pipeline	<ul style="list-style-type: none"> <li>- Development of options for new-build BECCS plants, BECCS on existing assets and BECCS on a pellet plant</li> <li>- Site location filtering, selection of site options and refinement of technical concepts</li> <li>- Development of a wider project pipeline to support opportunities for long-term growth</li> </ul>
Transportation & Storage	<ul style="list-style-type: none"> <li>- Continued detailed CO<sub>2</sub> storage evaluation programme</li> <li>- Negotiation with T&amp;S providers in regions of interest to support storage options in line with project pipeline</li> </ul>
Fibre	<ul style="list-style-type: none"> <li>- Development of MoUs for long-term fibre supply</li> </ul>
CDR and Power Sales	<ul style="list-style-type: none"> <li>- Development of MoUs to support long-term CDR and renewable PPAs to underpin project development</li> </ul>
Policy and Regulation	<ul style="list-style-type: none"> <li>- Progress discussions on renewable power and carbon removal packages</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>- Screening of long-term fibre supply</li> </ul>
Financial	<ul style="list-style-type: none"> <li>- Refinement of Group investment and financing plan to include US BECCS by 2030</li> </ul>

# Merchant Forward Commodity Prices

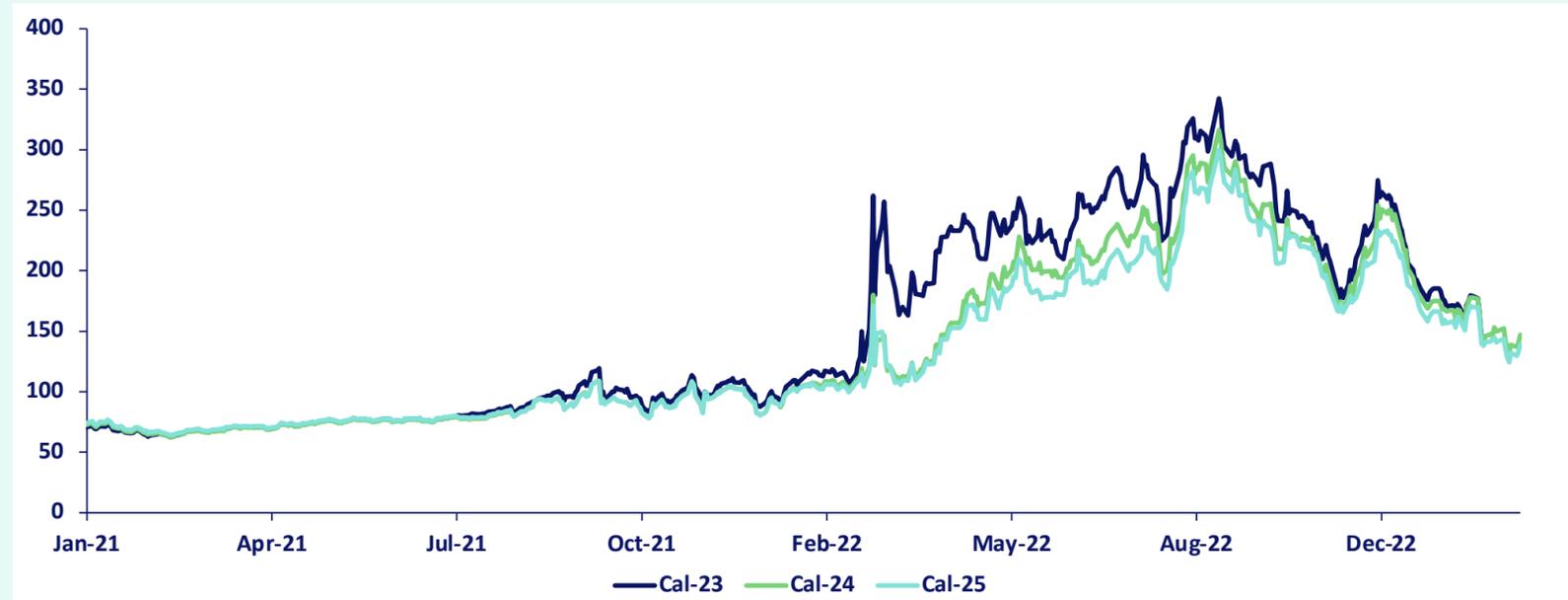
## Baseload Power Price (£/MWh)



## Peak Power Price (£/MWh)



## API2 Coal Price (\$/t)

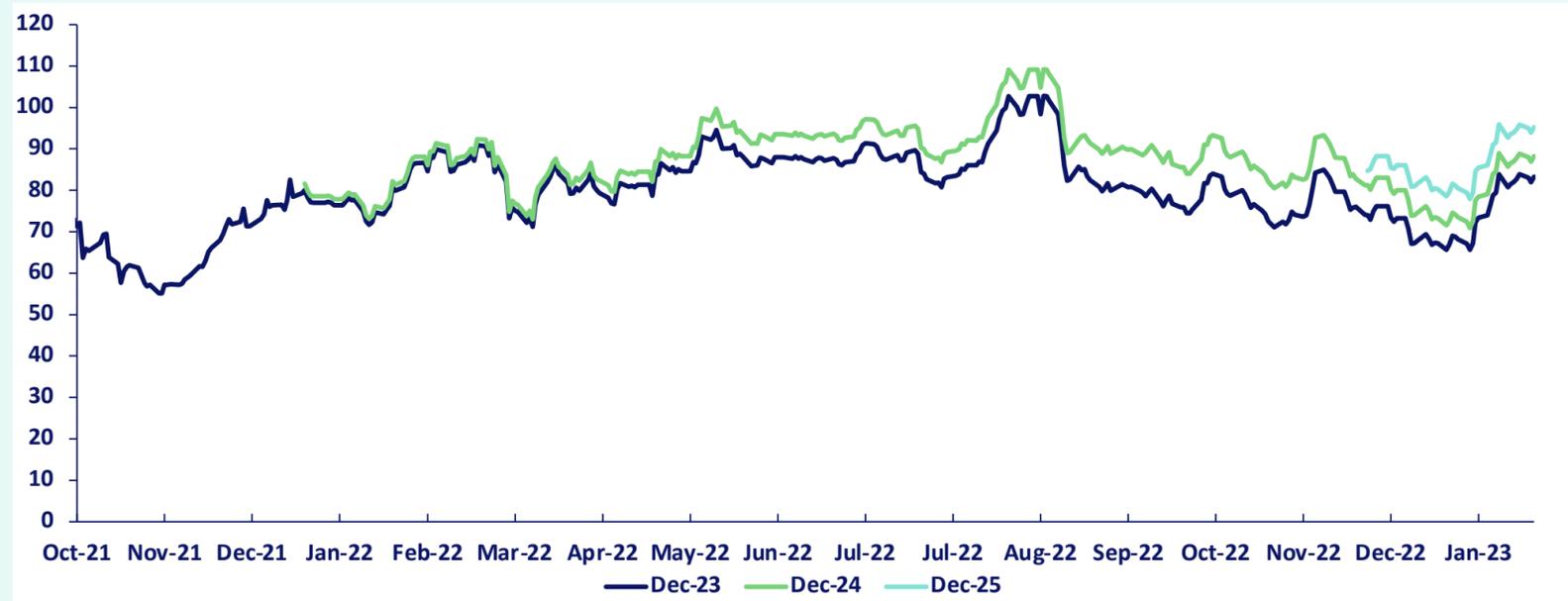


## NBP Gas Price (p/therm)

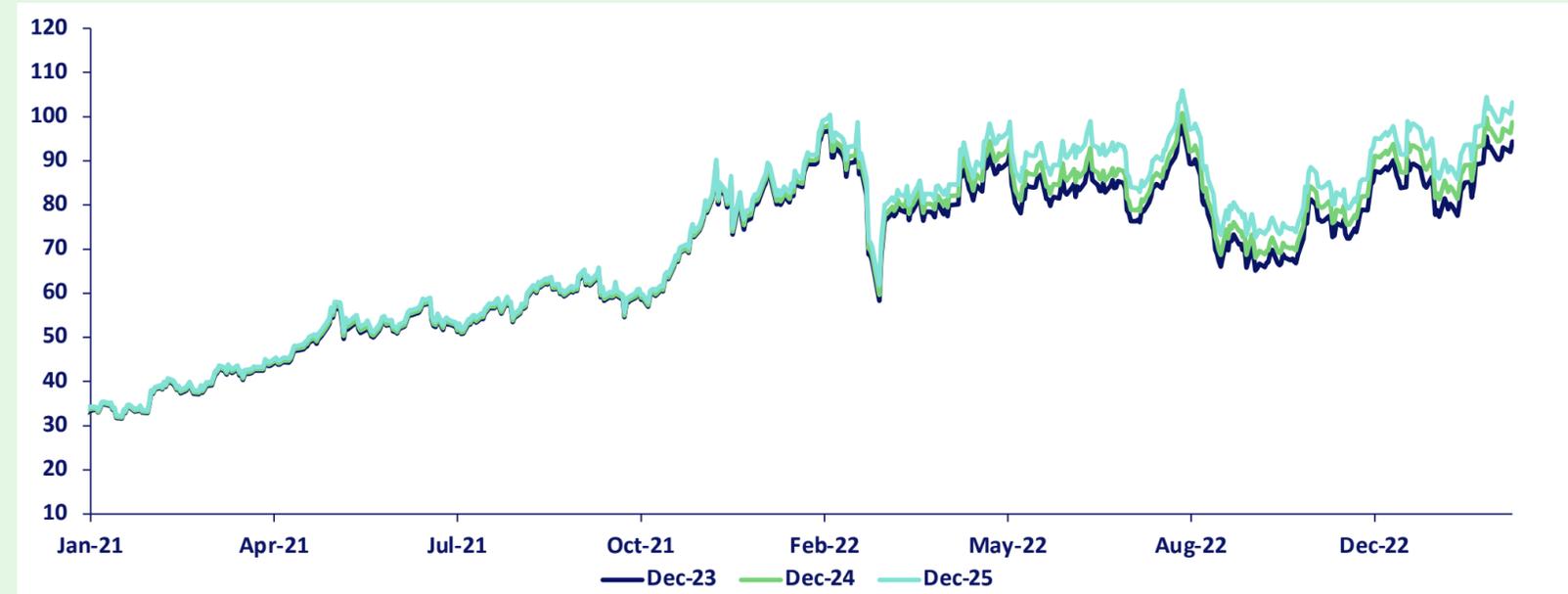


## Merchant Carbon Prices

UKA Carbon (£/t)

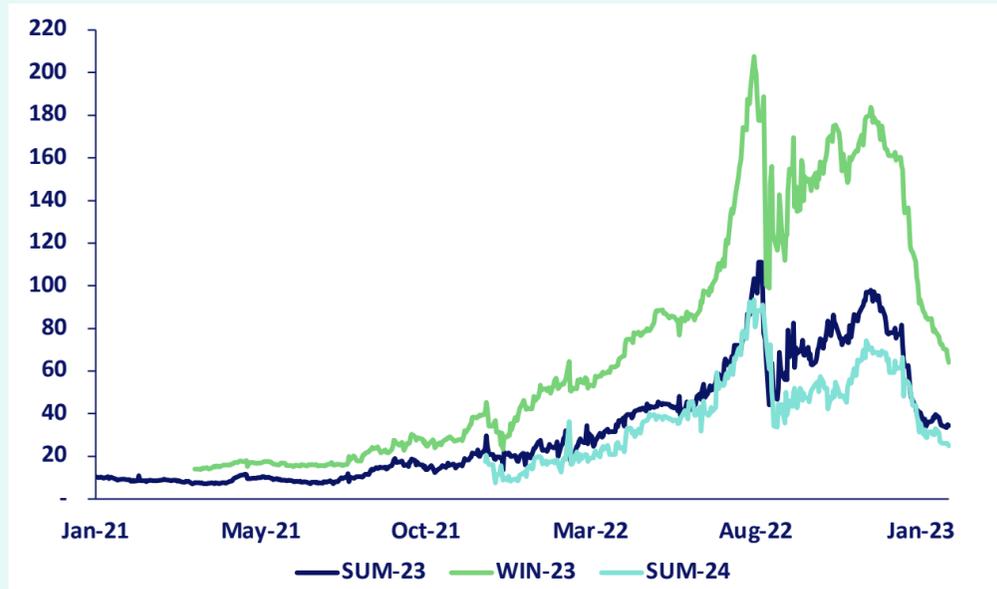


EU ETS Carbon (€/t)



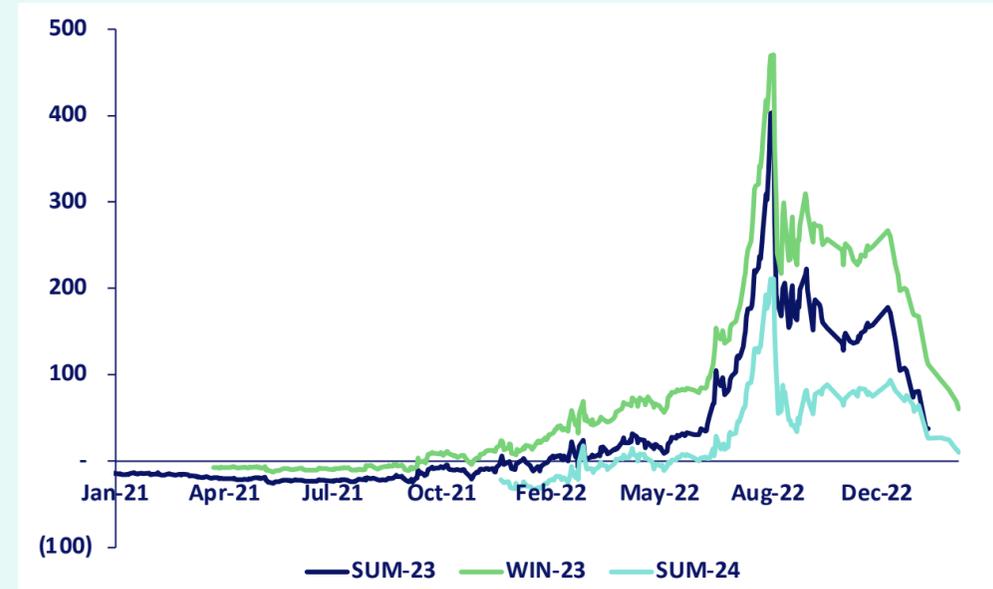
# Merchant Forward Spreads

Peak CSS (£/MWh)



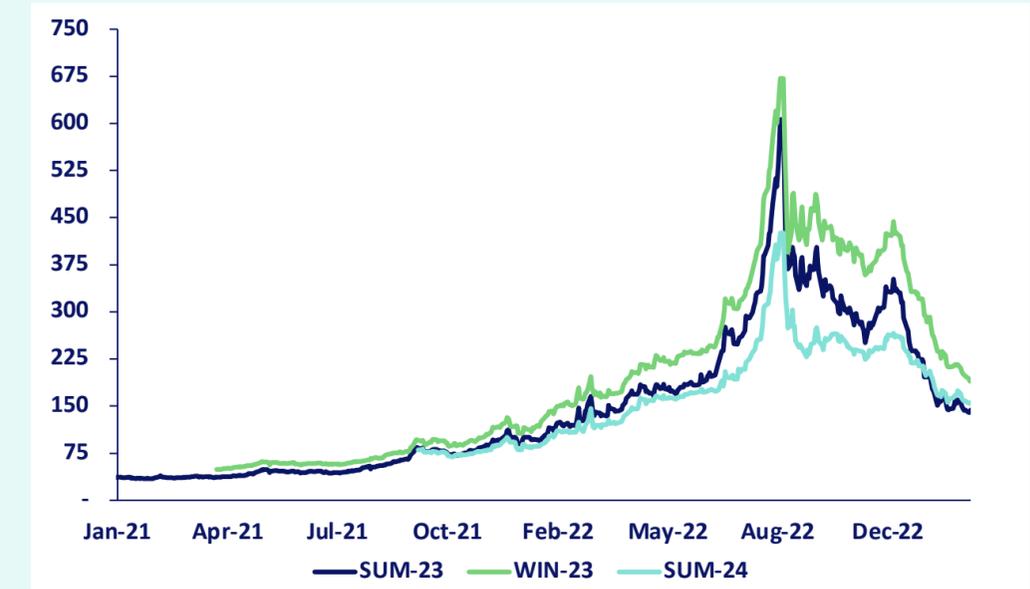
Source: ICE, Reuters and Drax

Peak DGS (£/MWh)



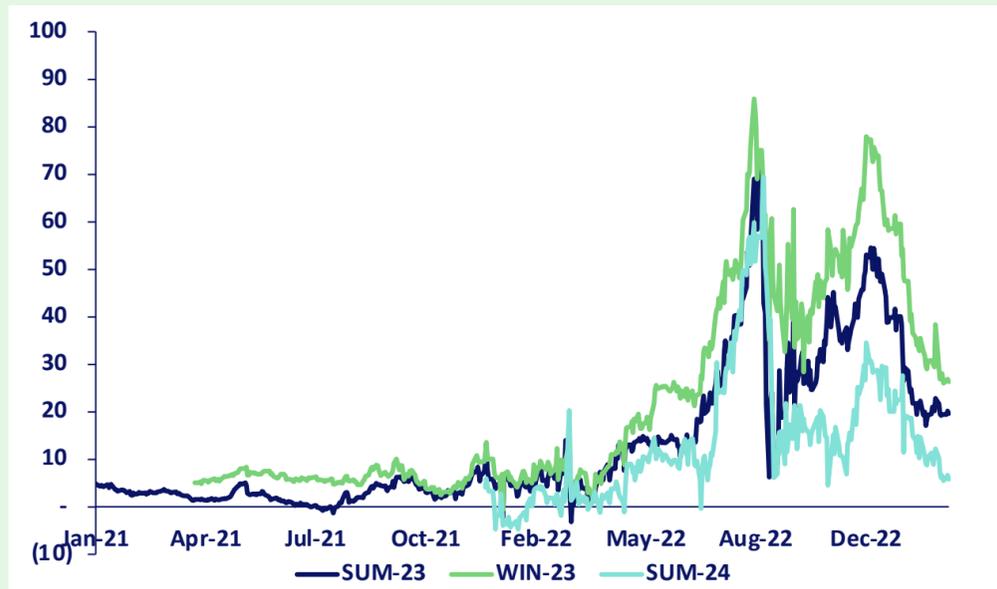
Source: ICE, Reuters and Drax

Peak ROC Bark Spread (£/MWh)



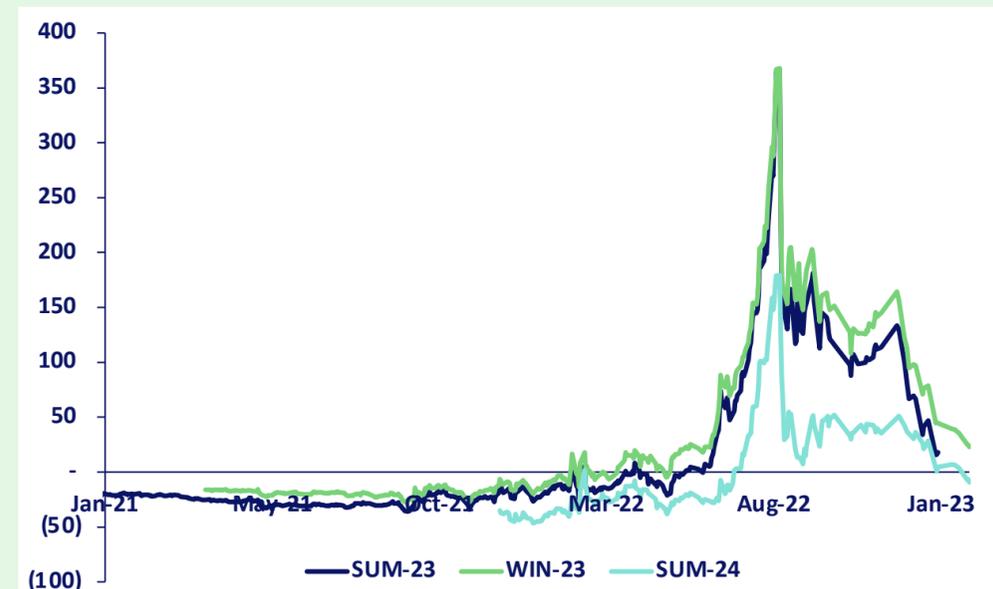
Source: ICE, Reuters and Drax

Baseload CSS (£/MWh)



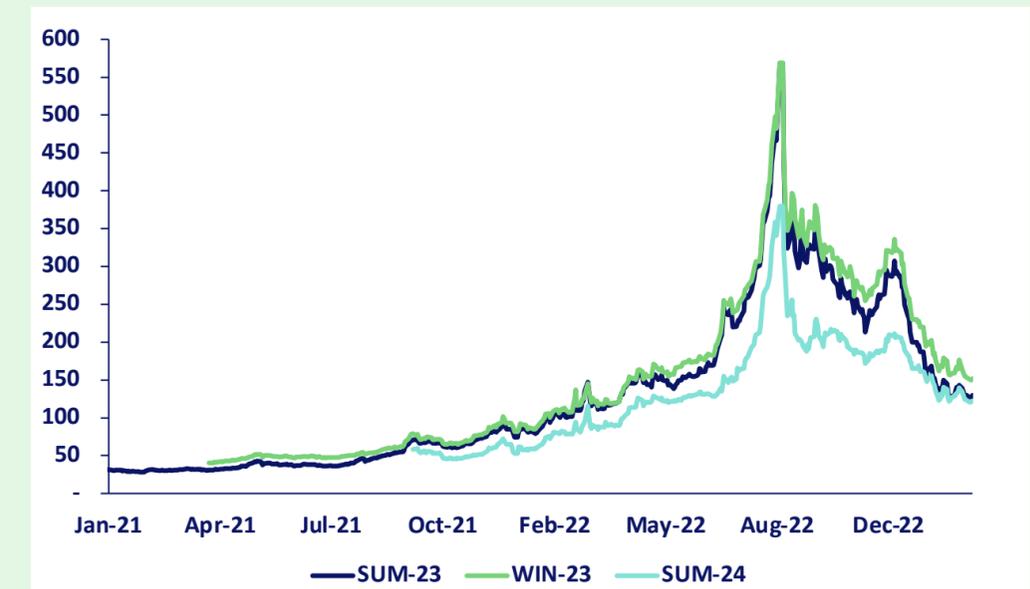
Source: ICE, Reuters and Drax

Baseload DGS (£/MWh)



Source: ICE, Reuters and Drax

Baseload ROC Bark Spread (£/MWh)



Source: ICE, Reuters and Drax

# 2022

# Full Year Results

23 February 2023

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