Webinar: Afmystificering af Scope 3-emissioner

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pwc

Hello from PwC

Susanne Stormer

Partner, Head of Sustainability

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Experience

Susanne recently joined PwC after 20 years with Novo Nordisk, setting direction for the company's ambition and strategy to be a sustainable business. She is a recognised international leader in corporate sustainability and reporting.

She is a member of the Project Task Force to operate the project on preparatory work for the elaboration of possible EU non-financial reporting standards, mandated to the European Financial Reporting Advisory Group (EFRAG) by the European Commission.

Jens Pultz Pedersen

Director, Sustainability Solutions

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Experience

Jens has worked in PwC Denmark's sustainability team since 2000. Jens has worked with the majority of the largest Danish companies, providing advice on data quality for ESG data and assurance of sustainability reports.

He is currently part of the working groups to provide input for potential updates to the reporting requirements for ESG/CSR in the Danish Financial Statements Act as well as the working group under the 14th partnership on climate change transition.

Niels Strange Peulicke-Andersen

Head of ESG Accounting Ørsted

Email: nisan@orsted.com

Experience

Niels is head of ESG Accounting at Ørsted, and is responsible for Ørsted's ESG reporting in the Annual Report and in the ESG Performance Report.

Together with his team, Niels has developed Ørsted's reporting on climate change in accordance with the GHG Protocol and hereunder the setup for reporting on the Company's Scope 3 emissions.

In this respect, Niels has come up with solutions to many of the reporting challenges companies face when reporting on the indirect CO2 emissions listed under scope 3 og the GHG Protocol.

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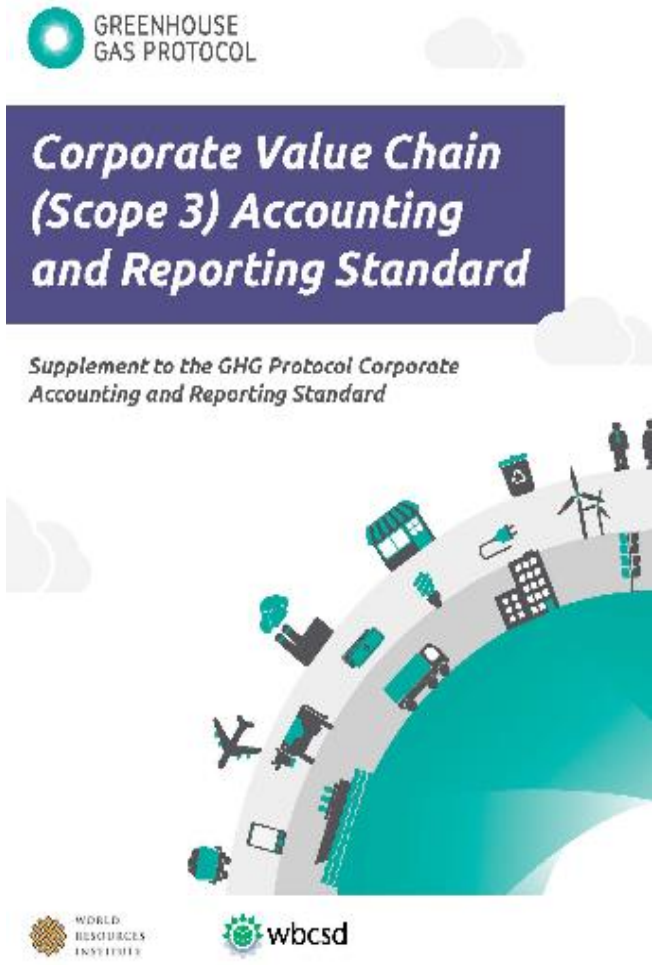
Overview of Scope 3 emissions

First things first

The Greenhouse Gas Protocol (GHG Protocol) establishes **comprehensive global standardized frameworks** to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions.

Released in 2011, **the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard** (also referred to as the Scope 3 Standard) is the **only internationally accepted method for companies to account for these types of value chain emissions.**

Scope 3 emissions are all of **the emissions a company is responsible for outside of its own walls**—from the goods it purchases to the disposal of the products it sells.



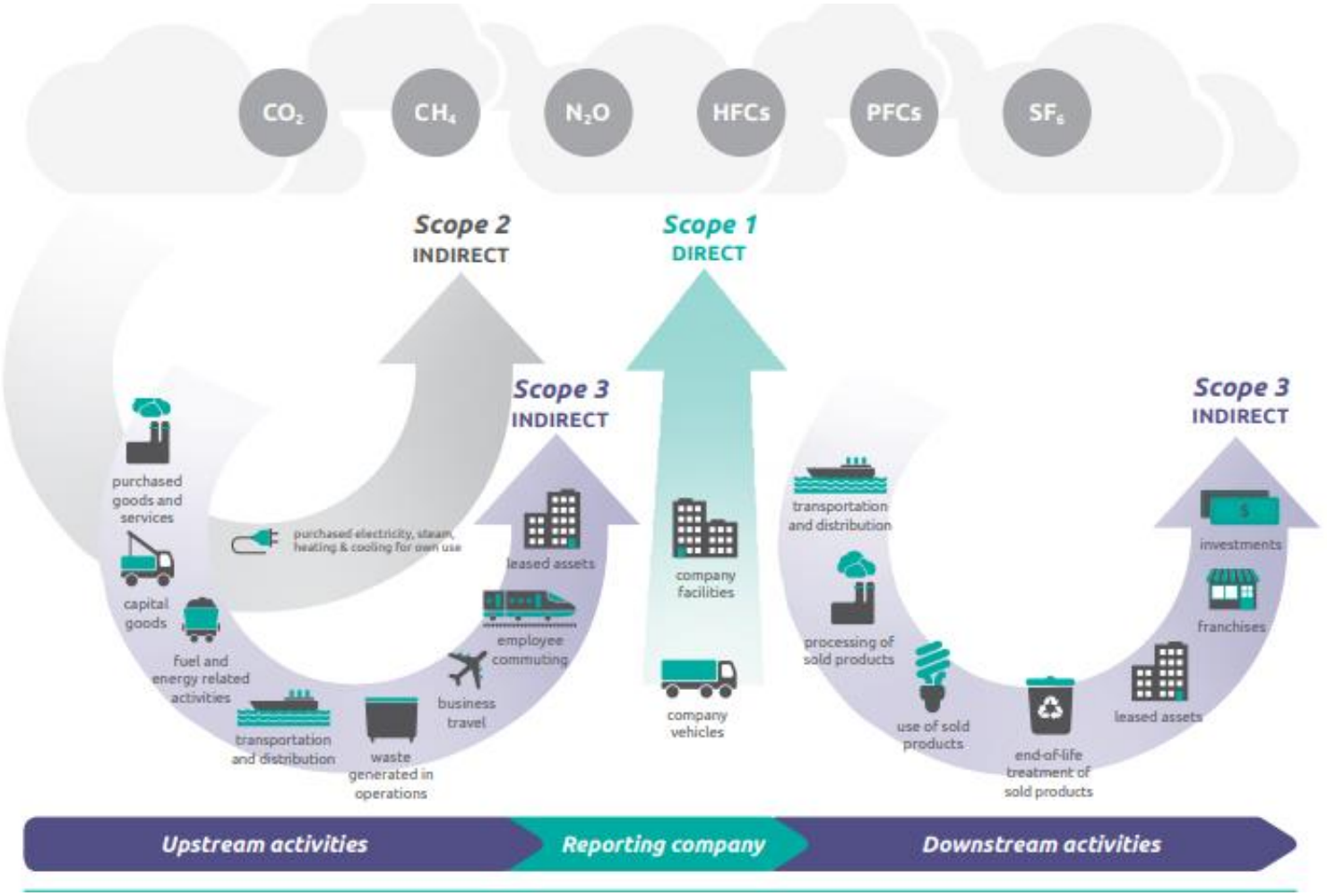
While the reporting landscape is evolving, the Greenhouse Gas Protocol remains the fixed point for climate change reporting.

Sustainability reporting standards	Sustainability frameworks	Harmonising alliances
GRI, SASB & 20+ measurement protocols	<IR>, CDSB Climate Disclosure Standards Board, CDP, TCFD	World Economic Forum, IMPACT MANAGEMENT PROJECT, SCIENCE BASED TARGETS, IFRS, value balancing alliance

All reporting standards, frameworks and initiatives to harmonise ESG reporting have adopted the guidelines of the GHG Protocol.

GREENHOUSE GAS PROTOCOL

Overview of GHG Protocol scopes and emissions across the value chain



Source: Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard

A closer look at scope 3 categories

Upstream or downstream	Scope 3 category
Upstream scope 3 emissions	1. Purchased goods and services 2. Capital goods 3. Fuel- and energy-related activities (not included in scope 1 or scope 2) 4. Upstream transportation and distribution 5. Waste generated in operations 6. Business travel 7. Employee commuting 8. Upstream leased assets
Downstream scope 3 emissions	9. Downstream transportation and distribution 10. Processing of sold products 11. Use of sold products 12. End-of-life treatment of sold products 13. Downstream leased assets 14. Franchises 15. Investments

Key highlights:

- The 15 categories are intended to provide companies with a systematic framework to organize, understand, and report on the diversity of scope 3 activities within a corporate value chain.
- The categories are designed to be mutually exclusive, such that, for any one reporting company, there is no double counting of emissions between categories.
- Each scope 3 category is comprised of multiple scope 3 activities that individually result in emissions.
- Companies are still challenged with identifying Scope category (e.g.leased vs. rented car).

Corporate-level GHG Protocol reporting options

Reporting Option	Scope 1	Scope 2	Scope 3
Report in conformance with the *GHG Protocol Corporate Standard*	Required	Required	**Optional**: Companies may report any scope 3 emissions the company chooses
Report in conformance with the *GHG Protocol Corporate Standard* and the *GHG Protocol Scope 3 Standard*	Required	Required	**Required**: Companies shall report scope 3 emissions following the requirements of the *Scope 3 Standard*

Key highlights:

- Incorporating scope 1, scope 2, and scope 3 emissions enables companies to understand their full emissions impact across the value chain and focus efforts where they can have the greatest impact.
- Companies reporting their corporate GHG emissions have two reporting options:
  - Under the Corporate Standard, companies are required to report all scope 1 and scope 2 emissions, while reporting scope 3 emissions is optional.
  - The Scope 3 Standard is designed to create further consistency in scope 3 inventories through additional requirements and guidance for scope 3 accounting and reporting.
- Companies should make and apply decisions consistently across both standards.

Source: Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard

Process to undertake reporting on Scope 3 emissions

1. Mapping of relevant emissions based upon the 15 categories and sub-categories
2. Establishing approach and methodology for data collection, calculations, relevant estimates and assumptions
3. Define a materiality threshold (the Scope 3 Protocol suggests 5%)
4. Scope what categories of Scope 3 reporting are material for your company and activities
5. Define reporting criteria
6. Define a base year for possible target setting
7. Set ambitious targets and define projects on how to achieve them
8. Start reporting externally, consider if extra attention can be obtained from signing up to Science Based Targets or reporting to Carbon Disclosure Project (benchmarking)
9. Get assurance if required by stakeholders

Goals frequently cited by businesses as reasons for developing a scope 3 inventory

Business goal	Description
Identify and understand risks and opportunities associated with value chain emissions	• Identify GHG-related risks in the value chain • Identify new market opportunities • Inform investment and procurement decisions
Identify GHG reduction opportunities, set reduction targets, and track performance	• Identify GHG "hot spots" and prioritize reduction efforts across the value chain • Set scope 3 GHG reduction targets • Quantify and report GHG performance over time
Engage value chain partners in GHG management	• Partner with suppliers, customers, and other companies in the value chain to achieve GHG reductions • Expand GHG accountability, transparency, and management in the supply chain • Enable greater transparency on companies' efforts to engage suppliers • Reduce energy use, costs, and risks in the supply chain and avoid future costs related to energy and emissions • Reduce costs through improved supply chain efficiency and reduction of material, resource, and energy use
Enhance stakeholder information and corporate reputation through public reporting	• Improve corporate reputation and accountability through public disclosure • Meet needs of stakeholders (e.g., investors, customers, civil society, governments), enhance stakeholder reputation, and improve stakeholder relationships through public disclosure of GHG emissions, progress toward GHG targets, and demonstration of environmental stewardship • Participate in government- and NGO-led GHG reporting and management programs to disclose GHG-related information

Key highlights:

- Scope 3 emissions can represent the largest source of emissions for companies and present the most significant opportunities to influence GHG reductions and achieve a variety of GHG-related business objectives.
- Before accounting for scope 3 emissions, companies should consider which business goal or goals they intend to achieve.
- Setting goals to be approved by Science Based Targets

Source: Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Supplement to the GHG Protocol Corporate Accounting and Reporting Standard

Credible climate action today is defined by Science-Based Targets

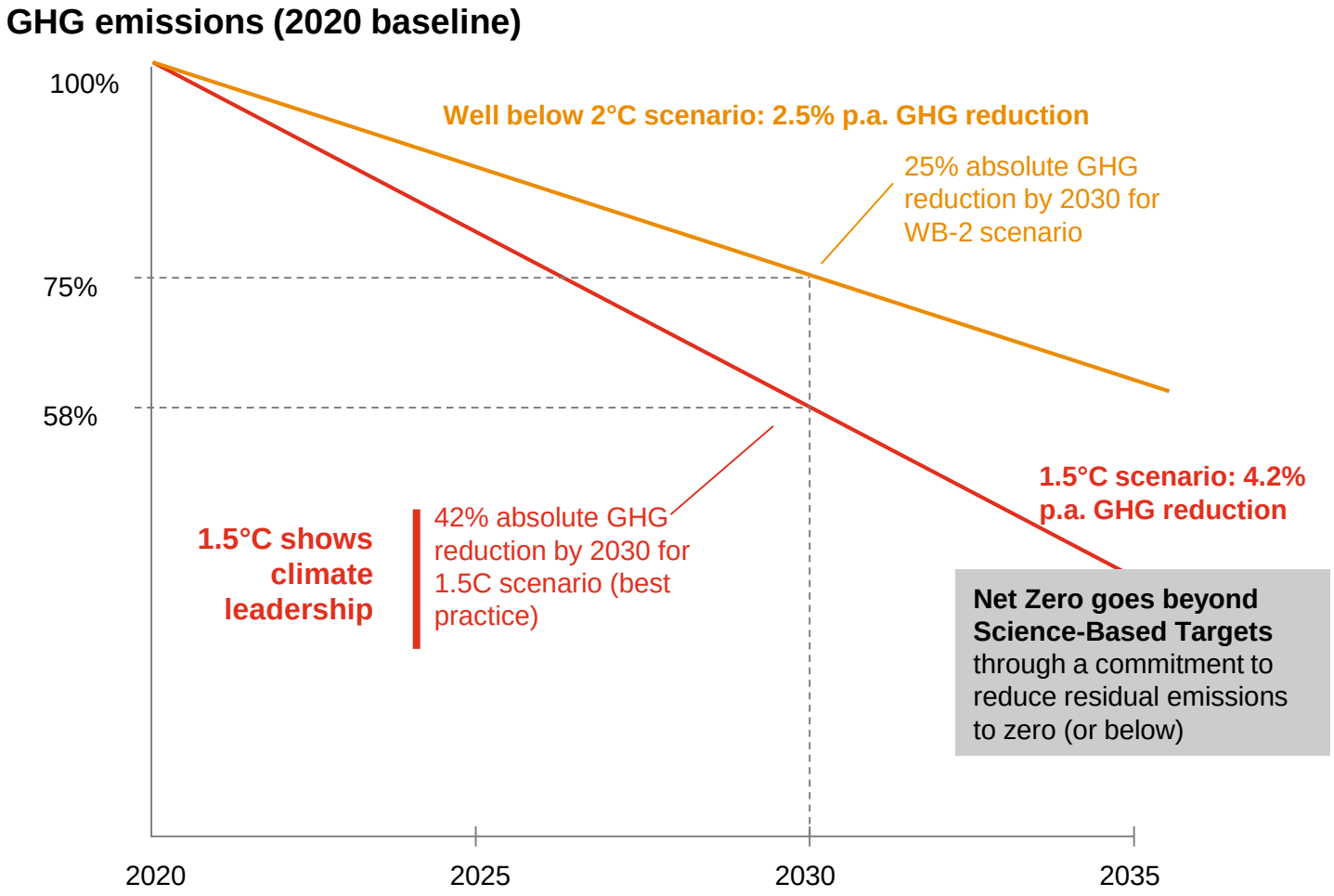
Science-Based Targets (SBTs) provide companies with a clearly defined pathway to future-proof growth by specifying how much and how quickly they need to reduce their greenhouse gas emissions.

The Paris Agreement in 2015 saw 195 of the world's governments commit to prevent dangerous climate change by limiting global warming to well below 2 degrees celsius. This signalled an acceleration in the transition to a low carbon economy.

Targets adopted by companies to reduce greenhouse gas (GHG) emissions are considered "science-based" if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement – to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

Source: https://sciencebasedtargets.org/what-is-a-science-based-target/

The Science-Based Targets Initiative (SBTi) validates targets set using this approach to ensure credibility, and provides a detailed standard that companies can use to set a valid SBT.



NB scenarios are strictly applicable to Scope 1+2 emissions - less ambitious targets can be applied to Scope 3 emissions, which must be included where >40% total emissions

What is required to set a SBT?

What is required to set a SBT?

- Level of ambition (Scope 1 and 2): At a minimum this must be consistent with the level of decarbonisation required to keep temperature increase to well-below 2°C while the SBTi encourages efforts towards 1.5°C
- Boundary: All company-wide Scope 1 and 2 GHG emissions (≥ 95%)
- Timeframe: 5-15 years into the future
- The use of offsets must not be counted as emissions reduction toward the progress of companies' SBTs
- Scope 3: A Scope 3 screening is required. An ambitious Scope 3 target is required when Scope 3 emissions cover > 40% of total emissions.
- Reporting: Disclose GHG emissions inventory on an annual basis.

What counts as an ambitious Scope 3 target?

- Absolute targets consistent with decarbonisation required to keep global temperature increase to 2°C
- Economic intensity targets that result in at least 7% year-on-year reduction of emissions per unit value added
- Physical intensity reductions aligned with the relevant sector reduction pathway

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Interview with Niels Strange Peulicke-Andersen, Ørsted

A world that runs entirely on green energy

Niels S. Peulicke-Andersen
Director, Head of ESG Accounting

Ørsted

Ørsted at a glance

Global market leader in offshore wind farms

- Develops, constructs, owns, build and operates offshore wind farms

Onshore

- Onshore wind farms
- Solar PV and energy storage

Markets & Bioenergy

- Power and heat
- Energy products for customers

Headquarter:	Denmark
Number of employees:	6,200
EBITDA 2020:	USD 2.9bn

Carbon neutral targets to continue our decarbonisation in line with the 1.5°C limit

2025

Carbon neutral company

Emissions from:

- Energy generation
- Operations

2040

Carbon neutral footprint

All emissions, incl.:

- Supply chain
- Energy trading

Science based targets

Obtained through at least:

98% reduction in carbon intensity

since 2006 (gCO2e/kWh) (scope 1-2) *

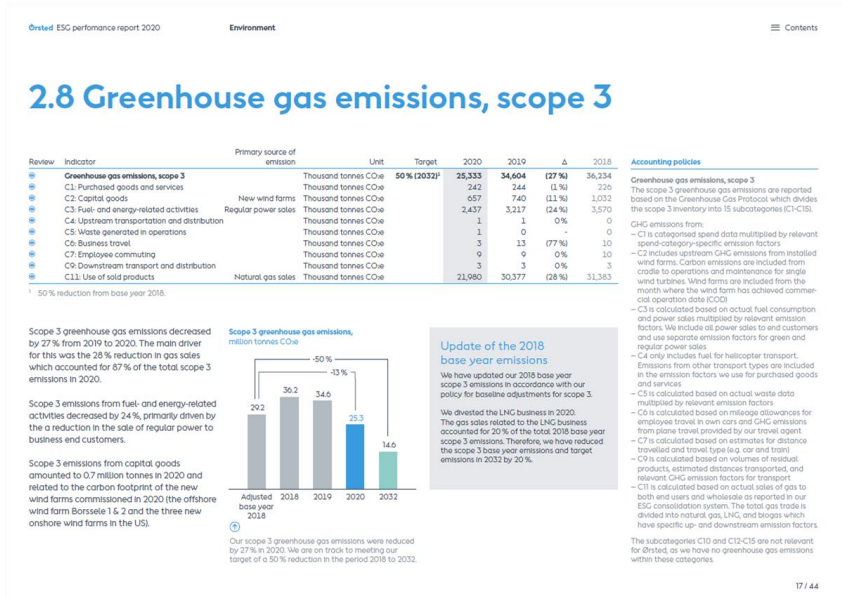
As a milestone:

50% reduction in absolute emissions in 2032

compared to 2018 from our supply chain and energy trading (scope 3) *

*Approved by the Science Based Targets initiative (SBTi) to be aligned with the 1.5°C pathway for energy companies

Scope 3 is reported in our ESG performance reports



Ørsted ESG performance report 2020 Environment Contents

2.8 Greenhouse gas emissions, scope 3

Review	Indicator	Primary source of emission	Unit	Target	2020	2019	Δ	2018
	Greenhouse gas emissions, scope 3		Thousand tonnes CO2e	**50 % (2032)[1]**	**25,333**	**34,604**	**(27 %)**	36,234
	C1: Purchased goods and services		Thousand tonnes CO2e		242	244	(1 %)	226
	C2: Capital goods	New wind farms	Thousand tonnes CO2e		657	740	(11 %)	1,032
	C3: Fuel- and energy-related activities	Regular power sales	Thousand tonnes CO2e		2,437	3,217	(24 %)	3,570
	C4: Upstream transportation and distribution		Thousand tonnes CO2e		1	1	0 %	0
	C5: Waste generated in operations		Thousand tonnes CO2e		1	0	-	0
	C6: Business travel		Thousand tonnes CO2e		3	13	(77 %)	10
	C7: Employee commuting		Thousand tonnes CO2e		9	9	0 %	10
	C9: Downstream transport and distribution		Thousand tonnes CO2e		3	3	0 %	3
	C11: Use of sold products	Natural gas sales	Thousand tonnes CO2e		21,980	30,377	(28 %)	31,383

[1] 50 % reduction from base year 2018.

Scope 3 greenhouse gas emissions decreased by 27 % from 2019 to 2020. The main driver for this was the 28 % reduction in gas sales which accounted for 87 % of the total scope 3 emissions in 2020.

Scope 3 emissions from fuel- and energy-related activities decreased by 24 %, primarily driven by the a reduction in the sale of regular power to business end customers.

Scope 3 emissions from capital goods amounted to 0.7 million tonnes in 2020 and related to the carbon footprint of the new wind farms commissioned in 2020 (the offshore wind farm Borssele 1 & 2 and the three new onshore wind farms in the US).

Scope 3 greenhouse gas emissions, million tonnes CO2e

Our scope 3 greenhouse gas emissions were reduced by 27 % in 2020. We are on track to meeting our target of a 50 % reduction in the period 2018 to 2032.

Update of the 2018 base year emissions

We have updated our 2018 base year scope 3 emissions in accordance with our policy for baseline adjustments for scope 3.

We divested the LNG business in 2020. The gas sales related to the LNG business accounted for 20 % of the total 2018 base year scope 3 emissions. Therefore, we have reduced the scope 3 base year emissions and target emissions in 2032 by 20 %.

Accounting policies

Greenhouse gas emissions, scope 3

The scope 3 greenhouse gas emissions are reported based on the Greenhouse Gas Protocol which divides the scope 3 inventory into 15 subcategories (C1-C15).

GHG emissions from:

- C1 is categorised spend data multiplied by relevant spend-category-specific emission factors
- C2 includes upstream GHG emissions from installed wind farms. Carbon emissions are included from cradle to operations and maintenance for single wind turbines. Wind farms are included from the month where the wind farm has achieved commercial operation date (COD)
- C3 is calculated based on actual fuel consumption and power sales multiplied by relevant emission factors. We include all power sales to end customers and use separate emission factors for green and regular power sales
- C4 only includes fuel for helicopter transport. Emissions from other transport types are included in the emission factors we use for purchased goods and services
- C5 is calculated based on actual waste data multiplied by relevant emission factors
- C6 is calculated based on mileage allowances for employee travel in own cars and GHG emissions from plane travel provided by our travel agent
- C7 is calculated based on estimates for distance travelled and travel type (e.g. car and train)
- C9 is calculated based on volumes of residual products, estimated distances transported, and relevant GHG emission factors for transport
- C11 is calculated based on actual sales of gas to both end users and wholesale as reported in our ESG consolidation system. The total gas trade is divided into natural gas, LNG, and biogas which have specific up- and downstream emission factors.

The subcategories C10 and C12-C15 are not relevant for Ørsted, as we have no greenhouse gas emissions within these categories.

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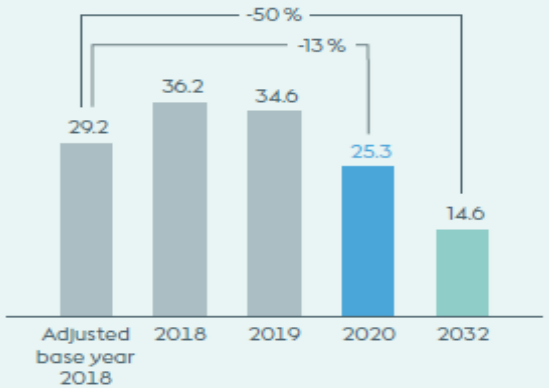

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5.6 Calculation factors

Table reference	Indicator	Factor	Comment	Reference	Publication
Table 2.7	Scope 1 emissions	Global warming potential of greenhouse gases	CO_2, CH_4, N_2O, SF_6	Intergovernmental Panel on Climate Change (IPCC), 2013	Fifth Assessment Report, The Physical Science Basis
Table 2.7	Scope 1 emissions	Carbon emissions from fossil fuels at CHP plants	Coal, oil, natural gas	Danish Energy Agency, 2019	Standardfaktorer for brændværdier og CO_2-emissioner (Standard factors for calorific value and carbon emissions)
Table 2.7	Scope 1 emissions	Carbon emissions from fossil fuels outside CHP plants	Diesel, petrol, fuel oil, jet fuel	American Petroleum Institute (API), 2009	Compendium of greenhouse gas emission methodologies for the oil and natural gas industry
Table 2.7	Scope 2 emissions	Carbon emissions from power purchased	In Denmark	EnerginetDK, 2019	Generel deklaration og Miljødeklaration (Generic declaration and environmental declaration)
Table 2.7	Scope 2 emissions	Carbon emissions from power purchased	In other European countries	Association of Issuing Bodies (AIB), 2019	European Residual Mixes
Table 2.7	Scope 2 emissions	Carbon emissions from power purchased	In countries outside Europe	Institute for Global Environmental Strategies (IGES), 2019	List of grid emission factors
Table 2.8	Scope 3 emissions	Use of sold products. Fuel- and energy-related activities	Emissions from end use of gas. Upstream supply chain of fuels	UK Department for Environment, Food & Rural Affairs (DEFRA), 2019	UK government GHG conversion factors for company reporting
Table 2.8	Scope 3 emissions	Capital goods	Wind farm suppliers	Siemens, 2016 and 2017	Environmental Product Declaration, swt-6-0-154 and swt-7.0-154
Table 2.8	Scope 3 emissions	Purchased goods and services	Supply chain emission factors depend on product categories	UK Department for Environment, Food & Rural Affairs (DEFRA), 2014	Indirect emissions from the supply chain
Table 2.8	Scope 3 emissions	Business travel in private car	Assumption: 'average car', 'unknow fuel type'	UK Department for Environment, Food & Rural Affairs (DEFRA), 2019	UK government GHG conversion factors for company reporting
Table 2.9	Avoided emissions	Carbon emissions from average fossil-fuel mix	Average of coal, gas, and oil	International Energy Agency (IEA), 2018	Emissions Factors & CO_2 Emissions from Fuel Combustion
Table 2.11	Water stress	Baseline water stress	Measured at site level, baseline water stress is the ratio of total water withdrawals to available renewable supply	World Resources Institute (WRI), 2019, Aqueduct Water Risk Atlas v3.0	Aqueduct Water Risk Atlas
Table 3.5	People powered	Average power consumption of households per capita	For all countries, excluding the US	Enerdata, 2017	Global Energy & CO_2 Data
Table 3.5	People powered	Residential power consumption by state	For the US	US Energy Information Administration (EIA), 2018	Sales to ultimate customers by state
Table 3.5	People powered	Numbers of residents and households by state	For the US	US Census Bureau, 2018	Annual Estimates of the Resident Population for the United States; Households ACS 5-year estimates
Table 3.5	Jobs created	Average work-in-person-days per MW offshore wind	Includes only jobs in offshore wind value chain	International Renewable Energy Agency (IRENA), 2018	Renewable energy benefits – leveraging local capacity for offshore wind

Note: The table shows references for calculation factors used in the 2020 data set.

With suppliers, decarbonise the offshore wind supply chain

1

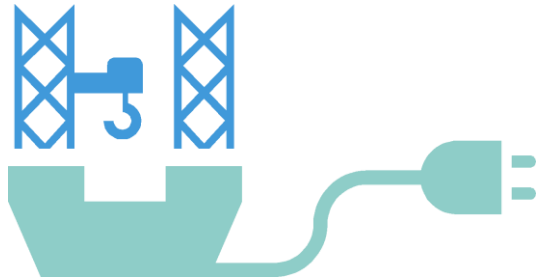
Disclose emissions and set science-based carbon-reduction targets

2

Use 100% renewable electricity in the manufacturing of wind turbines, foundations, cables, substations, and components

3

Optimise vessel fleet and develop roadmap to power vessels with renewable energy



Our vision

Let’s create a world that runs entirely on green energy

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Q&A

Thank you for your time.

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