

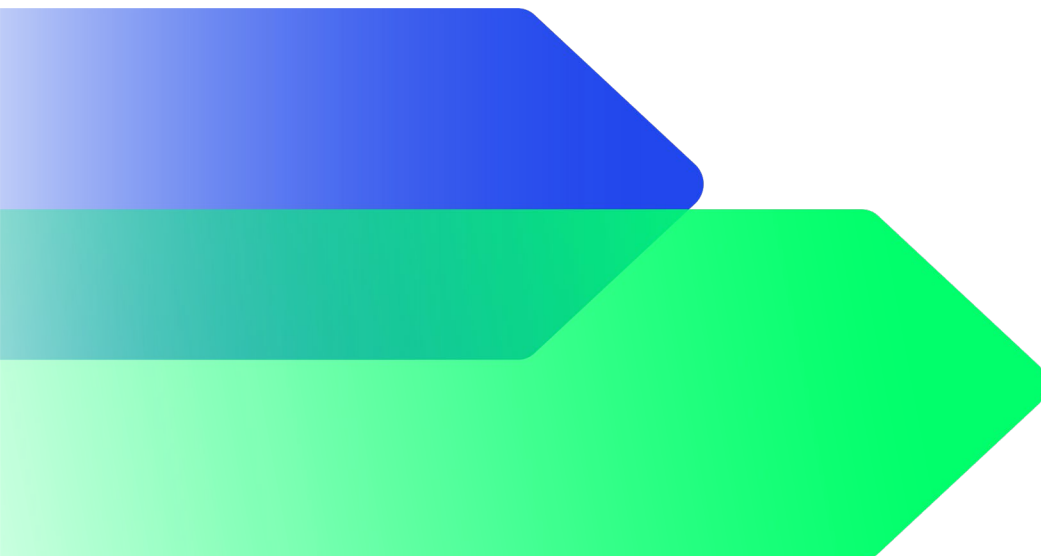
REPORT

Streamlined Energy and Carbon Reporting Summary

ASDA Group Limited

27th February 2022

Version 3.0





**The Carbon Trust's mission is to
accelerate the move to a decarbonised future.**

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1. Introduction

The UK Government's Streamlined Energy and Carbon Reporting (SECR) policy was implemented on 1 April 2019, when the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 came into force.

Three groups of businesses are affected by these regulations. Companies that fall within the following definitions must comply unless they meet certain exemption criteria:

- Quote companies of any size
- Unquoted 'large' companies
- 'Large' Limited Liability Companies (LLPs)

Unquoted companies or LLPs are defined as 'large' if they meet at least two of the following criteria in a reporting year:

- A turnover of £36m or more
- A balance sheet of £18m or more
- 250 employees or more

The reporting of energy and carbon data is required for financial years beginning on or after 1st April 2019.

Accompanying this report is an evidence pack containing all the raw data, analysis, and calculations. This is presented in the MS Excel model 'ASDA_SECR2021_FINAL'.

2. SECR qualification, scope and boundaries

ASDA Group Limited is required to comply with the Companies (Director's Report) and LLP (Energy and Carbon Report) Regulations 2018 and report against the SECR framework as a 'large' unquoted company.

Employees +250 Turnover greater than £36 million <div style="float: right; font-size: 2em; color: white;">✓</div>	
Reporting period	1 st January 2021 – 31 st December 2021
Sales Revenue (turnover) £million	> £36 million
No. of employees (FTE)	> 250 employees
Balance Sheet	> £18 million

Table 1. SECR Qualification criteria

2.1. Organisational Boundary

The company structure and UK company registration details are shown below and the figure showing the organisations included with the SECR boundary.

Name of reporting company	ASDA Group Limited
Company Registered No.	01396513
Company Registered Address	ASDA House, South Bank, Great Wilson Street, Leeds, LS11 5AD

Table 2. Company registration details

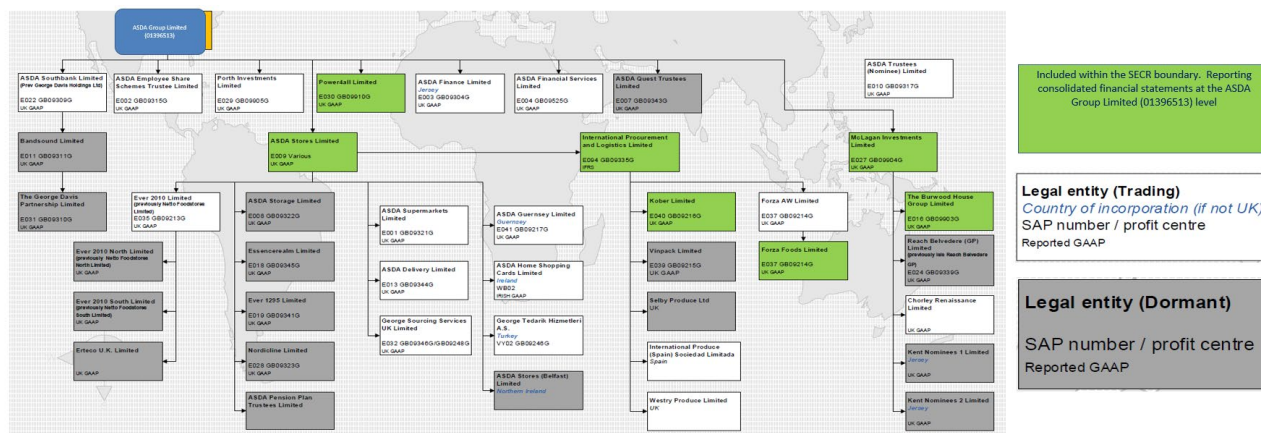


Figure 1. Organisational structure and SECR Boundary

2.2. Operational boundary and data sources

An operational control approach has been used to determine the energy and emissions sources included within the SECR operational boundary for ASDA Group Limited. The minimum SECR requirements for a 'large' unquoted organisation have been met, namely all UK energy and emissions sources for electricity, gas, and transport fuels for which the organisation is responsible are included. In addition, ASDA has elected to report their use of liquid fuels (in stationary applications) and greenhouse gas (GHG) emissions associated with their use of refrigerants (included within scope 1 emissions). Details of operational boundary assessment are shown in the table below. The energy consumption and emissions from previous SECR period 2020 are also reported for comparison.

All information and activity data on which this assessment is based was provided by Laura Babbs and Emma Gibson of ASDA Group Limited via SharePoint and MS Teams meetings. An evidence pack containing the raw data provided for the assessment together with the analysis and calculations is presented as an MS Excel Model 'ASDA_SECR2021_FINAL' together with this summary report.

Table 3. SECR Operational boundary and data sources.

Energy and emissions sources	Operational Control	UK energy and emissions data sources
Building energy	ASDA & IPL	Consolidated monthly invoice data. Source files: <ul style="list-style-type: none"> • 2021 Gas.xlsx • 2021 Electricity v2.xlsx • 2021 F Gas v2.xlsx • 2021 Solar.xlsx • All Excel's in IPL Scopes 1&2
Transport and Distribution	ASDA	Source files: <ul style="list-style-type: none"> • Allstar YTD 2021.xlsx • ASDA RDC - Jan to YTD 2021.xlsx (diesel tab) • Scania Gas Truck Data 2021 v2.xlsx • Volvo LNG Truck Data.xlsx
Owned/leased vehicles	ASDA & IPL	Employee car business mileage expense claims Source file: <ul style="list-style-type: none"> • Carbon footprint annual report 2021.xlsl
Grey Fleet	ASDA	Source files: <ul style="list-style-type: none"> • Carbon footprint annual report 2021.xlsl • 2021 IPL mileage per employee (3).xlsl • Forza Business Travel.xlsl • Kober Business Travel.xlsl
LPG	ASDA	Source files: <ul style="list-style-type: none"> • Calor MHE Gas Usage 2021.xlsl • ASDA RDC - Jan to YTD 2021.xlsx (red-diesel tab) • IPL - Scopes 1&2 (all Excel's in folder)
Gas oil / Fuel oil	ASDA	<ul style="list-style-type: none"> • Fuel Oil by Store 2021.xlsx • IPL - Scopes 1&2 (all Excel's in folder)

Transport fleet refrigerant emissions	ASDA	<ul style="list-style-type: none"> Carrier Asda Refrigerant Usage Report 2021.xlsl GAH Asda Gas Usage Report 2021.xlsl
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3. Methodology

3.1. Methodology

All the SECR requirements for unquoted 'large' companies have been met with energy consumption and associated emissions reported. This includes UK consumption of electricity, natural gas, and transport fuels where the company is responsible for the fuels. In addition, ASDA has elected to report their use of liquid fuels (in stationary applications) and greenhouse gas (GHG) emissions associated with their use of refrigerants (included within scope 1 emissions).

The methodology used to calculate emissions is the WBCSD/WRI Greenhouse Gas Protocol: a corporate accounting standard: revised edition in conjunction with UK Government environmental reporting guidelines including SECR guidance, March 2019. Emissions have been calculated using UK Government greenhouse gas emissions conversion factors for company reporting 2021. An operational control approach has been taken.

No formal third-party data verification of the energy and emissions data has been carried out.

4. SECR Energy and carbon emissions summary

ASDA Group Limited's total energy consumption for 2021 period from electricity, natural gas, and transport fuels for which the organisation is responsible is **2,339,827,054kWh**.

This compares with an energy consumption for the previous SECR period 2020 of **2,347,615,019kWh**. The breakdown by energy user and type for 2021 is shown below.

4.1.1. Energy use breakdown

Table 4. Energy consumption by energy use current reporting period 2021

Category	Electricity (kWh)	Gas (kWh)	Other Stationary (kWh)	Transport Fuels (kWh)	Total (kWh)	% Contribution
Building Energy	1,109,312,657	487,251,509	97,711,188	-	1,694,275,354	72.41%
Transport	-	-	-	645,551,700	645,551,700	27.59%
Total	1,109,312,657	487,251,509	97,711,188	645,551,700	2,339,827,054	100%

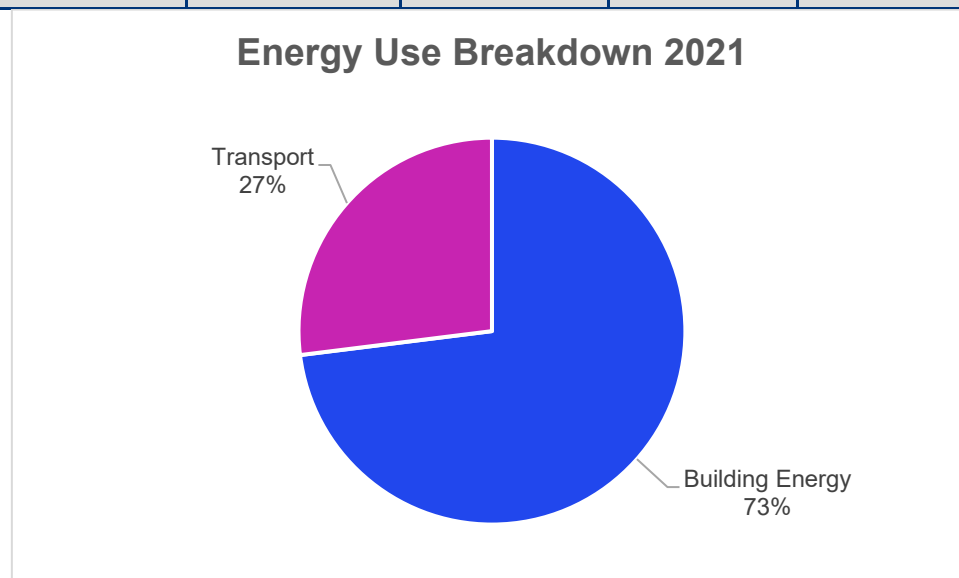


Figure 2. Energy Use breakdown for 2021

4.1.2. Energy Type breakdown

Table 5. Energy consumption by type for current reporting period 2021 compared to 2020

SECR energy summary	Current Reporting Period 2021	Comparison Reporting Period 2020
Electricity consumption (kWh)	1,109,312,657	1,128,563,040
Gas consumption (kWh)	487,251,509	479,338,215
Other stationary consumption (kWh)	97,711,188	103,577,084
Transport fuels energy consumption (kWh)	645,551,700	636,136,681
Total SECR energy consumption (kWh)	2,339,827,054	2,347,615,019

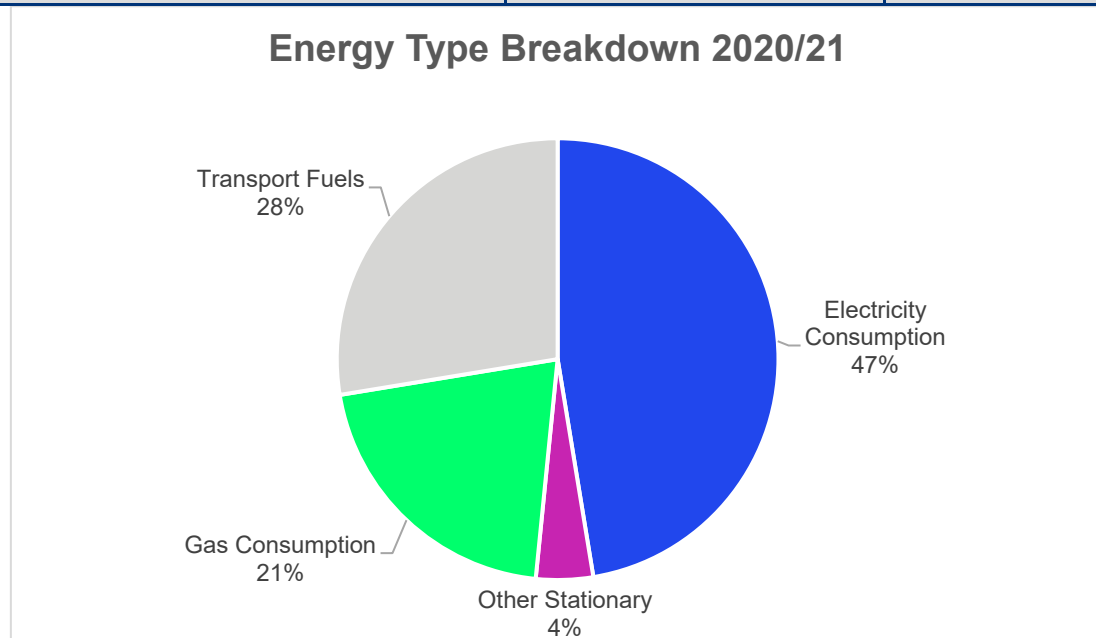


Figure 3. Energy type breakdown

4.2. SECR carbon emissions summary

The carbon emissions associated with the energy consumption are calculated using UK Government GHG conversion factors for company reporting 2021¹. Within the SECR boundary, ASDA Group Limited's gross total GHG emissions scope 1,2 (location-based) and 3 for the period 2021 are **624,912 tonnesCO₂e**.

For comparison, the total gross GHG emissions scope 1,2 (location-based) and 3 reported for the previous SECR period 2020 were **655,574 tonnesCO₂e**

Table 6. SECR carbon emissions summary

SECR Emissions (tonnesCO ₂ e)	Current Reporting Period 2021		Comparison Reporting Period 2020	
	Value	Percentage	Value	Percentage
Scope 1 emissions (tonnesCO ₂ e)	390,131.04	62.43%	393,810.43	60.07%
Scope 2 emissions (tonnesCO ₂ e)	234,548.27	37.53%	261,548.01	39.90%
Scope 1&2 emissions (tonnesCO₂e)	624,679.31	99.96%	655,358.45	99.97%
Scope 3 emissions - Business Travel where responsible for fuel (tonnes CO ₂ e)	232.84	0.04%	215.80	0.03%
Total Scope 1, 2 & 3 emissions (tonnesCO₂e)	624,912.15	100%	655,574.24	100%

¹ <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>

4.2.1. SECR carbon emissions by scope

Table 7. Carbon emissions by source for 2021

Scope	Emissions category	Total GHG emissions (tCO ₂ e)	% Contribution
Scope 1	Natural gas, mobile combustion, other stationary, and F-gases	390,131.04	62.43%
Scope 2	Electricity (location-based)	234,548.27	37.53%
Scope 3	Grey Fleet including car hires	232.84	0.04%
Total		624,912.15	100%

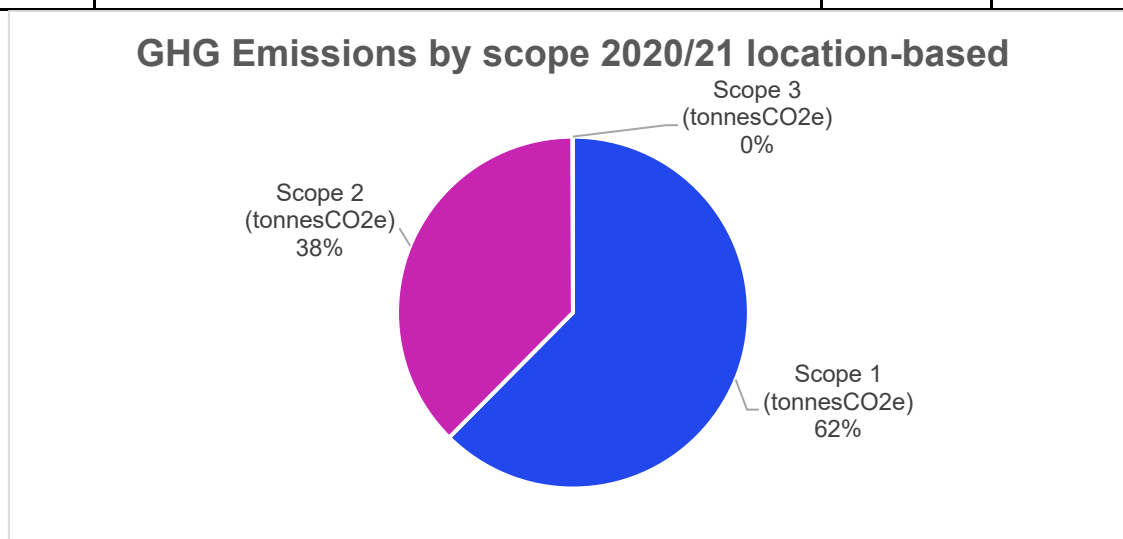


Figure 4. Carbon emissions by scope for 2021 (location-based)

4.3. Emissions Intensity

ASDA Group Limited's has chosen to report its emissions intensity using the metric per £million sales. For 2021, the emissions intensity of total gross emissions (scope 1,2 location-based & 3) is **26.61 tonnes CO₂e per £million sales**. For comparison, the emissions intensity for the period 2020 was **28.80 tonnesCO₂e per £million sales**.

Table 8. Emissions intensity summary comparison with previous reporting period

Detail	2021	2020
Total gross emissions (scope 1,2 and 3 in tonnesCO ₂ e)	624,912.15	655,574.24
Intensity metric (per £million sales)	23,488	22,760

Emission intensity (tonnesCO₂e per million sales)	26.61	28.80
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4.4. Energy Efficiency Actions

As part of the commitment to reduce the Group's scope 1 & 2 emissions by 50% by 2025 there was sustained investment throughout 2021 in projects to reduce energy and carbon emissions. An investment of £6.5 million was made in almost 1,000 projects across our Retail and Asda Logistics Services estates which will reduce energy demand by 5.4 GWh and emissions by 1,140 tCO₂e.

Furthermore, there was a continued focus and £0.5 million investment on innovation and trials to develop new opportunities to reduce consumption. This included the installation of doors on refrigerated display cases, working to fulfil the business' pledge made during CoP 26 to invest in this area and ensure their alignment to ASDA's Ways of Working.

Our Energy Bureau further developed and deployed software to improve fridge control solutions to minimise electricity consumption. This extended our demand management capacity to over 25 MW through "internet of things" connected dynamic fridge control equating to almost a fifth of our total energy demand. We used this functionality to support the National Grid balance UK electricity supply and demand.

The Bureau also continued their close monitoring of energy usage through our extensive network of 16,000 main and submeters and made over 800 interventions to address the risk of increasing energy and water consumption supported by a range in-store technicians and specialists. They also jointly ran trials and modelling with our fleet colleagues on the electrification of our diesel-powered refrigerated trailers.

Our facilities management (FM) and energy partner, City FM, were accepted into the EU ENOUGH consortium to provide demonstrators for "Farm to Fork" de-carbonisation of the food chain, a pan-European effort of 28 organisations including academia, manufacturers. This will provide significant insights, innovation opportunities to our business for the ongoing development of our Net Zero route-map and strategy.

In conjunction with City FM and Star Refrigeration we were the winner of the 2021 Temperature Controlled Storage & Distribution Partnership Awards on the work carried out on reducing energy use in the Chilled Distribution Depots. ASDA and City Building Engineering Services (CBES) were also winners at the National ACR & Heat Pump Awards 2021 for 'Refrigeration Project of the Year', recognising the retrofittable adiabatic solution developed to maximise refrigeration system asset uptime whilst increasing the effectiveness of the heat transfer from the condenser to the atmosphere, thereby reducing the amount of energy required to condense and sub-cool the refrigerant.

5. SECR summary information for Annual Report

5.1. SECR summary for Annual Report

This section of the report presents the SECR information which needs to be included in the Directors Report (or Strategic Report) of ASDA Group Limited's 2021 Annual Report and filed with Companies House to comply with the Companies (Director's Report) and LLP (Energy and Carbon Report) Regulations 2018.

Example summary wording is presented below to meet the minimum reporting requirements. The UK government is encouraging companies to use the Financial Reporting Council (FRC) Taxonomy for SECR and this reporting structure is also presented.

5.1.1. SECR Summary for Directors Report

ASDA Group Limited is reporting against the Streamlined Energy and Carbon Reporting (SECR) framework for the reporting period is 1st January 2021 to 31st December 2021. ASDA Group Limited is reporting as a 'large' unquoted company and all the minimum requirements have been addressed and are presented here.

The methodology used is the WBCSD/WRI Greenhouse Gas Protocol: a corporate accounting standard revised edition in conjunction with UK Government environmental reporting guidelines including SECR guidance. An operational control approach has been taken. We have used the UK Government greenhouse gas conversion factors for company reporting 2021. Scope 2 emissions from purchased electricity are reported using a location-based approach.

ASDA Group Limited total energy consumption for 2021 is **2,339,827,054kWh**. This includes the company's share of electricity, natural gas, and other stationary usage for all ASDA and IPL operated buildings, and transport fuels for business travel in employee-owned cars and hire cars.

For comparison the energy consumption reported for the previous SECR period 2020 was **2,347,615,019Wh**.

For 2021, the total carbon emissions associated with our reported energy use are **624,912.15 tonnesCO₂e**. For comparison, the total carbon emissions reported for the previous SECR period 2020 were **655,574.24 tonnesCO₂e**. The breakdown by emission scope is show below:

Carbon Emissions	2021	2020
Scope 1 emissions (tonnesCO ₂ e)	390,131.04	393,810.43
Scope 2 (location-based) emissions (tonnesCO ₂ e)	234,548.27	261,548.01
Scope 3 emissions – business travel where responsible for fuel (tonnesCO ₂ e)	232.84	215.80
Scope 1, 2 (location-based) and 3 emissions (tonnesCO₂e)	624,912.15	655,574.24

For 2021, our emissions intensity, measured as the total scope 1, 2 and 3 emissions relative to per £million sales **26.61 tonnesCO₂e per £million sales**. For comparison, the emissions intensity for the period 2020 was **28.80 tonnesCO₂e per £million sales**.

There are a couple of clarifications that should be made on the changes between 2020 and the 2021 footprint. With regard to the increase in scope 1 emissions, this has largely been driven by the increase reporting of other stationary fuels, including LPG, gas oil, fuel oil, etc. We expect this increase to result from more normality in business operations as COVID-19 restrictions loosened in 2021 as well as the effect of data collection and footprinting becoming more accurate year on year.

The large decrease in scope 3 business travel emissions is largely down to a greater visibility with ASDA's data that allowed us to allocate more emissions to the company cars that ASDA operates. As a result, these emissions have moved from scope 3 to Scope 1.

As part of the commitment to reduce the Group's scope 1 & 2 emissions by 50% by 2025 there was sustained investment throughout 2021 in projects to reduce energy and carbon emissions. An investment of £6.5 million was made in almost 1,000 projects across our Retail and Asda Logistics Services estates which will reduce energy demand by 5.4 GWh and emissions by 1,140 tCO₂e. Furthermore, there was a continued focus and £0.5 million investment on innovation and trials to develop new opportunities to reduce consumption. This included the installation of doors on refrigerated display cases, working to fulfil the business' pledge made during CoP 26 to invest in this area and ensure their alignment to ASDA's Ways of Working.

Our Energy Bureau further developed and deployed software to improve fridge control solutions to minimise electricity consumption. This extended our demand management capacity to over 25 MW through "internet of things" connected dynamic fridge control equating to almost a fifth of our total energy demand. We used this functionality to support the National Grid balance UK electricity supply and demand.

The Bureau also continued their close monitoring of energy usage through our extensive network of 16,000 main and submeters and made over 800 interventions to address the risk of increasing energy and water consumption supported by a range in-store technicians and specialists. They also jointly ran trials and modelling with our fleet colleagues on the electrification of our diesel-powered refrigerated trailers.

Our facilities management (FM) and energy partner, City FM, were accepted into the EU ENOUGH consortium to provide demonstrators for "Farm to Fork" de-carbonisation of the food chain, a pan-European effort of 28 organisations including academia, manufacturers. This will provide significant insights, innovation opportunities to our business for the ongoing development of our Net Zero route-map and strategy.

In conjunction with City FM and Star Refrigeration we were the winner of the 2021 Temperature Controlled Storage & Distribution Partnership Awards on the work carried out on reducing energy use in the Chilled Distribution Depots. ASDA and City Building Engineering Services (CBES) were also winners at the National ACR & Heat Pump Awards 2021 for 'Refrigeration Project of the Year', recognising the retrofittable adiabatic solution developed to maximise refrigeration system asset uptime whilst increasing the effectiveness of the heat transfer from the condenser to the atmosphere, thereby reducing the amount of energy required to condense and sub-cool the refrigerant.

5.1.2. Annual Report Summary using FRC's SECR Taxonomy v1.0.0.

Streamlined Energy and Carbon Reporting		Current period 2021	Previous 2020
Start date for SECR period		01/01/2021	01/01/2020
End date for SECR period		31/12/2021	31/12/2020
Methodology			
<p>All SECR requirements for unquoted 'large' companies have been met with energy consumption and associated emissions reported below. This includes UK consumption of electricity, gas and transport fuels where the company is responsible for the fuels.</p> <p>The methodology used to calculate emissions is the WBCSD/WRI Greenhouse Gas Protocol: a corporate accounting standard: revised edition in conjunction with UK Government environmental reporting guidelines including SECR guidance. Emissions have been calculated using UK Government greenhouse gas emissions conversion factors for company reporting 2021. An operational control approach has been taken.</p> <p>Scope 2 emissions from purchased electricity are reported using a location-based approach. Using a location-based approach, total Scope 2 emissions are 234,308 tonnes CO_{2e}.</p>			
Third party verification			
No third party data verification of the emissions data has been carried out			
Name of third party verifier		n/a	
Reported emissions (and carbon offsets) (tonnes CO _{2e})			
		2021	2020
Total net emissions (location-based)		624,912	655,574
Total gross emissions (Scope 1,2 and 3) under a location-based approach		624,912	655,574
Total direct and indirect emissions (scope 1 and 2) under a location-based approach		624,679	653,214
Total direct (scope 1) emissions		390,131	393,810
Direct emissions (scope 1) stationary combustion		116,870	115,467
Direct emissions (scope 1) mobile combustion		156,422	158,931
Direct emissions (scope 1) from transport fuels		156,422	158,931
Direct emissions (scope 1) from fugitive sources		116,839	119,412
Total indirect emissions (scope 2)		234,548	261,548
Indirect emissions (scope 2) from electricity using a location-based approach		234,548	261,548
Total other indirect emissions (scope 3)		233	216
Other indirect (scope 3) emissions from business travel		233	216
Other indirect (scope 3) emissions from business travel where company is responsible for purchasing fuel		233	216
Energy Consumption (kWh)			
		2021	2020

Energy consumption used to calculate emissions	2,339,827,054	2,347,615,019
Energy consumption, combustion of gas	487,251,509	479,338,215
Energy consumption, electricity	1,109,312,657	1,128,563,040
Energy consumption, combustion of transport fuel	645,551,700	636,136,681
Energy consumption, other (Diesel, Fuel Oil, Gas Oil)	97,711,188	103,577,084
Intensity ratio		
Intensity ratio	26.61	28.80
The reported emissions intensity ratio is the total gross emissions (scope 1,2 and 3 in tonnes CO2e) per £million sales		
Intensity ratio based solely on mandatory data	False	
Energy efficiency action report		
<p>As part of the commitment to reduce the Group's scope 1 & 2 emissions by 50% by 2025 there was sustained investment throughout 2021 in projects to reduce energy and carbon emissions. An investment of £6.5 million was made in almost 1,000 projects across our Retail and Asda Logistics Services estates which will reduce energy demand by 5.4 GWh and emissions by 1,140 tCO2e.</p> <p>Furthermore, there was a continued focus and £0.5 million investment on innovation and trials to develop new opportunities to reduce consumption. This included the installation of doors on refrigerated display cases, working to fulfil the business' pledge made during CoP 26 to invest in this area and ensure their alignment to ASDA's Ways of Working.</p> <p>Our Energy Bureau further developed and deployed software to improve fridge control solutions to minimise electricity consumption. This extended our demand management capacity to over 25 MW through "internet of things" connected dynamic fridge control equating to almost a fifth of our total energy demand. We used this functionality to support the National Grid balance UK electricity supply and demand.</p> <p>The Bureau also continued their close monitoring of energy usage through our extensive network of 16,000 main and submeters and made over 800 interventions to address the risk of increasing energy and water consumption supported by a range in-store technicians and specialists. They also jointly ran trials and modelling with our fleet colleagues on the electrification of our diesel-powered refrigerated trailers.</p> <p>Our facilities management (FM) and energy partner, City FM, were accepted into the EU ENOUGH consortium to provide demonstrators for "Farm to Fork" de-carbonisation of the food chain, a pan-European effort of 28 organisations including academia, manufacturers. This will provide significant insights, innovation opportunities to our business for the ongoing development of our Net Zero route-map and strategy.</p> <p>In conjunction with City FM and Star Refrigeration we were the winner of the 2021 Temperature Controlled Storage & Distribution Partnership Awards on the work carried out on reducing energy use in the Chilled Distribution Depots. ASDA and City Building Engineering Services (CBES) were also winners at the National ACR & Heat Pump Awards 2021 for 'Refrigeration Project of the Year', recognising the retrofittable adiabatic solution developed to maximise refrigeration system asset uptime whilst increasing the effectiveness of the heat transfer from the condenser to the atmosphere, thereby reducing the amount of energy required to condense and sub-cool the refrigerant.</p>		
Operational boundaries		
Name of controlled legal entity or facility	ASDA Group Limited (01396513)	
Operational control of legal entity or facility	True	

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