



# 2022 Half Year Results

26 July 2022

# 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; future investment and support for the Group’s objectives; and/or general economic conditions or conditions affecting the relevant industry, both domestically and internationally, being less favourable than expected. 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 Ambition**

To be a carbon negative  
company by 2030

# H1-22 Highlights

Strong financial and operational performance

A leading provider of UK dispatchable renewable power with plans to deliver negative emissions

## Strategic

- Robust integrated biomass model with options for value through supply chain
- Progress with negative emissions (BECCS)
- £3bn fully funded growth plans underpinning sustainable and growing dividend

## Operational

### Pellet Production

- Increase in pellet production and Adjusted EBITDA
- Flexibility to support optimisation of Generation

### Generation

- >99% reduction in scope 1 and 2 CO<sub>2</sub> vs 2012
- Optimisation of biomass to support security of supply and value
- Strong system support performance

### Customers

- Improved performance

## Financial

- 21% increase in Adjusted EBITDA
- Strong cash generation, liquidity and balance sheet
- 11.7% increase in dividend per share



# Future Positive

# Future Positive

Strategic ambition underpinned by safety, sustainability and biomass cost reduction

## People Positive

- Diversity and inclusion programme – inclusive management, promoting social mobility via graduate, apprenticeships and work experience
- Continued commitment to STEM outreach programme

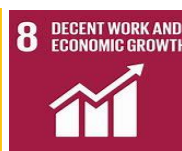
## Nature Positive

- Science-based sustainability policy fully compliant with UK and EU law on sustainable sourcing
- 100% of woody biomass produced by Drax verified against SBP, SFI, FSC® (C119787) or PEFC Chain of Custody certification

## Climate Positive

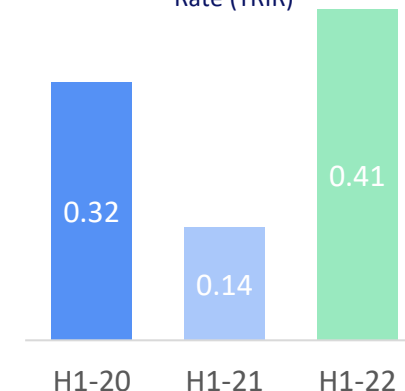
- >99% reduction in scope 1 and 2 generation CO<sub>2</sub> since 2012
- >99% of generation from renewable and low-carbon sources
- >97% of Adjusted EBITDA from renewable and low-carbon activities
- MOU with MOL to further reduce emissions from shipping

## UN Sustainable Development Goals



## Safety is key

Total Recordable Incident Rate (TRIR)



## TCFD supporter



# Operational Review

# Pellet Production – Operational Review

Increased production capacity, continued focus on cost reduction

## Increase in production driving earnings

- 54% increase in production
- 13% increase in Adjusted EBITDA

## 2% increase in production cost v FY-21

- Inflation impact on utility costs and fuel surcharges
- Plant commissioning costs
- Optimisation of supply chain to support Generation profile
- Other cost savings and no material change in raw fibre costs

## c.0.4Mt of new capacity in US Southeast commissioned in H1-22

- Expect to reach full capacity at Demopolis and Leola in H2-22

## Expect FID on 0.5Mt of new capacity in H2-22

## Continued investment in innovation

## Tokyo sales office opened July 2022

26 July 2022

<b>Adjusted EBITDA</b> <b>£45m</b> (H1-21: £40m)	<b>Production cost</b> <b>\$146/t<sup>(1/2)</sup></b> (FY-21: \$143/t)	
<b>Pellet production</b> <b>2.0Mt</b> (H1-21: 1.3Mt)	<b>Sales to 3<sup>rd</sup> parties</b> <b>1.0Mt<sup>(4)</sup></b> (H1-21: 0.4Mt <sup>(3)</sup> )	
<b>Fibre sources</b>	<b>H1-22</b>	<b>FY-21<sup>(3)</sup></b>
Sawmill residues	67%	57%
Branches, tops and bark	8%	5%
Thinnings	14%	22%
Low-grade round wood	11%	16%
<b>Total</b>	<b>100%</b>	<b>100%</b>

- 1) Cost of production in Pellet Production – raw fibre, processing into a wood pellet, delivery to Drax port facilities in US and Canada and loading to vessel for shipment and overheads – Free on Board (FOB). Cost of ocean freight, UK port and rail cost reflected in Generation business accounts in addition to price paid to Pellet Production for the wood pellet.
- 2) Cost per tonne stated at a constant CAD:USD rate of 1.30.
- 3) Inclusive of Pinnacle from 13 April 2021.

# Pellet Production – Strong Long-term Order Book

3<sup>rd</sup> party supply and own-use

## Attractive 3<sup>rd</sup> party supply business

US\$4.4bn of contracted sales to 3<sup>rd</sup> parties

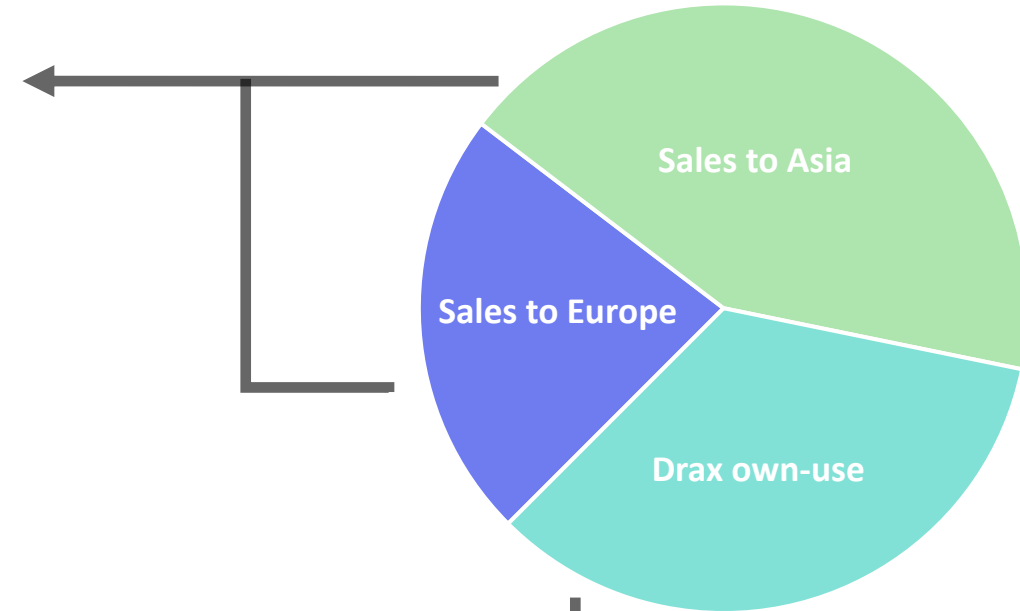
>21Mt of contracted sales to 3<sup>rd</sup> parties

Contracts extending to mid-2030s

High-quality Asian and European counterparties



## Diversified long-term offtake



## Additional capacity for own-use

13Mt own-use through 2026

Long-term capacity to support BECCS, additional 3<sup>rd</sup> party supply and generation models

Targeting 8Mt of production capacity to support growth – own-use and 3<sup>rd</sup> party supply

# Generation – Operations

UK's largest source of renewable power by output

## Biomass performance

- Optimisation of biomass generation and logistics to support UK security of supply when demand is high
- Additional optimisation, biomass and system costs
- Strong commercial availability
- Short planned outages completed on four units

## Strong system support performance across portfolio

- 13% increase in margin from system support

## Six-month extension of coal at request of UK government

- Winter contingency contract until end of March 2023
- Fixed fee and compensation for associated costs, including coal
- Remain committed to coal closure and development of BECCS

Adjusted EBITDA<sup>(1)</sup>  
**£205m**  
(H1-21: £186m)

System support<sup>(2)</sup>  
**£71m**  
(H1-21: £63m)

% of UK  
renewables  
**11%**<sup>(3)</sup>  
(Q2 2020 to Q1  
2021: 12%)

Biomass  
availability<sup>(4)</sup>  
**86%**  
(H1-21: 89%)

Biomass  
generation  
**6.1TWh**  
(H1-21: 7.6TWh)

Hydro  
generation<sup>(5)</sup>  
**0.2TWh**  
(H1-21: 0.3TWh)

**Coal closure  
March 2023**

Coal  
generation  
**<0.1TWh**  
(H1-21: 0.4TWh)

CO<sub>2</sub> intensity  
**<0.1t/MWh**  
(H1-21: 0.1t/MWh)

# Generation – Trading and Optimisation

Supporting security of supply though reprofiling biomass supply and generation

## Strong contracted power sales on ROC and hydro 2022-2024

- 25.4TWh contracted at £95.9/MWh

## Strong contracted biomass supply and freight through 2026

- Own-use pellet production and 3<sup>rd</sup> party contracts
- Long-term hedging of ocean freight costs
- Rolling FX hedge protects from changes in rates

## Total annual biomass generation

- ROC and CfD total annual generation typically limited by biomass supply to approximately 14TWh
- Lower expected level of ROC generation in 2023 due to major planned outages on two units

Contracted power sales 21 July 2022	2022	2023	2024
ROC (TWh) <sup>(1)</sup>	11.7	8.8	4.5
-Average achieved £ per MWh	87.2	98.3	109.5
Hydro (TWh)	0.3	0.1	-
-Average achieved £ per MWh	133.1	242.0	-
Gas hedges (TWh equivalent) <sup>(2)</sup>	(0.1)	0.5	1.9
-Pence per therm	361.0	145.8	135.0

# Customers

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 renewable power generation
- 21% increase in I&C sales versus 2021

## Developing portfolio of decarbonisation products

- Route to market for over 2,000 renewable generators
- Demand Side Response propositions, supporting grid stability and benefiting customers
- Electric Vehicle charge point services – a new dedicated portal for fleet customers

## I&C alignment with wider Group renewable strategy

- Alignment of Customers business with Group strategy and customers who share Drax ESG ambitions
- Potential route to market for negative emissions from future projects

Adjusted EBITDA  
**£24m**  
(H1-21: £5m loss)

Drax I&C power sales  
**6.9TWh**  
(H1-21: 5.7TWh)



# Financial Review

# Financial Summary

Strong financial and operational performance

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

**£225m**

(H1-21: £186m<sup>(2)</sup>)

**Total Cash and  
Committed Facilities  
June 2022**

**£539m**

(Dec-21: £549m)

**Cash Generated from  
Operation**

**£185m**

(H1-21: £138m)

**Net Debt  
June 2022<sup>(3)</sup>**

**£1,101m**

(H1-21: £1,029m)

Expect to be significantly below 2x  
Net Debt to Adjusted EBITDA by  
end of 2022

**Adjusted  
Basic Earnings Per Share<sup>(1/2)</sup>**

**20.0p/share<sup>(1/2)</sup>**

(H1-21: 14.6p/share)

**Interim Dividend**

**8.4p/share (£34m)**

(H1-21: 7.5p/share, £30m)

**Expected Full Year Dividend**

**21.0p/share (£84m)**

(H1-21: 18.8p/share, £75m)

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 (H1 2021: £21m of discontinued operation – CCGT generation assets).

3) Cash and short-term investments of £288m less borrowings of £1,388m.

# Pellet Production Cost

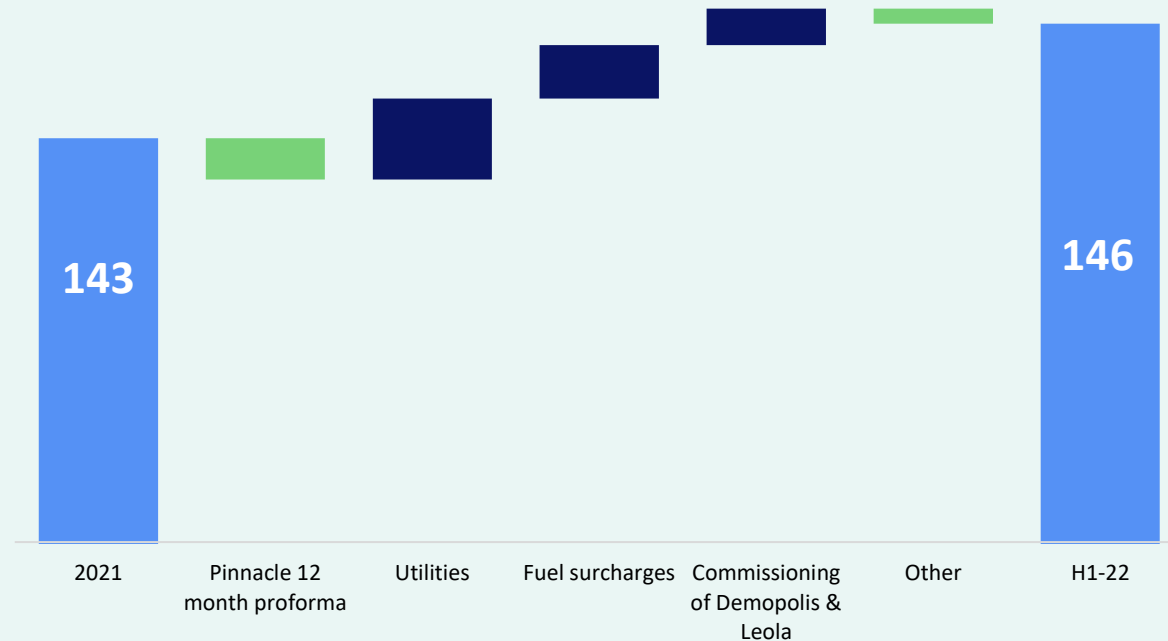
35% of target reductions achieved over last three years

Further savings in H1 offset by targeted inflationary increases and commissioning costs

## Biomass FOB<sup>(1)</sup> cost 2018-2021



## Biomass FOB<sup>(1)</sup> cost 2021 to H1-22



## 2% increase in H1-22

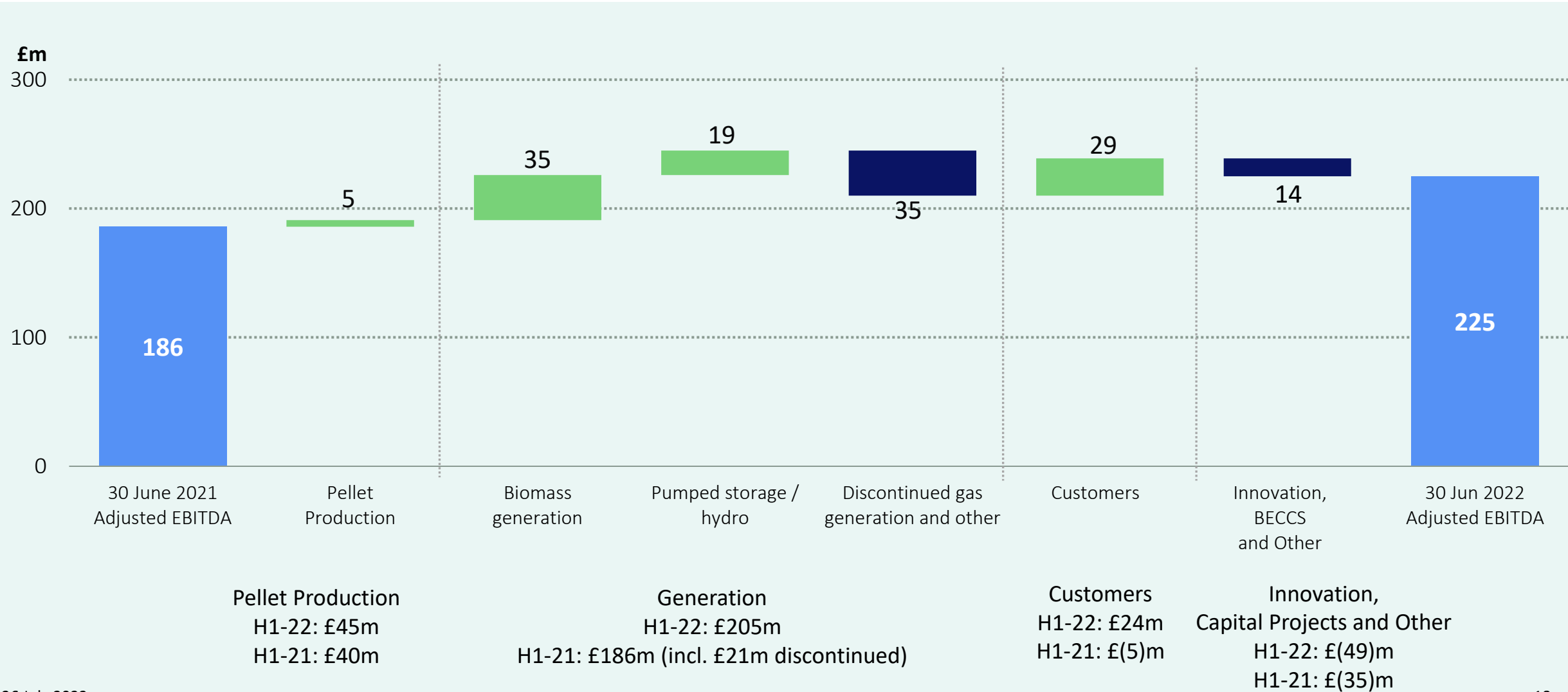
- Increase in utility costs (> 20% increase)
- Fuel surcharges on barge and rail transport to port (> 10% increase)
- Commissioning costs at Demopolis & Leola – 80% of full volume achieved in June
- “Other” represents a net reduction across all other costs:
  - Other savings more than offset costs incurred optimising the supply chain to support reprofiling of Generation
  - No material change in raw fibre costs

## Areas of focus for savings

- Increased use of lower cost residuals and a wider range of sustainable biomass materials
- Continued optimisation across fibre, transportation and production
- Incremental throughput at existing sites and addition of new capacity
- Development and introduction of new technologies and innovation

# Adjusted EBITDA Bridge H1-21 to H1-22

21% increase in Adjusted EBITDA



# Capital Investment

Investment to drive operational efficiency, strategic initiatives and growth

2022 estimate	Key areas	Investment
Maintenance	Maintain operational performance	£70-80m
Enhancement	Efficiency and operational improvements	£20m
Strategic and growth	UK BECCS	£20m
	New pellet plants (subject to FID)	£10m
	Biomass and other	£20-30m
	OCGT	£120m
Other	Health, safety, environment and IT	£30m
Total		£290-£310m

**H1-22: £60m**

## Full year outlook

- Continued investment in development of UK BECCS FEED study and early site preparation
- OCGT investment in H2-22 in line with 2024 Capacity Market agreement Expect to take FID on 0.5Mt of new pellet plant capacity in H2-22



# Balance Sheet

Long-term structures in place to support growth

## Facilities in place to support growth and decarbonisation

- Infrastructure facilities extend maturity profile to 2030
- ESG facilities with margin linked to carbon emissions

## Group cost of debt <3.6%

- Repayment of £35m index-linked term loan

## Strong credit profile

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

## Further opportunities for efficiency and reduced cost

Expect significantly  
<2x Net Debt to  
Adjusted EBITDA by  
end of 2022

£539m cash and  
committed facilities

Maturity profile  
to 2030

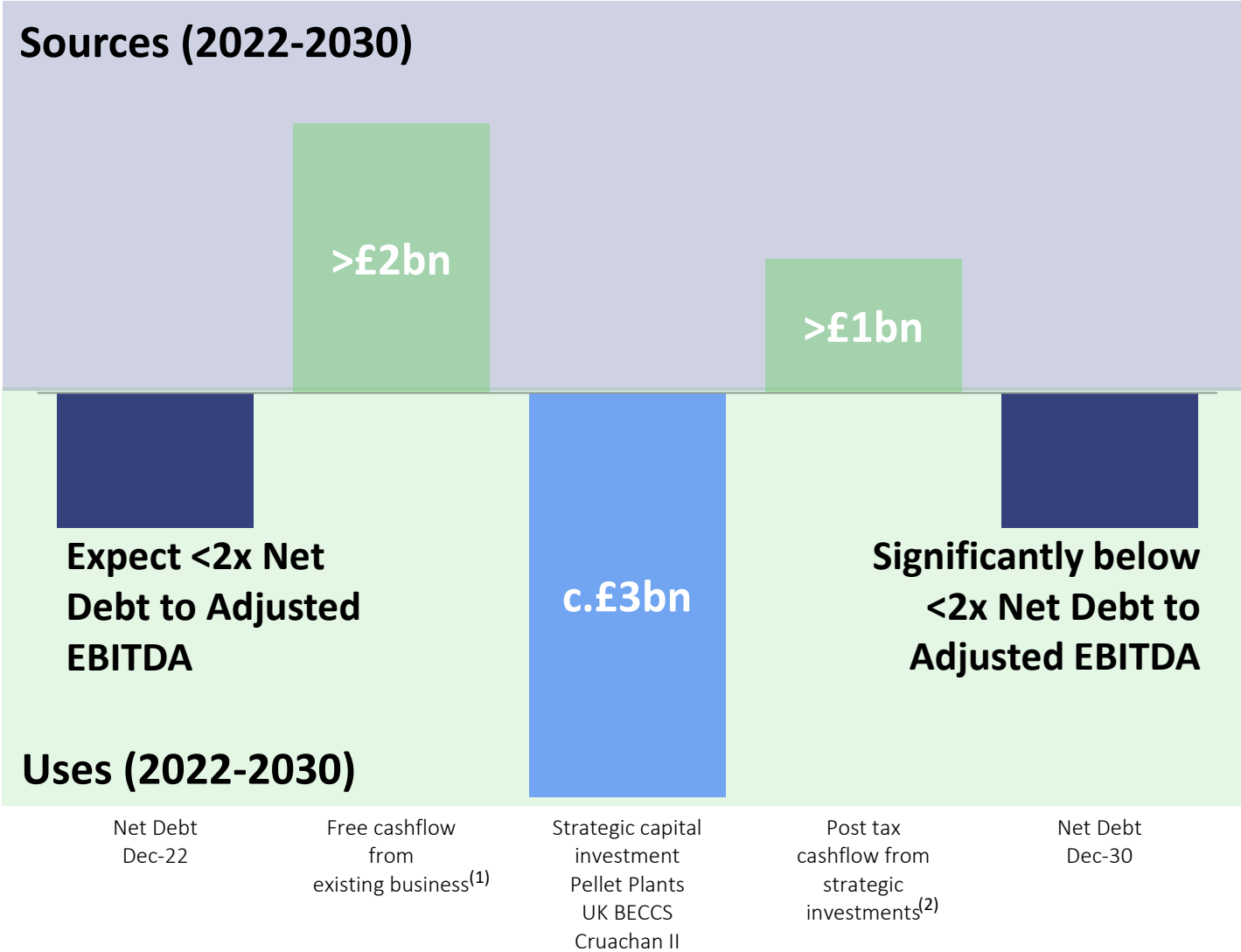
Instrument	Maturity	Description
<b>Infrastructure facilities</b>		
2019	2024-2029	£375m
2020	2024-2030	c.£213m <sup>(1)</sup>
<b>Bonds</b>	2025	\$500m
	2025	€250m
<b>ESG Revolving Credit Facility</b>	2025	£300m (undrawn for cash)
<b>ESG term-loan<sup>(2)</sup></b>	2024	C\$300m

1) c.£213m – €25m in 2024 (£23m), €70m (£63m) in 2026, £45m in 2027, £53m in 2028 and €31.5m (£29m) in 2030, of which £130m was undrawn at December 2020, subsequently drawn February 2021.<sup>20</sup>

2) Refinanced July 2021, reduced from C\$435m at 30 June 2021.

# Sources and Uses of Cash – Fully Funded Investment Plan to 2030

Investment funded by existing cash generation and EBITDA growth consistent with long-term target of 2x Net Debt



## Strategic capital investments

- Pellet plants, UK BECCS, Cruachan II

## Investment and funding

- 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
- Peak investment period 2024-2027
- Net debt to Adjusted EBITDA <2x in 2030

## Additional free cashflow available to support other investments, including BECCS projects in US

## Returns

- Target high single to low double-digit returns depending on risk profile and proportion of contracted earnings

## Remain committed to current dividend policy

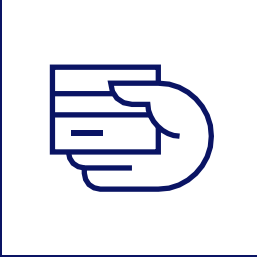
- Average growth rate over last 5 years of 10%

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

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

# Clear Capital Allocation Policy

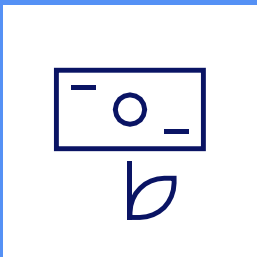
Implemented in 2017, designed to support strategy



1. Maintain credit rating



2. Invest in core business



3. Sustainable and growing dividend



4. Return surplus capital beyond investment requirements

# Strategy Update

# Strategic Objectives

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

## Pellet Production

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

- 3<sup>rd</sup> party sales, own-use, cost reduction, fibre sourcing and technology

## Negative Emissions

### **Objective 2: to be a global leader in negative emissions**

- Development of projects in UK and internationally
- Carbon negative by 2030

## Dispatchable, Renewable Power

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

- Biomass, pumped storage and hydro
- Renewable power and energy services to strategic customers

**All underpinned by safety, sustainability and cost reduction**

# Milestones for 2022

Making good progress on milestones for progressing strategy through 2022

## Biomass pellet production

- Expect to take final investment decision on up to 0.5Mt of new capacity

## Biomass pellet sales

- ✓ - Establishment of Tokyo field office
- Establishment of European business development
- ✓ - Expansion of international affairs capability

## Biomass cost reduction

- 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
- ✓ - Planning application submitted
- ✓ - Government to run competitive process for Gas CCS, industrial CCS and hydrogen projects
- Government to develop and initiate selection process for BECCS and other greenhouse gas removal projects in priority CCS clusters
- Government to publish Bioenergy Strategy Review

## International BECCS

- ✓ - Programme of government engagement
- ✓ - Site location filtering
- Progress discussions on renewable power and negative emission packages
- Commence detailed CO<sub>2</sub> storage evaluation programme
- Refine technical concepts

## Pumped Storage

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

# Development of UK BECCS

Drax Power Station – targeting 8Mt pa of negative emissions from BECCS by 2030, on track for FID in 2024

## H1-22

### Technology

- FEED study progressing well
- Early stage site preparation commenced

### Planning

- Planning application submitted May 2022

### Government

- Competitive process for Gas CCS, industrial CCS and hydrogen projects underway

## H2-22

### Technology

- Coal “winter contingency” contract – delay coal infrastructure removal to April 2023
- No significant impact on BECCS timetable

### Government

- Draft Energy Bill (July 2022) – creates legislative framework for BECCS business model
- Consultation on GGR business models published July 2022
- Consultation on power BECCS business model to be published “reflective of its advanced technological readiness and the co-benefits of both power and negative emissions”
- Launch next stage of selection process for BECCS and other greenhouse gas removal projects
- Publish Bioenergy Strategy Review
- Progress Review of Energy Market Arrangements (REMA) – an important long-term role for biomass and BECCS

# International BECCS

Targeting 4Mt pa of negative emissions from new-build BECCS outside UK by 2030

## Supportive regulatory developments in USA

- Inclusion of BECCS as an eligible technology under Department of Energy climate goals funding scheme
- Louisiana legislation supporting renewable status of biomass and negative emissions from BECCS
- Inclusion of BECCS in California carbon neutrality plan....  
*"Biomass utilization strategies paired with sequestration, like bioenergy with carbon capture and storage (BECCS). The Proposed Scenario estimates that 5–10 MTCO<sub>2</sub>e may be available from recoverable biomass, but this will require the permitting, construction, and start-up of new infrastructure in California"*

## Good progress with milestones

- State and Federal level engagement in USA, including Louisiana, Texas and California
- Continued screening and narrowing of regions and locations – including green and brownfield sites
- Key consideration – proximity to fibre and carbon infrastructure, regulatory support, commercial potential and technology
- Evaluating options for commercial agreements with industrial partners for renewable power and negative emissions
- Engagement with policy makers on standards for the classification of biomass engineered removals (negative emissions)

## Emerging opportunities for coal-to-biomass-to-BECCS

# Outlook

Drax strategic objectives closely aligned with net zero policies, providing attractive opportunities for long-term growth

**UK and international policies increasingly support the use of biomass, BECCS and the role of dispatchable generation**

## Pellet Production

- Targeting 4Mt pa of 3<sup>rd</sup> party pellet sales by 2030
- Targeting 8Mt pa of pellet production capacity by 2030

## Negative Emissions

- Targeting 8Mt pa of negative emissions from UK BECCS by 2030
- Growing global demand for negative emissions and increasing opportunities for BECCS outside UK by 2030

## Dispatchable, Renewable Power

- Long-term system need for biomass generation
- Develop option for additional 600MW pumped storage by 2030

## Underpinned by safety, sustainability and biomass cost reduction

- Continue to target biomass cost reduction
- Investment in resources to deliver strategy and purpose



# 2022 Half Year Results

26 July 2022

# 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**

**Climate Positive**

**Sustainable Biomass Sourcing and Carbon Life Cycle**

**Sources of Biomass Supply**

**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 value chain

Business unit	Assets	Capacity	H1-22 Adjusted EBITDA (£m)	H1-21 Adjusted EBITDA (£m)
Pellet Production	17 pellet plants and developments in Canada and USA Access to 4 deep water ports (with control of 2)	c.5Mt  c.8Mt	45	40
Generation	Drax Power Station – biomass and legacy coal	2.6GW/1.3GW <sup>(1)</sup>	152	131
	Hydro Cruachan Pumped Storage Lanark and Galloway hydro schemes Daldowie – energy from waste	0.6GW	53	34
	Gas 4 x gas CCGTs		-	21
Customers	I&C, Corporate and SME supply		24	(5)
Innovation, Capital Projects and Other			(49)	(35)
<b>Total</b>			<b>225</b>	<b>186</b>

# Group Income Statement – Continuing Operations

In £m	H1-22			H1-21		
	Adjusted	Exceptional	Total	Adjusted	Exceptional	Total
Revenue	3,621	(64)	3,557	2,177	(3)	2,174
Cost of sales	(3,135)	194	(2,941)	(1,807)	23	(1,784)
<b>Gross profit</b>	<b>486</b>	<b>130</b>	<b>616</b>	<b>370</b>	<b>20</b>	<b>390</b>
Operating and administrative expenses	(235)	(2)	(237)	(197)	(12)	(209)
Impairment losses on financial assets	(26)	-	(26)	(8)	-	(8)
<b>Adjusted EBITDA from continuing operations</b>	<b>225</b>	<b>n/a</b>	<b>n/a</b>	<b>165</b>	<b>n/a</b>	<b>n/a</b>
Depreciation	(106)	-	(106)	(72)	-	(72)
Amortisation	(15)	-	(15)	(17)	-	(17)
Impairment of non-current assets	-	(25)	(25)	-	-	-
Loss on disposal of fixed assets	(1)	-	(1)	-	-	-
Income from associates	1	-	1	-	-	-
<b>Operating profit</b>	<b>104</b>	<b>103</b>	<b>207</b>	<b>76</b>	<b>8</b>	<b>84</b>
Foreign exchange gains	28	-	28	2	-	2
Net interest charge	(35)	-	(35)	(34)	-	(34)
<b>Profit before tax</b>	<b>97</b>	<b>103</b>	<b>200</b>	<b>44</b>	<b>8</b>	<b>52</b>
Tax	(18)	(34)	(52)	(5)	(53)	(58)
<b>Net result from continuing operations</b>	<b>79</b>	<b>69</b>	<b>148</b>	<b>39</b>	<b>(45)</b>	<b>(6)</b>

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

In £m	H1-22			H1-21		
	Continuing	Discontinued	Total	Continuing	Discontinued	Total
Revenue	3,621	-	3,621	2,177	52	2,229
Cost of sales	(3,135)	-	(3,135)	(1,807)	(32)	(1,839)
<b>Gross profit</b>	<b>486</b>	-	<b>486</b>	<b>370</b>	<b>20</b>	<b>390</b>
Operating expenses	(235)	-	(235)	(197)	1	(196)
Impairment losses on financial assets	(26)	-	(26)	(8)	-	(8)
<b>Adjusted EBITDA</b>	<b>225</b>	-	<b>225</b>	<b>165</b>	<b>21</b>	<b>186</b>
Depreciation	(106)	-	(106)	(72)	-	(72)
Amortisation	(15)	-	(15)	(17)	-	(17)
Loss on disposal of fixed assets	(1)	-	(1)	-	-	-
Income from associates	1	-	1	-	-	-
<b>Operating profit</b>	<b>104</b>	-	<b>104</b>	<b>76</b>	<b>21</b>	<b>97</b>
Foreign exchange gains	28	-	28	2	-	2
Net interest charge	(35)	-	(35)	(34)	-	(34)
<b>Profit before tax</b>	<b>97</b>	-	<b>97</b>	<b>44</b>	<b>21</b>	<b>65</b>
Tax	(18)	-	(18)	(5)	(2)	(7)
<b>Profit for the period</b>	<b>79</b>	-	<b>79</b>	<b>39</b>	<b>19</b>	<b>58</b>
<b>Basic earnings per share (pence)</b>	<b>20.0</b>	-	<b>20.0</b>	<b>9.9</b>	<b>4.7</b>	<b>14.6</b>

# Consolidated Adjusted EBITDA – Continuing and Discontinued Operations

H1-22 £m	Power Generation	Discontinued	Pellet Production	Customers	Adjustments <sup>(1)</sup>	Consolidated
Segment Adjusted EBITDA	205	-	45	24	(5)	269
Innovation, Capital Projects and Other						(44)
<b>Consolidated Adjusted EBITDA</b>						<b>225</b>

H1-21 £m	Power Generation	Discontinued	Pellet Production	Customers	Adjustments <sup>(1)</sup>	Consolidated
Segment Adjusted EBITDA	165	21	40	(5)	(4)	217
Innovation, Capital Projects and Other						(31)
<b>Consolidated Adjusted EBITDA</b>						<b>186</b>

# Pellet Production – Adjusted EBITDA

In £m	H1-22	FY-21
Revenues	358	450
Cost of sales	(242)	(267)
<b>Gross profit</b>	<b>116</b>	<b>183</b>
Operating costs	(71)	(97)
<b>Adjusted EBITDA</b>	<b>45</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

USD\$	H1-22	FY-21
Cost of sales (\$m)	312	367
Operating costs (\$m)	92	132
<b>Total cost (\$m)</b>	<b>404</b>	<b>499</b>
3 <sup>rd</sup> party pass through volumes (\$m)	(62)	(23)
Freight cost on CIF contracts (\$m)	(31)	(34)
Other adjustments (\$m) <sup>(1)</sup>	(19)	2
<b>Underlying production cost (\$m)</b>	<b>292</b>	<b>444</b>
Drax pellet production (Mt)	2.0	3.1
<b>Cost per tonne (\$/t)<sup>(2)</sup></b>	<b>146</b>	<b>143</b>

# Generation – Adjusted EBITDA – Continuing and Discontinued Operations

In £m	H1-22	H1-21
<b>Revenue</b>		
Power sales	2,549	1,236
System support and optimisation	91	82
ROC sales	396	191
CfD income	(8)	188
Capacity Market income	8	25
Gas sales to Customers business	60	35
Fuel sales	37	10
Other income	-	5
	<b>3,133</b>	<b>1,772</b>
<b>Cost of sales</b>		
Generation fuel costs	(598)	(691)
Cost of system support and optimisation	(20)	(19)
Fuel sold	(22)	(2)
ROC support	267	262
Carbon tax	-	(11)
Carbon certificates	(2)	(15)
ROCs sold or utilised	(400)	(191)
Cost of power purchases	(2,017)	(788)
Grid charges	(55)	(44)
	<b>(2,847)</b>	<b>(1,499)</b>
<b>Gross profit</b>	<b>286</b>	<b>273</b>
Operating costs	(81)	(87)
<b>Total Adjusted EBITDA<sup>(1)</sup></b>	<b>205</b>	<b>186</b>

## System support and optimisation

£m	H1-22	H1-21
<b>System support and optimisation</b>		
System support and optimisation revenues	91	82
System support and optimisation cost of sale	(20)	(19)
<b>Margin from system support and optimisation</b>	<b>71</b>	<b>63</b>

## Average achieved power price

	H1-22	H1-21
Gross power sales (£m)	2,549	1,236
Cost of power purchases (£m)	(2,017)	(788)
<b>Net power sales (£m)</b>	<b>532</b>	<b>448</b>
Net power sales (TWh)	6.3	8.9
<b>Average achieved price (£/MWh)</b>	<b>84.4</b>	<b>50.3</b>

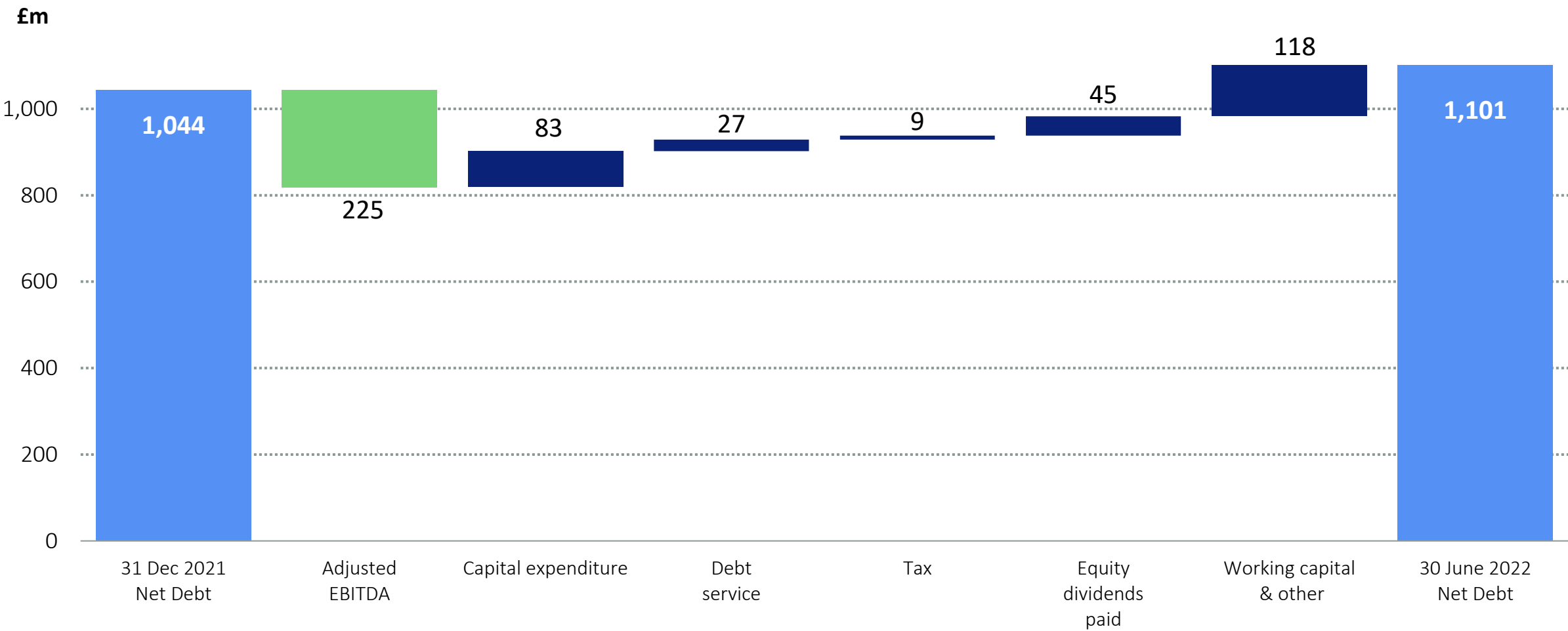
## Customers – Adjusted EBITDA

In £m	H1-22	H1-21
<b>Revenue</b>	<b>1,668</b>	<b>1,077</b>
<b>Cost of sales</b>		
Cost of power and gas purchases	(934)	(442)
Grid charges	(319)	(232)
Other costs	(325)	(359)
	<b>(1,578)</b>	<b>(1,033)</b>
<b>Gross profit</b>	<b>90</b>	<b>44</b>
Operating costs	(40)	(41)
Bad debt charge	(26)	(8)
<b>Adjusted EBITDA</b>	<b>24</b>	<b>(5)</b>

# Group Cash Flow Statement – Continuing and Discontinued Operations

In £m	H1-22	H1-21
Adjusted EBITDA <sup>(1)</sup>	225	186
Working capital and other	(40)	(48)
<b>Cash generated from operations</b>	<b>185</b>	<b>138</b>
Debt service and other interest	(32)	(31)
Tax	(9)	8
<b>Net cash from operating activities</b>	<b>144</b>	<b>115</b>
Capital investment	(83)	(64)
Disposal of subsidiary	-	188
Acquisition of subsidiaries	-	(204)
Net refinancing	(41)	124
Equity dividends paid	(45)	(41)
Other	(7)	(2)
<b>(Decrease) / increase in cash and cash equivalents</b>	<b>(32)</b>	<b>116</b>
Cash and cash equivalents at the beginning of the period	317	290
Net cash flow	(32)	116
Effect of changes in foreign exchange rates	3	-
<b>Cash and cash equivalents at the end of the period</b>	<b>288</b>	<b>406</b>

# Group Net Debt Bridge



# Climate Positive

The world's leading sustainable biomass generation and supply business – ambition to be carbon negative by 2030  
>99% reduction in scope 1 and 2 generation CO<sub>2</sub> since 2012 and >99% of generation from renewable and low-carbon sources

## >£2bn investment in renewables since 2012

Coal-to-biomass conversion, biomass supply chain, pumped storage and hydro

## Ending use of fossil fuels

End of commercial coal generation (Mar-21)  
Winter contingency contract (Oct-22 to Mar-23)  
Closure of coal (Mar-23)

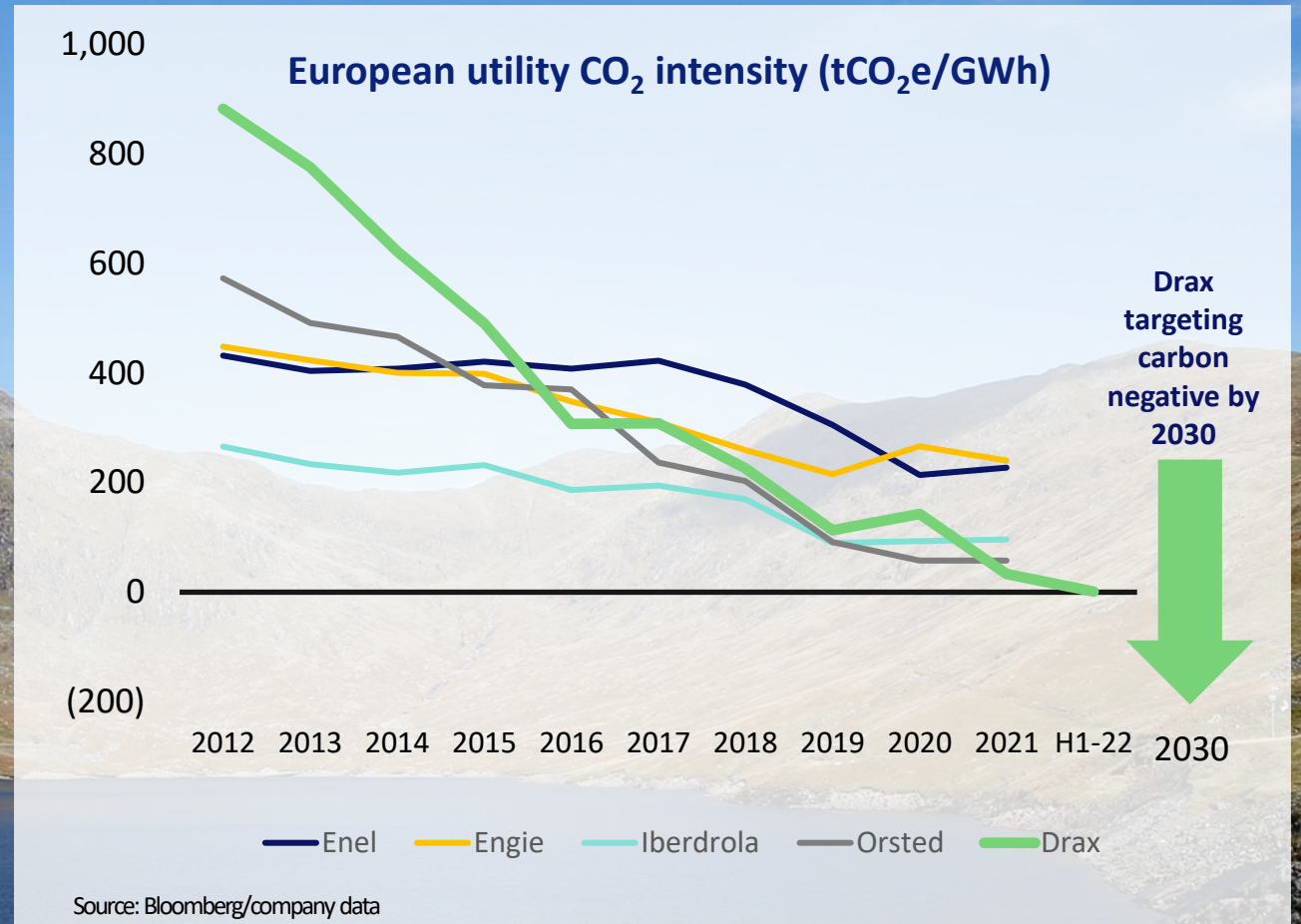
## £3bn of investment opportunities in renewables and negative emissions by 2030

Biomass supply, UK BECCS, pumped storage hydro

Development of options for BECCS in USA

## Ambition to be carbon negative by 2030

Drax expects >90% of capital investment 2022-2030 to be in renewable and low-carbon projects



# Sustainable Biomass Sourcing and Carbon Life Cycle

Science-led biomass sourcing policy ensures long-term sustainability and contribution to natural environment

## Key principles

- No deforestation
- Positive impacts in the areas where we source

## Objectives

- Reduce CO<sub>2</sub> emissions
- Protect the natural environment
- Support people and societies
- Research, outreach and intervention

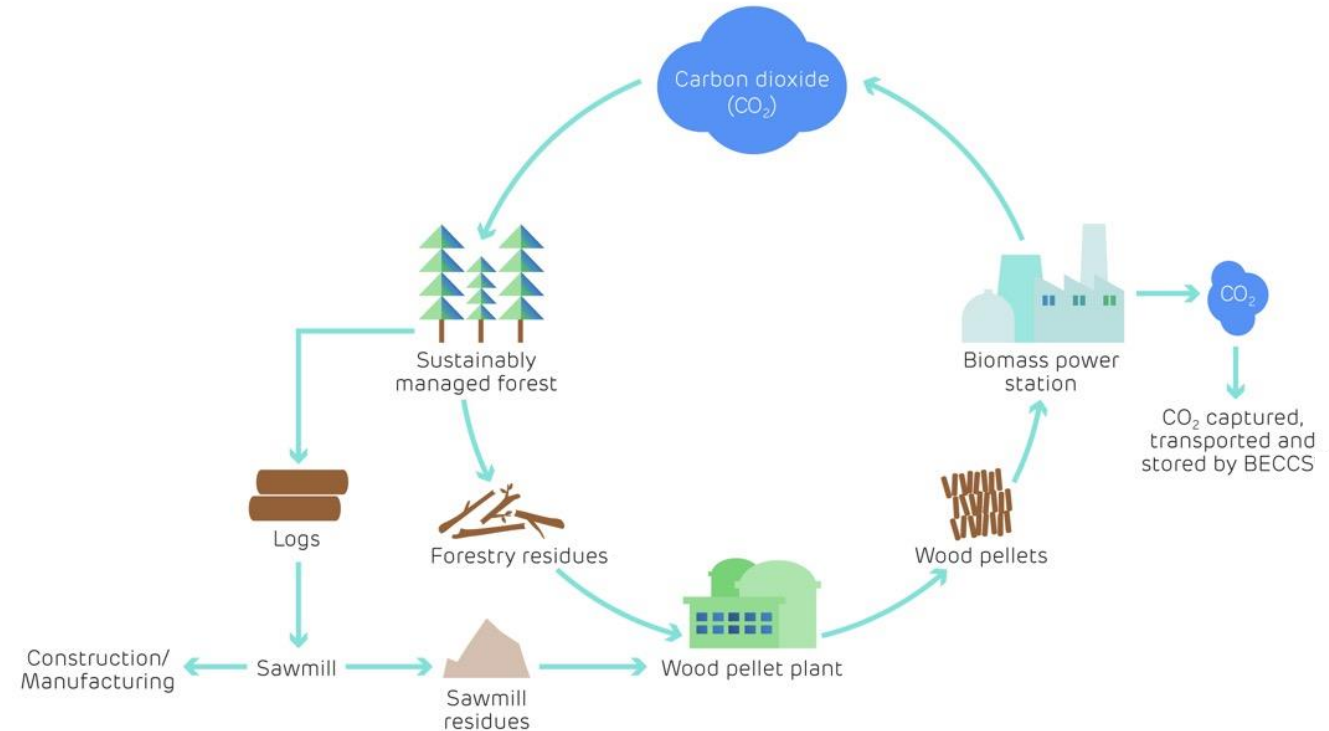
## Policy

- Reflects Committee on Climate Change bioenergy review and Forest Research<sup>(1)</sup> recommendations
- Independent Advisory Board
- Independent assurance of sources

## Strong regulatory mechanisms ensure biomass sustainability

- European Union REDII and Taxonomy, continued with REDIII – emphasis on BECCS
- UK ROC and CfD renewable schemes

## Biomass generation carbon life cycle



1) Forest Research is Great Britain's principal organisation for forestry and tree related research and is internationally renowned for the provision of evidence and scientific services in support of sustainable forestry.  
26 July 2022

# Sources of Biomass Supply

## 3<sup>rd</sup> party and self-supply sources of fibre by location – H1-22

	Sawmill residues	Branches, tops and bark	Thinnings	Low grade round wood	Agri. residues	Total
<b>USA</b>	22%	2%	13%	20%	1%	<b>58%</b>
<b>Canada</b>	23%	4%	-	-	-	<b>27%</b>
<b>Latvia</b>	2%	-	-	6%	-	<b>8%</b>
<b>Estonia</b>	<1%	-	-	-	-	<b>1%</b>
<b>Portugal</b>	<1%	-	<1%	<2%	-	<b>2%</b>
<b>Brazil</b>	-	-	-	1%	-	<b>1%</b>
<b>Other European</b>	<1%	-	-	<1%	1%	<b>3%</b>
<b>Total</b>	<b>48%</b>	<b>6%</b>	<b>14%</b>	<b>30%</b>	<b>2%</b>	<b>100%</b>

## Self-supply sources of fibre – H1-22

	Sawmill residues	Branches, tops and bark	Thinnings	Low grade round wood	Agri. residues	Total
<b>USA</b>	26%	-	14%	11%	-	<b>51%</b>
<b>Canada<sup>(2)</sup></b>	41%	8%	-	-	-	<b>49%</b>
<b>Total</b>	<b>67%</b>	<b>8%</b>	<b>14%</b>	<b>11%</b>	<b>-</b>	<b>100%</b>

## 3<sup>rd</sup> party and self-supply sources of fibre by location – H1-21<sup>(1)</sup>

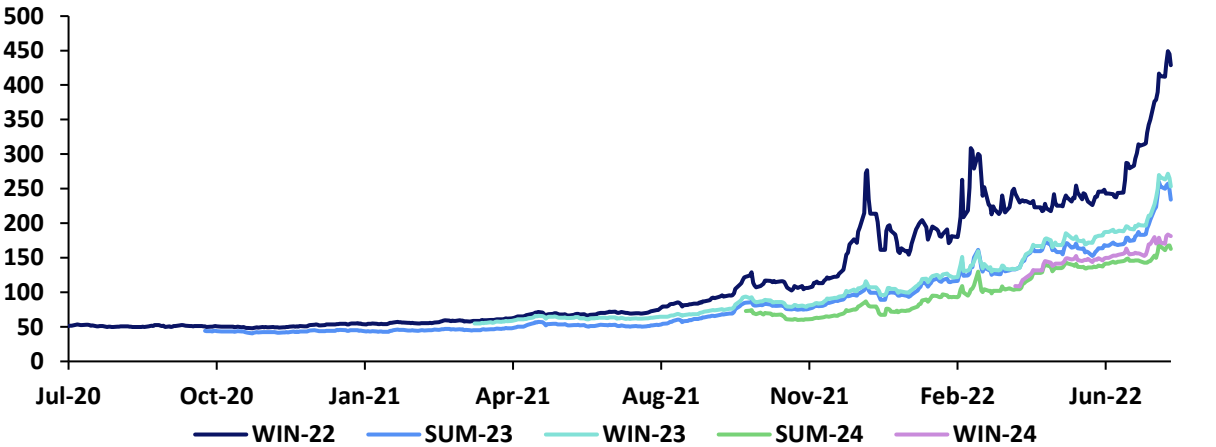
	Sawmill residues	Branches, tops and bark	Thinnings	Low grade round wood	Agri. residues	Total
<b>USA</b>	21%	4%	15%	25%	1%	<b>67%</b>
<b>Canada</b>	11%	1%	-	3%	-	<b>15%</b>
<b>Latvia</b>	1%	-	-	6%	-	<b>7%</b>
<b>Estonia</b>	1%	-	-	1%	-	<b>3%</b>
<b>Portugal</b>	-	1%	-	-	-	<b>1%</b>
<b>Brazil</b>	-	-	-	4%	-	<b>4%</b>
<b>Other European</b>	1%	-	-	-	2%	<b>3%</b>
<b>Total</b>	<b>37%</b>	<b>5%</b>	<b>16%</b>	<b>39%</b>	<b>3%</b>	<b>100%</b>

## Self-supply sources of fibre – H1-21<sup>(1)</sup>

	Sawmill residues	Branches, tops and bark	Thinnings	Low grade round wood	Agri. residues	Total
<b>USA</b>	28%	-	27%	17%	-	<b>72%</b>
<b>Canada</b>	19%	2%	-	6%	-	<b>28%</b>
<b>Total</b>	<b>48%</b>	<b>2%</b>	<b>27%</b>	<b>23%</b>	<b>-</b>	<b>100%</b>

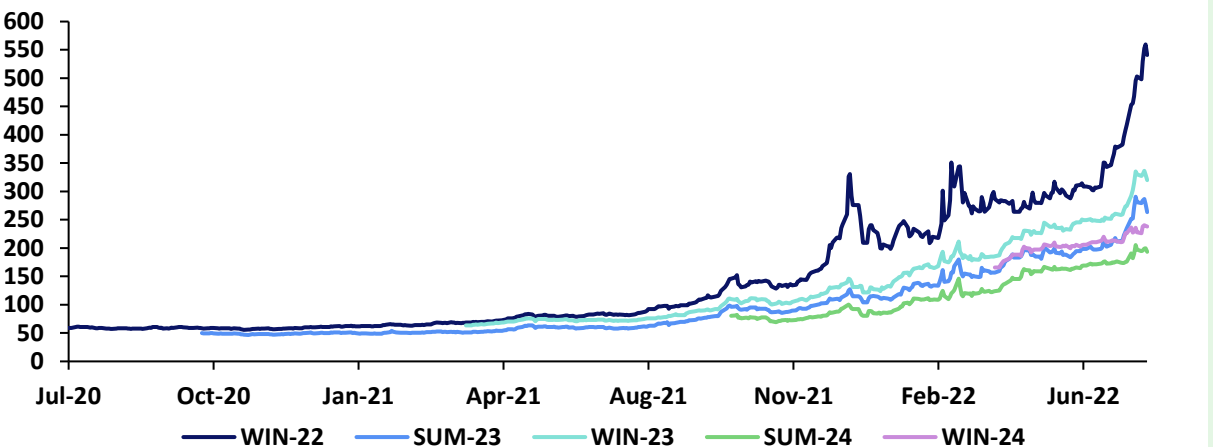
# Merchant Forward Commodity Prices

Baseload Power Price (£/MWh)



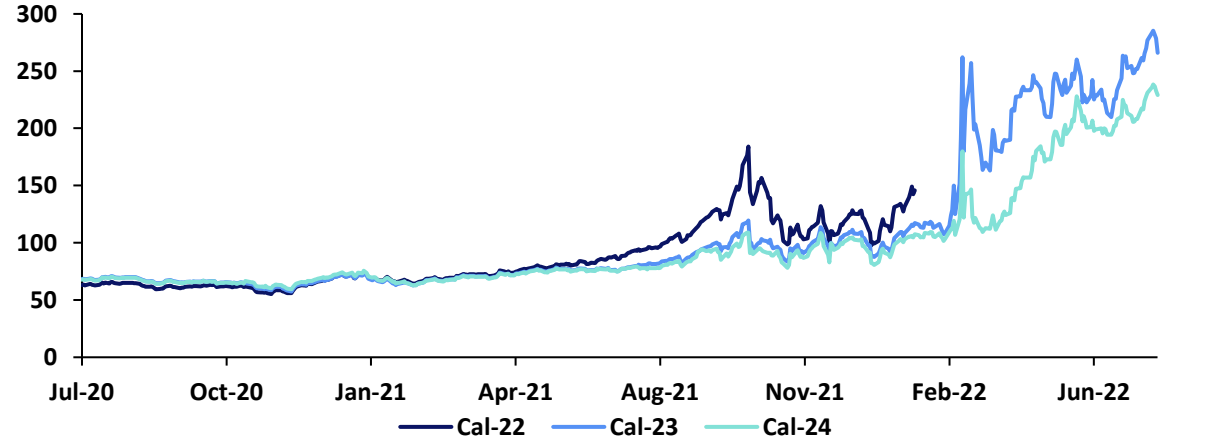
Source: ICE

Peak Power Price (£/MWh)



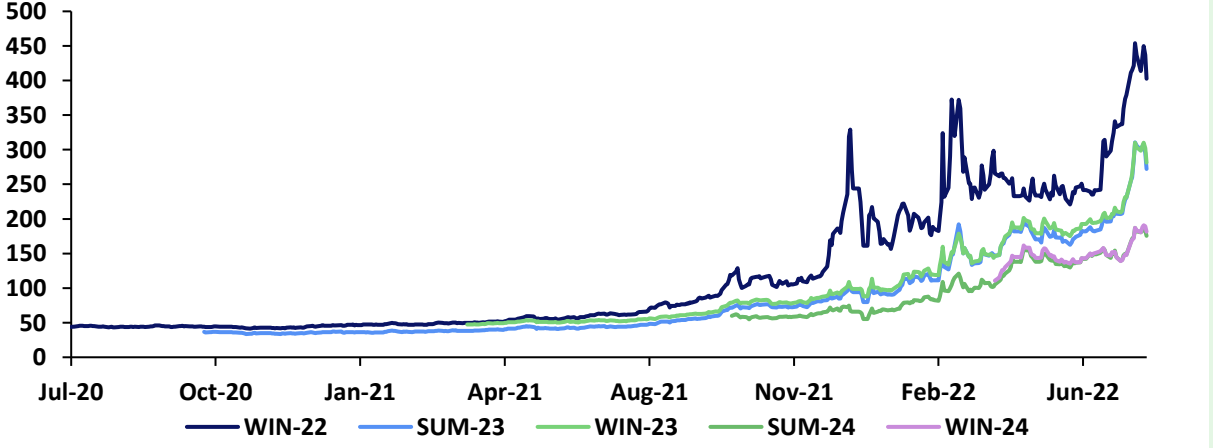
Source: ICE

API2 Coal Price (\$/t)



Source: ICE

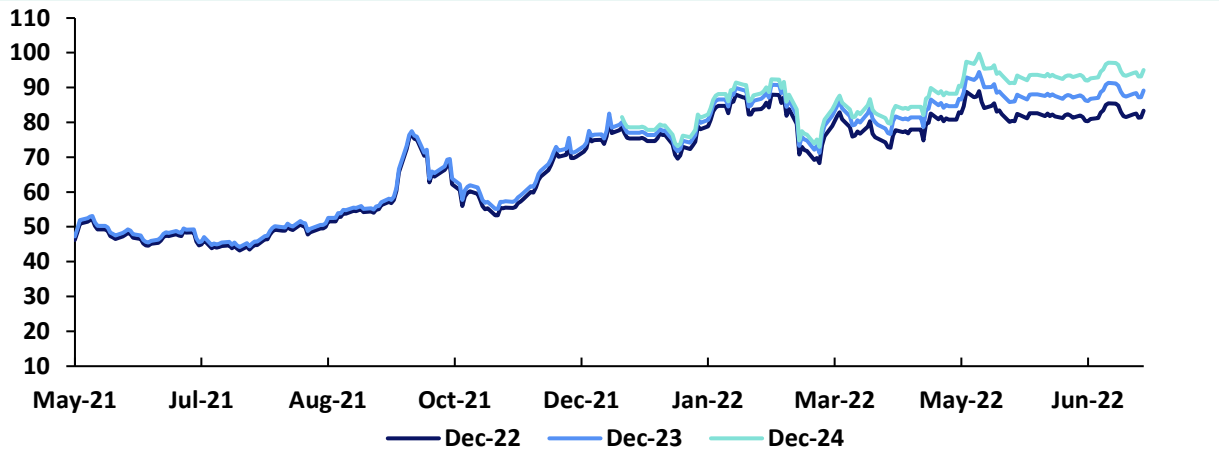
NBP Gas Price (p/therm)



Source: ICE

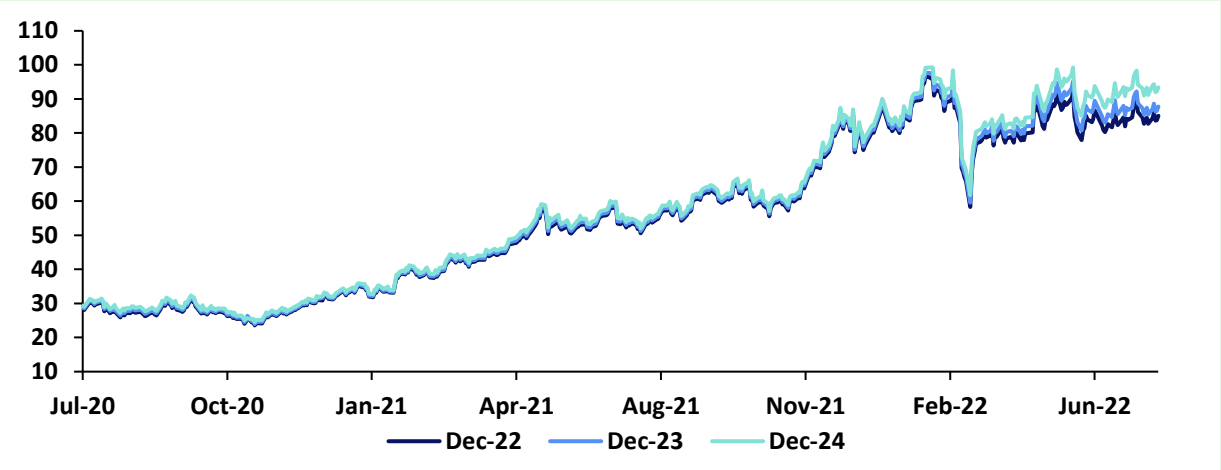
# Merchant Carbon Prices

UKA Carbon (£/t)



Source: ICE

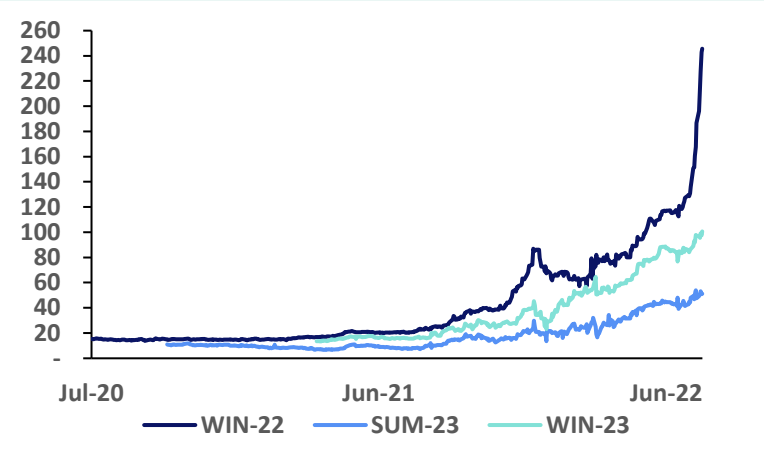
EU ETS Carbon (€/t)



Source: ICE/Spectron

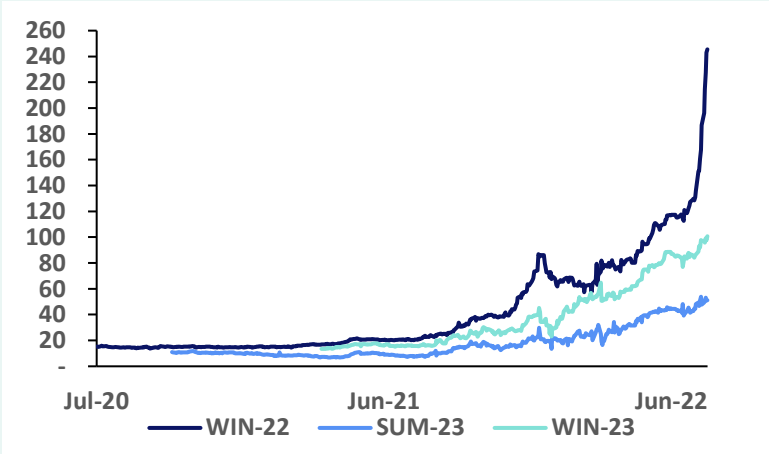
# Merchant Forward Spreads

Peak CSS (£/MWh)



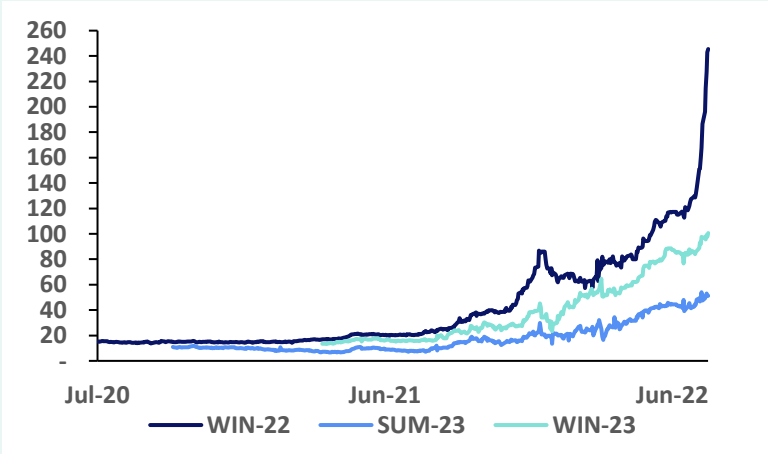
Source: ICE, Reuters and Drax

Peak DGS (£/MWh)



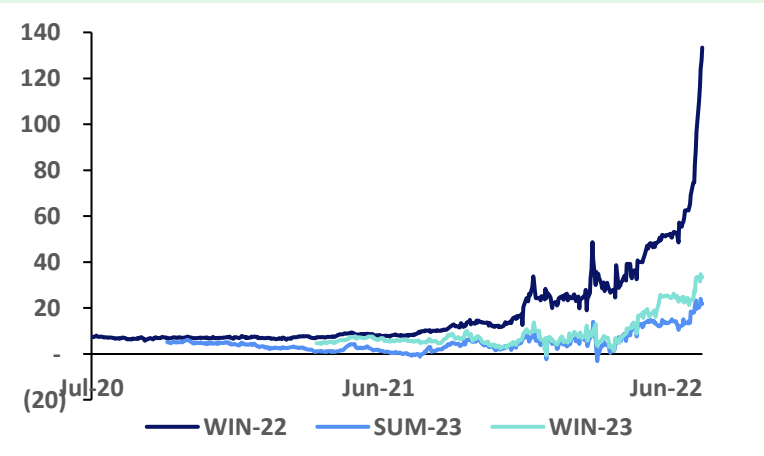
Source: ICE, Reuters and Drax

Peak ROC Bark Spread (£/MWh)



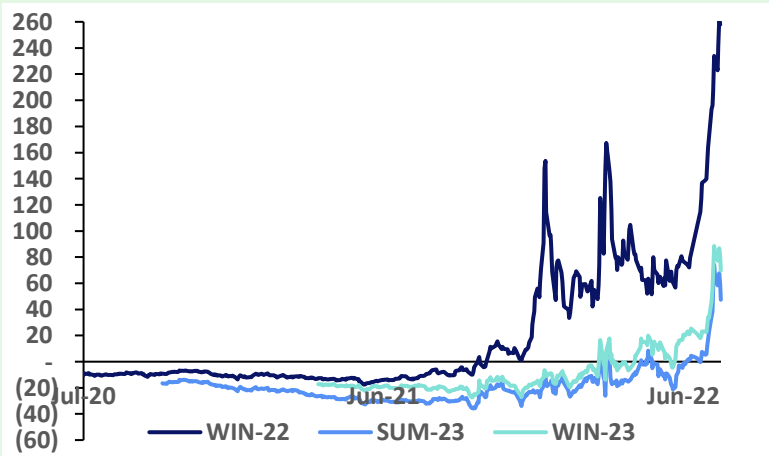
Source: ICE, Reuters and Drax

Baseload CSS (£/MWh)



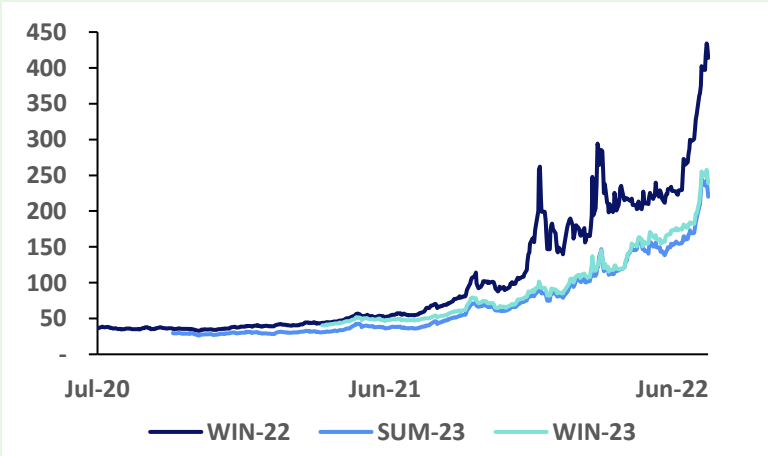
Source: ICE, Reuters and Drax

Baseload DGS (£/MWh)



Source: ICE, Reuters and Drax

Baseload ROC Bark Spread (£/MWh)



Source: ICE, Reuters and Drax



# 2022 Half Year Results

26 July 2022