

Drax ESG Data Supplement 2022

Our ESG data supplement provides a consolidated overview of our ESG performance.

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Policies and key documents are available at www.drax.com/about-us/corporate-governance/compliance-and-policies/

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Environment

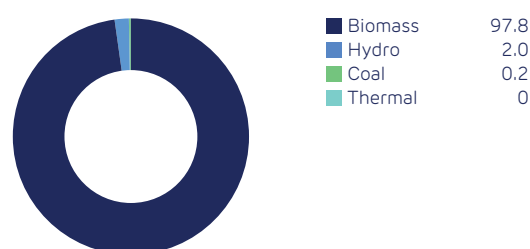
Generation Portfolio, Pellet Production, and Customers

Datapoint	Unit	2022	2021	Notes
Generation Output				
Total generation output*	TWh	12.9	16.1	
Total renewable generation output*	TWh	12.9	15	Includes biomass, hydro and pumped storage
Total non-renewable generation output*	TWh	0.02	1.1	
Proportion of renewable generation output	%	99.8	93	Total renewable generation output as a proportion of Drax total generation output (includes biomass, hydro and pumped storage)
Generation Capacity				
Total generation capacity	GW	4.5	4.5	Capacity at 31 December for reporting year
Total renewable generation capacity	GW	3.1	3.1	Includes biomass, hydro and pumped storage
Total non-renewable generation capacity	GW	1.4	1.4	
Pellet Production				
Total wood pellets produced	Mt	3.9	3.1	
Customers				
Total electricity sales	TWh	17.3	15.1	Prior year data was based on an incomplete dataset which omitted December data and understated the volume supplied by 1.4 TWh
Total gas sales	TWh	2.1	2.7	Prior year data was based on an incomplete dataset which omitted December data and understated the volume supplied by 0.3 TWh
Electricity supplied to customers from renewable sources	%	67	100	With a significant increase in the cost of renewable electricity, Drax focused on meeting its contractual obligations, providing renewable electricity to those customers on renewable power contracts. Drax did not supply renewable energy to customers not on a renewable energy contract. Please see more on our websites at https://energy.drax.com/support/fuel-mix-disclosure/ and https://www.opusenergy.com/fuel-mix-disclosure/

*Includes pumped storage generation net of imported and exported power.

Power generation mix in 2022

(% total output)



Carbon and Energy

Datapoint	Unit	2022	2021	2020	Notes
Carbon emissions, Scope 1 and 2					
Generation CO ₂ Emissions	ktCO ₂ e	310	525 ⁽¹⁾	2,682 ⁽¹⁾	Generation emissions covers the total direct emissions from Scope 1 and indirect emissions from Scope 2 activities across our Generation sites
Group total Scope 1	ktCO ₂ e	336*	932	2,762	Group total Scope 1 covers all direct emissions from our own business operations, across all sites
Group total Scope 2 (location-based)	ktCO ₂ e	333*	323	318	Group total Scope 2 covers all indirect emissions associated with our electricity and heat consumption, across all sites
Group total Scope 2 (market-based)	ktCO ₂ e	332*	323	318	Drax Group reported on a location-based methodology for 2020 and 2021. In 2022 we have opted to produce our information following a market-based approach which take into account our consumption of REGO backed renewable electricity
Group total Scope 1 and 2 (location-based)	ktCO ₂ e	669*	1,255	3,080	
Proportion of Group emissions within the UK	%	51*	78	95	
Biologically sequestered carbon	ktCO ₂ e	12,130	13,415	13,273	The biogenic carbon emissions resulting from generation are counted as zero in official reporting to both UK authorities and under the UK Emissions Trading System (UK ETS) as the use of sustainable biomass is considered to be CO ₂ neutral at the point of combustion. This methodology originates from the United Nations Framework Convention on Climate Change
Generation emissions per GWh of electricity generation	tCO ₂ e/GWh	23*	33 ⁽¹⁾	143 ⁽¹⁾	
Group emissions per GWh of electricity generation	tCO ₂ e/GWh	49*	78	164	Group emissions are total Scope 1 and 2 emissions as reported
Carbon Emissions, Scope 3					
Group total Scope 3	ktCO ₂ e	3,123*	3,121	3,135	Group total Scope 3 excludes downstream leased assets
<i>Purchased goods and services</i>	tCO ₂ e	783,329	674,418	397,282	
<i>Capital goods</i>	tCO ₂ e	224,576	235,635	186,637	
<i>Fuel and energy related activities</i>	tCO ₂ e	1,344,446	1,411,629	1,706,748	
<i>Upstream transportation and distribution</i>	tCO ₂ e	301,800	203,928	133,030	
<i>Waste generated in operations</i>	tCO ₂ e	3,601	3,150	1,117	
<i>Business travel</i>	tCO ₂ e	3,585	1,488	1,270	
<i>Employee commuting</i>	tCO ₂ e	4,806	5,660	5,453	
<i>Upstream leased assets</i>	tCO ₂ e	157	187	81	
<i>Downstream transportation and distribution</i>	tCO ₂ e	8,732	7,130	7,035	
<i>Processing of sold products</i>	tCO ₂ e	4,562	4,849	8,668	
<i>Use of sold products</i>	tCO ₂ e	441,188	572,894	687,595	
Energy consumption					
Group total energy consumption	kWh	5,232,723,625*	44,112,891,484	48,253,807,865	
Group total energy consumption within the UK	kWh	680,178,336	40,112,110,277	47,090,524,296	

⁽¹⁾2021 and 2020 figure was based on the Scope 1 ktCO₂ EUETS value of Drax Power Station and Dalldowie only

*Limited external assurance by LRQA (qualified opinion) using the assurance standard ISAE 3000 and based on Drax using the Corporate Greenhouse Gas Protocol, for 2022 data as indicated. For assurance statement and basis of reporting see www.drax.com/sustainability

Drax continues to apply the UK's Streamlined Energy and Carbon Reporting (SECR) requirements as described in the Companies House Act (2006), the relevant disclosures are included in the tables above. A full review of our environmental achievements, energy saving measures and commitments can be found within the Strategic Report of the Annual Report and Accounts.

Carbon and Energy continued

Carbon Emissions by greenhouse gas type

2022	Unit	CO ₂	CH ₄	N ₂ O	SF ₆	HFCs	PFCs	Total
Group total Scope 1	ktCO ₂ e	281	4	47	4	–	–	336
Group total Scope 2 (location-based)	ktCO ₂ e	331	1	1	–	–	–	333
Group total Scope 2 (market-based)	ktCO ₂ e	331	1	1	–	–	–	332
Group total Scope 1 and 2 (location-based)	ktCO ₂ e	612	5	48	4	–	–	669

Environmental Management

Datapoint	Unit	2022	2021	Notes
Power Generation, Emissions to Air				
Nitrogen oxides – power generation	t	5,979	7,556	Emissions from biomass and coal generation
Sulphur dioxide – power generation	t	403	1,087	Emissions from biomass and coal generation
Particulates – power generation	t	376	448	Emissions from biomass and coal generation
Power Generation emissions to air, breakdown by fuel type				
Nitrogen oxides – biomass	t	5,956	6,882	
Sulphur dioxide – biomass	t	387	699	
Particulates – biomass	t	375	418	
Nitrogen oxides – coal	t	22	534	
Sulphur dioxide – coal	t	16	388	
Particulates – coal	t	1	30	
Pellet Production, Emissions to Air				
Nitrogen oxides – pellet production	t	836	386	2021 data reported for Drax Biomass plants only: LaSalle, Morehouse and Amite. In 2022, we used emissions data from all our 17 pellet mills
VOCs – pellet production	t	854	1,202	2021 data reported for Drax Biomass plants only: LaSalle, Morehouse and Amite. In 2022, we used emissions data from all our 17 pellet mills
Particulates – pellet production	t	1,354	193	2021 data reported for Drax Biomass plants only: LaSalle, Morehouse and Amite. In 2022, we used emissions data from all our 17 pellet mills
Water Use				
Total water abstracted – power generation	m ³	51,899,818*	64,140,878	2021 Power Generation covers Blackburn, Damhead Creek, Drax, Rye House and Shoreham Power Stations. 2022 Thermal Generation covers Drax Power Station
Total water returned – power generation	m ³	47,187,916*	57,616,803	
Total water abstracted and returned – hydro generation	m ³	3,389,452,345*	3,005,380,954	Hydro Generation covers Galloway and Lanark Hydro Scheme
Total water abstracted from reservoir – pumped storage	m ³	361,145,582*	261,791,757	Pumped Storage covers Cruachan Power Station
Total water abstracted from Loch Awe – pumped storage	m ³	325,844,996*	249,155,337	Excluding volume of water collected via the aqueduct system

*Limited external assurance by LRQA (qualified opinion) using the assurance standard ISAE 3000 and based on Drax using the Corporate Greenhouse Gas Protocol, for 2022 data as indicated. For assurance statement and basis of reporting see www.drax.com/sustainability

Biomass

Datapoint	Unit	2022	2021	Notes
Drax Power Station				
Proportion of SBP-compliant woody biomass sourced by DPS	%	97	98	
Average biomass supply chain GHG emissions	kgCO ₂ e/MWh	96*	100	The GHG data are not calculated for waste materials and therefore these are not included in the average total.

* Limited external assurance by Bureau Veritas using the assurance standard ISAE 3000. For assurance statement see www.drax.com/sustainability

Drax Group sources of fibre

Country	Sawmill and other wood industry residue (t)	Branches & tops (t)	Thinning (t)	Low grade roundwood (t)	Arboricultural residues (t)	Agricultural residues (t)	Waste (t)	Country total (t)
US	1,620,136	245,146	1,131,778	1,809,150	–	112,690	–	4,918,900
Canada	1,663,922	273,828	–	63,709	–	–	–	2,001,460
Latvia	176,007	664	131	556,978	–	–	–	733,780
Estonia	57,846	–	12,796	53,921	–	–	–	124,563
Brazil	214	–	–	144,069	–	532	–	144,816
Portugal	10,519	22,429	27,356	102,331	52	–	–	162,687
Belarus	24,807	–	–	647	–	–	–	25,454
UK	–	–	–	–	–	63,510	–	63,510
Russia	19	–	–	–	–	17,053	5,264	22,336
Other European	18,008	–	–	178	–	6,734	–	24,920
Total	3,571,479	542,067	1,171,062	2,730,982	52	200,519	5,264	8,222,425

Pellet production sources of fibre

Country	Sawmill and other wood industry residue (t)	Branches & tops (t)	Thinning (t)	Low grade roundwood (t)	Arboricultural residues (t)	Agricultural residues (t)	Waste (t)	Country total (t)
US	878,417	–	586,317	443,731	–	–	–	1,908,465
Canada	1,405,962	257,839	–	38,938	–	–	–	1,702,740
Total	2,284,379	257,839	586,317	482,669	–	–	–	3,611,205

Drax Power Station sources of fibre

Country	Sawmill and other wood industry residue (t)	Branches & tops (t)	Thinning (t)	Low grade roundwood (t)	Arboricultural residues (t)	Agricultural residues (t)	Waste (t)	Country total (t)
US	1,465,295	245,146	1,018,727	1,730,220	–	112,690	–	4,572,079
Canada	581,782	136,156	–	41,641	–	–	–	759,579
Latvia	176,007	664	131	556,978	–	–	–	733,780
Estonia	57,846	–	12,796	53,921	–	–	–	124,563
Brazil	214	–	–	144,069	–	532	–	144,816
Portugal	10,519	22,429	27,356	102,331	52	–	–	162,687
Belarus	24,807	–	–	647	–	–	–	25,454
UK	–	–	–	–	–	63,510	–	63,510
Russia	19	–	–	–	–	17,053	5,264	22,336
Other European	18,008	–	–	178	–	6,734	–	24,920
Total	2,334,498	404,395	1,059,011	2,629,984	52	200,519	5,264	6,633,722

Social

Health & Safety

Datapoint	Unit	2022	2021	Notes
Health & Safety				
TRIR	Per 100,000 hours	0.44*	0.22	TRIR is the total fatalities, lost time injuries and medical treatment injuries per 100,000 hours worked. Total includes both employees and contractors.
TRIR – employees	Per 100,000 hours	0.46	0.27	
TRIR – contractors	Per 100,000 hours	0.39	0.11	
LTIR	Per 100,000 hours	0.13	0.05	LTIR is the total fatalities and lost time injuries per 100,000 hours worked. Total includes both employees and contractors.
LTIR – employees	Per 100,000 hours	0.12	0.05	
LTIR – contractors	Per 100,000 hours	0.17	0.04	
Fatalities	n	0	0	Total includes both employees and contractors.

*Limited external assurance by LRQA (qualified opinion) using the assurance standard ISAE 3000 and based on Drax using the Corporate Greenhouse Gas Protocol, for 2022 data as indicated. For assurance statement and basis of reporting see www.drax.com/sustainability

Our People

Datapoint	Unit	2022	2021	Notes
Workforce Composition				
Total Group employees	n	3,229*	3,053	Total number of Group employees as at 31 December for reporting year
United Kingdom	%	72	73	
United States of America	%	12	13	
Canada	%	15	14	
Japan	%	<1	–	
Full time employees	%	93	92	
Part time employees	%	7	8	
Total pay and benefits (50th percentile)	£	68,326	53,033	
Ratio of CEO earnings	n:1	79:1	52:1	
Diversity, Equity & Inclusion				
Female employees	%	32	30	Total workforce, including Board members and senior managers
Male employees	%	68	70	Total workforce, including Board members and senior managers
Board members – female	n	4	4	
Board members – male	n	5	5	
Senior managers – female	n	28	26	Executive Committee and their direct reports (excluding Personal Assistants and Executive Assistants)
Senior managers – male	n	45	44	Executive Committee and their direct reports (excluding Personal Assistants and Executive Assistants)
Workforce – Other				
Employees covered by collective bargaining agreement	%	13	14	
Employee engagement score	%	79	79	
Employee turnover rate	%	13.8	29.5	
Average spend per employee on training and development	£	498	197	Excluding compliance and safety training, Apprentice Levy spend and formal supported academic qualifications
Training hours per employee	hours	5	11	Excluding compliance and safety training, Apprentice Levy spend and formal supported academic qualifications
Total learning lessons		160	–	
Total digital learning hours utilising a blended learning approach		12,415	–	

Social Value

Datapoint	Unit	2022	2021	Notes
Community				
Total donations	£k	843	421	Cash donations, management cost, in-kind and employee time contributions
Total organisations that have received donations	n	225	–	Donations from Drax charitable committee to community/ local causes
Early Careers				
Apprentices	n	53	56	
Graduates	n	7	9	
Number of work experience participants	n	29	63	

*Limited external assurance by LRQA (qualified opinion) using the assurance standard ISAE 3000 and based on Drax using the Corporate Greenhouse Gas Protocol, for 2022 data as indicated. For assurance statement and basis of reporting see www.drax.com/sustainability

Governance

Ethics and integrity

Datapoint	Unit	2022	2021	Notes
Speak Up (whistleblowing)				
Total number of Speak Up reports raised	n	14	14	Total number of reports raised across Drax channels, internal and external
Employee survey question on ability to raise concerns	%	86	86	Total favourable response to MyVoice employee survey statement: I feel comfortable to speak up or report any concerns
eLearning and Training				
Employees that have received and completed an Annual Business Ethics Declaration	%	86	100	Calculated as the proportion of permanent employees who have completed an Annual Business Ethics Declaration, at time of writing, relative to the number invited to complete. Excludes employees on long-term absence from Drax during the declaration period, and does not include colleagues based at our Princeton and Japanese sites who joined the business during 2022. The declaration is issued in 2023 (covering 2022) and completion to 100% will continue to be progressed until achieved
Employees that have received and completed Code of Conduct eLearning refresh	%	99	100	Calculated as the proportion of permanent employees who have completed the Code of Conduct eLearning refresh, at time of writing, relative to the number invited to complete. Excludes employees on long term absence from Drax, colleagues based at our Princeton and Japanese sites who joined the business during 2022 and colleagues based at our former Pinnacle sites who were required to read the Code of Conduct during 2022 as part of their integration. Completion to 100% will continue to be progressed until achieved

Assurance Statements

LRQA Independent Assurance Statements

Relating to the Drax Group Plc Environmental and Social Governance data for the period January 1, 2022 to December 31, 2022.

This Assurance Statement has been prepared for Drax Corporate Ltd (hereafter referred to as 'Drax' in accordance with our contract

Terms of Engagement

LRQA was commissioned by Drax to provide independent assurance on selected Environmental and Social Governance data (hereafter referred to as 'Selected Information'), for the period January 1, 2022 to December 31, 2022, against the assurance criteria below to a limited level of assurance and at a materiality of the professional judgement of the verifier using LRQA's verification procedure. LRQA's verification procedure is based on current best practice, is in accordance with ISAE 3000 and ISAE 3410.

Our assurance engagement with Drax covered the following requirements:

- Verifying conformance with:
 - Environmental and Social Governance (ESG) Databook, Drax Group Procedure.
 - World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A corporate accounting and reporting standard, revised edition (otherwise referred to as the WRI/WBCSD Protocol) for the GHG data¹.
- Evaluating the accuracy and reliability of data and information for only the selected indicators listed below:
 - Group Greenhouse Gas (GHG) emissions (Scope 1 and 2);
 - Group GHG emissions (Scope 3);
 - Water abstraction and discharge;
 - Total Recordable Injury Rate;
 - Employment data on headcount;
 - Group energy consumption;
 - Percentage of emissions in the UK;
 - Group generation emissions intensity; and
 - Group emissions intensity.

Our assurance engagement excluded the following data and information:

- data of Drax's suppliers, contractors and any third-parties mentioned in the report;
- category 13 downstream assets

LRQA's responsibility is only to Drax. LRQA disclaims any liability or responsibility to others as explained in the end footnote. Drax's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of Drax.

LRQA's Opinion

Based on LRQA's approach, nothing has come to our attention that would cause us to believe that Drax has not, in all material respects:

- Met the requirements of the criteria listed above; and
- Disclosed accurate and reliable performance data and information in the Selected Information.

The opinion expressed is formed on the basis of a limited level of assurance² and at the materiality of the professional judgement of the verifier.

LRQA's Approach

LRQA's assurance engagements are carried out in accordance with our verification procedure and with the International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after December 15, 2015), issued by the International Auditing and Assurance Standards Board (December 2013).

The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- Review of the evidence pack;
- Conducted virtual interviews with relevant personnel of Drax;
- Review of the data collection and consolidation processes used to compile the Selected Information, including assessing assumptions made, the data scope and reporting boundaries;
- Reviewed a sample of the Selected Information against the corresponding source documentation provided by Drax; and
- Performed a selection of aggregation calculations of the Selected Information.

Observations

Further observations and findings, made during the assurance engagement, are:

- The company should continue to make every effort to improve the accuracy of submitted data to the workbook. Assumptions have been made appropriately but actual data would be an improvement.
- The company should continue to develop the calculations in a way that allows factors and conversions to be applied in a clear and transparent manner.
- It would be beneficial to complete periodic reviews of the ESG reporting process, to consider its effectiveness and where opportunities for improvement could be.
- It would be beneficial to develop sense checks where appropriate, to monitor data trends and to highlight any initial data errors such as those arising from changes in reporting units.
- Drax must obtain and retain evidence to demonstrate the reliability of the Scope 3 quantification modelling.

¹ <http://www.ghgprotocol.org/>

² The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

LRQA's Standards, Competence and Independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition and ISO/IEC 17021 Conformity assessment – Requirements for bodies providing audit and certification of management systems that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is:

- Drax's certification body for ISO14001 and OHSAS18001;
- Drax Generation Enterprise Limited's certification body for ISO 45001; and
- Drax Power Station installation's UK ETS verification body.

The verification and certification assessments are the only work undertaken by LRQA for Drax and as such does not compromise our independence or impartiality.

Graeme Clayton, LRQA Lead Verifier

On behalf of LRQA Ltd

1 Trinity Park, Bickenhill Lane, Birmingham, UK.

Bureau Veritas UK Ltd Summary Assurance Statement

Issue date: 20 February, 2023

Summary Assurance Statement from Bureau Veritas UK Ltd

Bureau Veritas UK Ltd has provided independent assurance to Drax Group Plc over its 'average biomass supply chain GHG emissions' data as reported in its Annual Report and Accounts 2022.

The assurance process was conducted in accordance with International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after December 15, 2015), issued by the International Auditing and Assurance Standards Board.

Bureau Veritas' full assurance statement includes certain limitations, exclusions, observations, and a detailed assurance methodology and scope of work.

The full assurance statement with Bureau Veritas' independent opinion can be found at www.drax.com/sustainability London, 20th February 2023

LRQA reference: LRQ00003798

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