knowit

Declaration of climate neutrality for the period 1 January 2022 to 31 December 2022 and commitment to achieve climate neutrality for the period 1 January 2023 to 31 December 2023 in accordance with PAS 2060

zeromission ENABLING BETTER BUSINESS

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Introduction

Knowit is a digitalisation consulting company with approximately 4,000 employees in Sweden, Norway, Denmark, Finland, Germany, and Poland. The company offers digital solutions and has expertise in design and communication, management consulting and IT.

Together with ZeroMission, Knowit has collected and analysed emissions coming from all operations in the value chain from 1 January 2022 to 31 December 2022 with the aim of becoming climate neutral according to PAS 2060.

General Information

PAS 2060, introductory information	
Individual responsible	Joakim Pilborg, Head of Sustainability, Knowit Group
Entity making the declaration	Knowit including all subsidiaries in all countries
Subject of the declaration	Knowit's operations 2022
System boundaries	All upstream, core and relevant downstream activities needed for Knowit to provide its services are included, except capital goods. See "Scope" later in this report for more information.
Function	Knowit is a consulting company that offers digital solutions and has expertise in design, communication, management consulting and IT. During 2020 and 2021, Knowit has made several new acquisitions and divestments that in total results in significant changes to organisation structure enough to trigger a recalculation of the base year 2019 and the reporting year 2020. The recalculated values for 2019 and 2020 are shown in this report.
Rationale for the selection of the subject	The object is defined by the Greenhouse Gas Protocol, which describes all relevant emissions that arise from Knowit's operations from an "operational control approach" perspective.
Baseline period	1 January 2019 – 31 December 2019
Achievement period	1 January 2022 – 31 December 2022
Commitment period	1 January 2023 – 31 December 2023
Standard for assessing the reduction of greenhouse gas emissions	Greenhouse Gas Protocol – Corporate Accounting and Reporting Standard, Corporate value Chain (Scope 3) Standard and Scope 2 Guidance
Type of conformity assessment	OPV-3, Other party verified by ZeroMission AB– unified.
Knowit's carbon footprint 2022	6051 tCO_2e (Market-based method)

PAS 2060, introductory information	
Confirmation	ZeroMission AB hereby confirms that the standard GHG Protocol has been used in accordance with its provisions and basic rules set out in PAS 2060.
Number of Employees (FTE) 2022	3961

Declaration of Climate Neutrality According to PAS 2060

"Carbon neutrality of Knowit's operations in 2022 achieved by Knowit in accordance with PAS 2060 on the 31st of December 2022 with commitment to maintain to 31st of December 2023 from the period commencing 1st of January 2023, ZeroMission AB certified."

Statement by Knowit

Digitization is accelerating, with both opportunities and risks for the climate and society as a result. Knowit's role, as a leading consulting company in the digitalisation industry, is therefore becoming increasingly important from a sustainability perspective. Knowit needs to understand how society is changing to better capture opportunities, manage risks and to continue to develop its business. Sustainable business means creating long-term value for owners, customers, and employees as well as other stakeholders. This is done by identifying and managing environmental, social, and financial opportunities and risks and by integrating these into Knowit's business strategy and operations.

In 2018 and 2019, Knowit, together with more than 40 other companies in the digitalisation consulting industry, developed a roadmap for a fossil-free, climate-positive, and competitive digitization consulting sector. The plan was developed on behalf of the Swedish government within the framework of their initiative Fossil-Free Sweden. Part of the roadmap was that Knowit undertook to halve CO_2 emissions from its own operations by 2030 compared to 2018 and to be completely fossil-free by 2045. The climate accounts for 2019 and 2020 already showed that Knowit's sustainability work had begun to have an effect. During the pandemic, travel decreased significantly to increase again in 2022, but not to the levels we had before the pandemic. The company's assessment is that air travel will continue to decrease over time, while the use of bio-jet fuel will increase.

Since 2018, Knowit prepares climate accounts annually to understand how the climate footprint develops and what measures are required to achieve set goals. The reporting takes place in accordance with the Greenhouse Gas Protocol (GHG protocol), an international accounting standard for calculating and reporting a business's climate impact. In 2022, CO_2 emissions from Knowit's own operations have increased compared to 2021, which was expected as 2022 is the first year without any effects caused by the covid-19 pandemic. In 2022, the company emitted 1.53 tonnes of CO2e per employee, which means that Knowit is still far below the set targets for the company's emissions. During 2022, the company's emissions have increased, above all in four areas where focused work is now needed to reduce emissions, and for the company's emissions to follow the company's emission reduction targets over time. One area is the attitude to air

travel, the second is to ensure that the company's offices use fossil-free electricity, the third is the lifespan of electronics and the fourth is the reuse of office furniture. To create the conditions to succeed with our emission targets in the long term, we also need to start work on ensuring that Knowit's essential suppliers have climate ambitions that are in line with or exceed Knowit's.

The climate accounts include direct emissions (such as travel to and from work and the service), as well as indirect emissions, (from the purchase of electricity, cooling and heating to offices, computers, mobile phones, transport and building materials and capital goods in connection with the renovation of offices). Knowit also measures its climate impact caused by purchased server operations for its own operations as well as server operations for the customers where Knowit has an operating commitment.

In addition to reducing emissions in the areas above, Knowit has decided to invest in projects for climate offset, outside its own operations and value chain, corresponding to the company's remaining emissions. For 2022, this means 6 051 tonnes of CO2e. Knowit has decided to be a climate-neutral company since 1 January 2019. Since 1 January 2022, we have taken one step further and Knowit is now a climate-positive company by choosing to compensate the climate emissions with an additional 10 percent in addition to what is required for climate neutrality.

Signed:

Joakim Pilborg,
Head of Sustainability Knowit Group

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Climate Footprint 2022

Introduction

To meet the PAS 2060 standard, at least 95% of all emissions related to the object must be included in the calculation. The calculation must also follow an accounting standard, either specified in the ISO standard for life cycle analyses, or GHG Protocol.

About GHG Protocol, Life Cycle Perspective and Greenhouse Gases

Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard is an internationally accepted standard that takes a holistic perspective on organizations, with guidance and clear demarcation for how organizations should calculate their direct and indirect emissions. According to the standard, the emissions are grouped into three so-called Scopes:

> Scope 1. Direct emissions
> Scope 2. Indirect emissions from purchased energy
> Scope 3. Indirect emissions arising from the value chain, both upstream and downstream

Overall, this means that a life cycle perspective applied for the entire organization, from purchased materials to the use of the products that Knowit delivers. The details of what is included in the assessment are described in detail in the section "Scope" below.

The calculations include all greenhouse gases (mainly CO_2, CH_4 and N_2O) that have been converted and reported as tonnes of carbon dioxide equivalents (CO_2e). IPCC AR5 is the source of the conversion factors (GWP) which has a 100-year perspective and is without "climate feedbacks". As far as possible, emission factors that are spatially and temporally specific have been used to calculate the climate impact, with a life cycle perspective in mind. Read more about the emission factors in the reference list among the appendices.

Time Period for the Calculation

All data in the analysis refer to activities during the period 1 January 2022 - 31 December 2022.

Control Approach: Operational Control

The reporting is based on operational control approach, meaning that the object (Knowit) consists of units (subsidiaries) that are controlled directly by Knowit. See the entire accounting structure in appendices.

Scope 2 Market-based and Location-based

Calculations for electricity and heat in Scope 2 are reported both as market-based and location-based in Knowit's climate accounts. The results reported in this report are calculated based on the market-based method and apply unless otherwise stated. The climate accounts are published on Knowit's external websites.

Scope

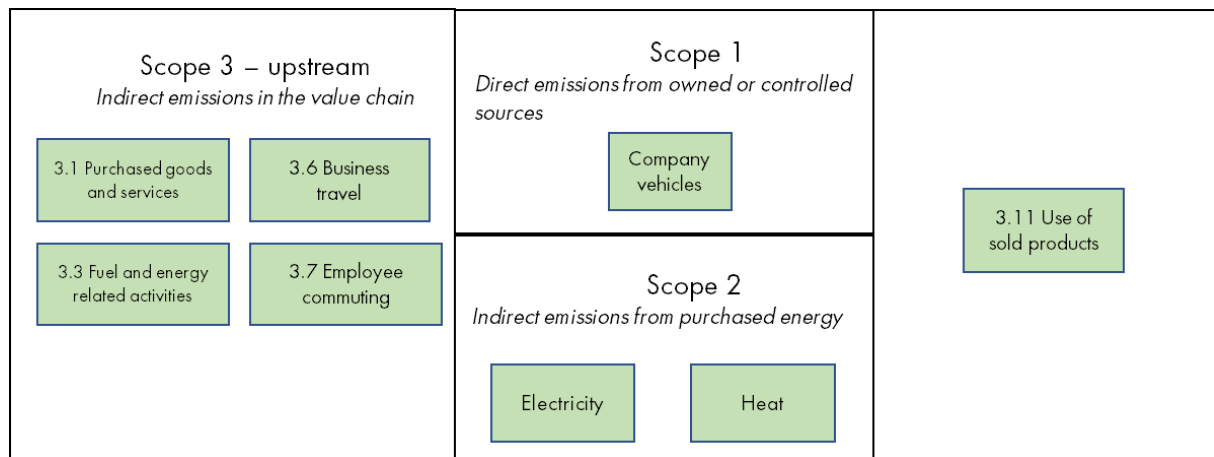Included categories are reported in the figure below.

Figure 1 System boundaries for Knowit's climate accounts.

Table 1: Activities included in the accounts, grouped into the categories upstream, core activities and downstream.

Scope	Category	Included activities
Scope 1	Mobile combustion	Direct emissions from company owned and leased cars.
Scope 2	Purchased energy	Direct emissions from the use of electricity and district heating in owned or rented office spaces.
Scope 3	3. 1 – Purchased goods and services	Emissions from purchased goods and services such as IT equipment, food and drink, cloud services and office renovation.
	3.3 – Fuel and energy related activities	Upstream emissions from the generation of fuels and energy not reported under scope 1 and 2.
	3. 6 - Business travel	Employee travel by car, bus, plane, ferry, bicycle, motorcycle, taxi and train as well as hotel nights.
	3.7 - Commuting	Employees' commuting trips by car, bus, train, motorcycle, and bicycle as well as working from home.
	3.11 – Use of sold products	Hosted server space for customers where Knowit has contracted operations. Reported as "Provider of server services" upstream. No other emissions from sold services have been included in the calculation.

Excluded Processes and Relevance

The following categories in scope 3 have not been included in the assessment based on the guidelines and requirements in GHG Protocol and PAS 2060.

Table 2 Activities excluded in the accounting.

Excluded categories	Rational
3.2 Capital goods	Knowit has not invested in capital goods with financial depreciation for a long time. Furniture and office space are included in the accounts as "purchased material".
3. 4 – Upstream transportation and distribution	Transport of purchased goods are included in the calculations for category 3.1 purchased goods and services.
3.5 – Waste management	Management of office waste has been excluded from the 2021 assessment as the category results in negligible emissions (0,1 % of total emissions in 2019).
3.10 - Processing of sold products	Not applicable / none existing.
3.12 - Waste management of sold products	Not applicable / none existing.
3.13 - Downstream leased assets	Not applicable / none existing.
3.14 - Franchises	Not applicable / none existing.
3.15 - Investments	Not relevant for the business and not a requirement according to GHG Protocol to report for this type of business.
3.8 - Upstream leased assets	Not applicable / none existing.
3.9 - Downstream transport	Not applicable / none existing.

Assumptions and Estimates

In cases where primary data is not available, or when gaps are present in the data, the following additions have been made. Data and uncertainty are discussed in detail below.

1. District heating and electricity have for some offices been calculated based on office space as exact kWh has not been available.
2. Questionnaire responses from employees regarding business travel and commuting have been extrapolated based on the response rate to cover all employees.
3. Energy consumption for servers where Knowit has operating commitments has been based on data from 2020. No specific data has been collected for 2022.

Data Quality and Uncertainty

Uncertainties exist both in activity data and in the emission factors applied. Uncertainty in climate calculations arises from applied activity data, method, assumptions, emission factors and GWP values. To avoid underestimating emissions, conservative assumptions and emission factors have generally been applied. A quantified uncertainty analysis was conducted in 2020 to determine the main sources of uncertainty and has been used to further reduce uncertainties for this year's assessment.

All activity data has been collected by Knowit and consists of both primary data (actual, measured amounts) and secondary data. As far as possible, primary data is sought to avoid uncertainties in the result. The information that has been collected refers to e.g. travel distances, vehicle data, energy use, purchasing volumes, etc. For the climate footprint in 2022 39 percent is based on primary data and 61 percent on secondary data.

Travel

Business travel, commuting trips and conference trips are calculated based on primary data collected by Knowit via surveys sent out to all employees. The response rate to the questionnaires was complete from the office managers and the CEOs. 67 percent of the employees answered the survey about individual travel. Efforts have been made to ensure that companies and employees who travel extensively have responded to the survey, and the results have then been extrapolated to cover 100 percent of all employees in all regions.

Purchases

Electronics such as mobile phones, screens and laptops are based on real purchasing data from a representative period of the year (quarter 3), which is then extrapolated to cover the entire year's purchases. Food and drink are based on purchasing data from the whole year. Renovation of office space and the purchase of furniture for workplaces and conference rooms are included and are based on templates for emissions per renovated square meter or average workplace.

Electricity and Heat

Primary data for electricity consumption has been collected for 57 percent of Knowit's offices. The district heating and electricity consumption for the remaining offices have been calculated based on office space that is rented, as heat and electricity are often included in the rent and are not specified in kWh. About 47 percent of the offices can present guarantees of origin for the purchased electricity.

Use of Sold Products

Server operation on behalf of customers is based on all customer cases that purchase this type of service from Knowit. For 2022, data has not been collected for specific customer cases, the emissions are based on previously reported years. Emissions are relatively low in most cases as Knowit does not have an agreement on operational commitment of servers on behalf of customers.

Emission Factors

The emission factors, the factors used to calculate the climate impact from different activities, are taken from several databases, life cycle analyses, published articles, national statistics, or combinations of these. The ambition is always to match the emission factors with the activities, regarding to geography, technology, time, precision and scope. In practice, this means that the factors are as up to date as possible and relevant to the activities that Knowit carried out in 2022. The limitation for the quality of the emission factors is the current state of knowledge, which is constantly expanding and improving. See specific source reference in the appendix to the climate accounts.

Results

The total emissions of greenhouse gases in 2022 are 6051 tonnes CO2 equivalents. This corresponds to 1.5 tonnes of CO2e per employee stated in full-time equivalents. All results are reported in accordance with the market-based method unless otherwise stated.

Figure 2 Emissions per category reported in tCO2e.

Results per Scope According to GHG Protocol

Table 3 Results per scope for market-based and location-based methods.

Scope	Explanation	Ton CO$_2$e
Market-based method		
Scope 1	Direct greenhouse gas emissions from vehicles / properties that are under Knowit's control	64
Scope 2	Indirect greenhouse gas emissions arising from energy use in properties owned or controlled by Knowit (market-based reporting)	1054
Scope 3	All other indirect greenhouse gas emissions	4931
Total 2021		6051
Location-based method		
Scope 1	Direct greenhouse gas emissions from vehicles / properties that are under Knowit's control	64
Scope 2	Indirect greenhouse gas emissions arising from energy use in properties owned or controlled by Knowit	698
Scope 3	All other indirect greenhouse gas emissions	4952
Total 2021		5716

Results, Data and Assumptions

Table 4 Results in 2022 per category in resp. scope according to GHG Protocol and information on data collection, emission factor, data quality and assumptions.

Scope	Category	Emissions [ton CO_2e]	Share of emissions	Type of activity data	Data quality
Scope 1	Company owned vehicles	66	1 %	Means of transport and distance	Primary data
Scope 2	Purchased energy	1054	17 %	Consumption data and square meter area	Primary and secondary data
Scope 3	Purchased goods and services	2145	36 %	Consumption data	Primary and secondary data
	Business travel	1857	31 %	Means of transport and distance	Primary and secondary data
	Commuting	659	11 %	Means of transport and distance	Primary and secondary data
	Upstream energy and fuel-related emissions	244	4 %	Consumption data and square meter area	Primary and secondary data
	Use of sold products and services	26	0 %	Number of customer assignments	Secondary data

Recalculation of base year

During 2020 and 2021, Knowit made acquisitions that collectively changed the company structure to the extent a recalculation of the base year 2018 and the subsequent years 2019 and 2020 was triggered. The recalculation was based on the increase of number of employees at the time where the acquisitions were made. Going forward, Knowit will adapt a recalculation policy threshold of 5 %. Meaning that any significant changes in company structure, apart from organic growth and decline, which in aggregate results in more than 5 % change in total emission will trigger a recalculation of the base year.

Table 5 Carbon emissions per category from the carbon assessment 2022 and 2021 as well as the recalculated emissions for 2019–2020.

	2022	2021	2020 recalculated	2019 recalculated
Scope 1 & 2 - aggregated	**1 120**	**726**	**956**	**1453**
Scope 1 - Company owned vehicles	66	31	84	148
Scope 2 - Purchased energy	1054	694	873	1305
Scope 3 - Aggregated	**4 905**	**2 496**	**1 705**	**7 068**
Cat 1 - Purchased goods and services	2145	1369	668	1718

	2022	2021	2020 recalculated	2019 recalculated
Cat 3 - Upstream energy and fuel-related emissions	244	116	106	83
Cat 6 - Business Travel	1857	607	420	3494
Cat 7 - Commuting	659	521	617	1856
Cat 11 - Use of sold products	26	25	23	23
Total emissions	**6 051**	**3 363**	**2 800**	**8 636**

Emission Reduction

Knowit's total emissions in 2022 have reduced 30 percent compared to 2019. The reduction was mainly achieved from reduced business travel and commuting. The trend illustrated in figure 4 and 5 as well as in table 5 shows a clear reduction from 2019 in all categories except purchased goods and services. The pandemic has played a major part in disrupting previous travel patterns and thus emissions. The increase in emissions in 2022 compared to 2021 is mainly due to operations once again being conducted in a similar way as before the pandemic. Even so, emissions are not back to the same levels as before the pandemic. The emissions of commuting remain at the same level as in 2020, thanks to a maintained option to work remotely. Business trips have increased significantly towards 2020 and 2021 but are still at around 50 percent of 2019's emission level.

The rolling multi-year average base period is calculated by the average emissions from the previous three years and compared with the reporting period. For the reporting year 2022, emissions per FTE is compared with the average emission per FTE for 2019, 2020 and 2021.

Intensity based reduction

Rolling mulit-year average based period		Change	Reporting year	
Multi-year average period	Rolling multi-year average base period [tCO2e/FTE]	Reduction / Increase	Reporting year	tCO2e/FTE
2018–2020	2,05		2020	0,78
2019–2021	1,37	- 33 %	2021	0,93
2020–2022	1,08	- 21 %	2022	1,53

Absolute based reduction

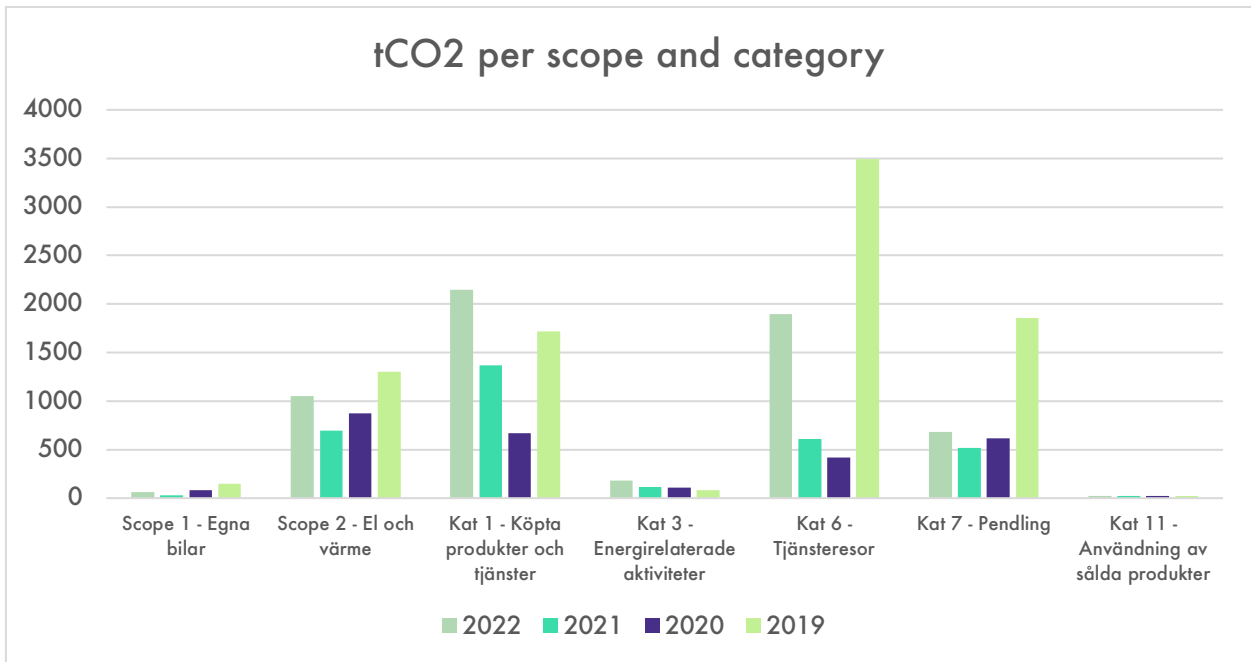| Rolling multi-year average base period		Change	Reporting year	
Multi-year average period	Rolling multi-year average base period [tCO2e]	Reduction / Increase	Reporting year	tCO2e
2018-2020	7 265		2020	1 721
2019-2021	4 936	- 32 %	2021	3 363
2020-2022	4 074	- 17 %	2022	6 051

tCO2 per scope and category

Figure 3 Comparison of emissions by scope and category 2019, 2020, 2021 and 2022.

Reduction Targets

Science Based Targets

During 2021 Knowit developed Science Based Targets that were approved by SBTI in March 2022. The targets cover Scope 1, 2 and 98,4 percent of total scope 3 emissions. The target has been set in line with the 1,5-degree trajectory and requires Knowit to reduce Scope 1, 2 and 3 emissions by 50 % by 2030 from a 2019 base year. The official target wording is as follows:

Knowit AB commits to reduce absolute scope1 and 2 GHG emissions 50% by 2030 from a 2019 base year. Knowit AB also commits to reduce absolute scope 3 emissions from purchased goods and services, business travel, and employee commuting 50% within the same timeframe.
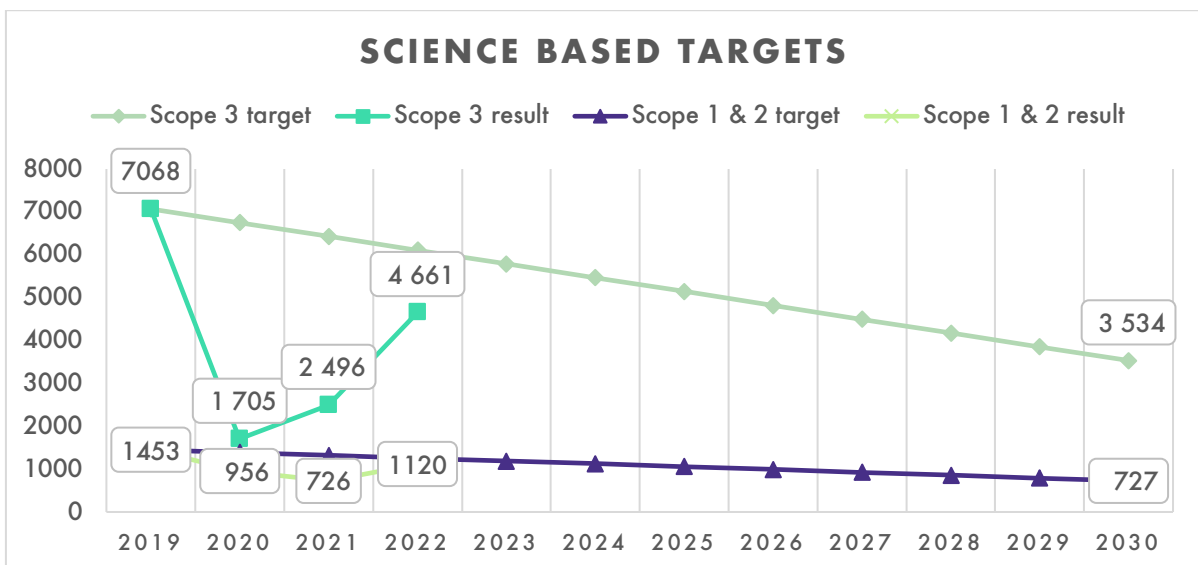

SCIENCE BASED TARGETS

Figure 4 Target and result for Knowit's Science Based Targets.

Long term Fossil-free Sweden Target

Knowit has contributed to the development of the Digitalisation Consulting Industry's roadmap for fossil-free Sweden and signed it. The roadmap's goal is for greenhouse gas emissions per employee to be reduced by at least 50% by 2030 compared to 2018 and to be completely fossil-free by 2045. For Knowit, this means halving the reference value from 2018 of 2,95 tonnes CO2e / employee by 2030.
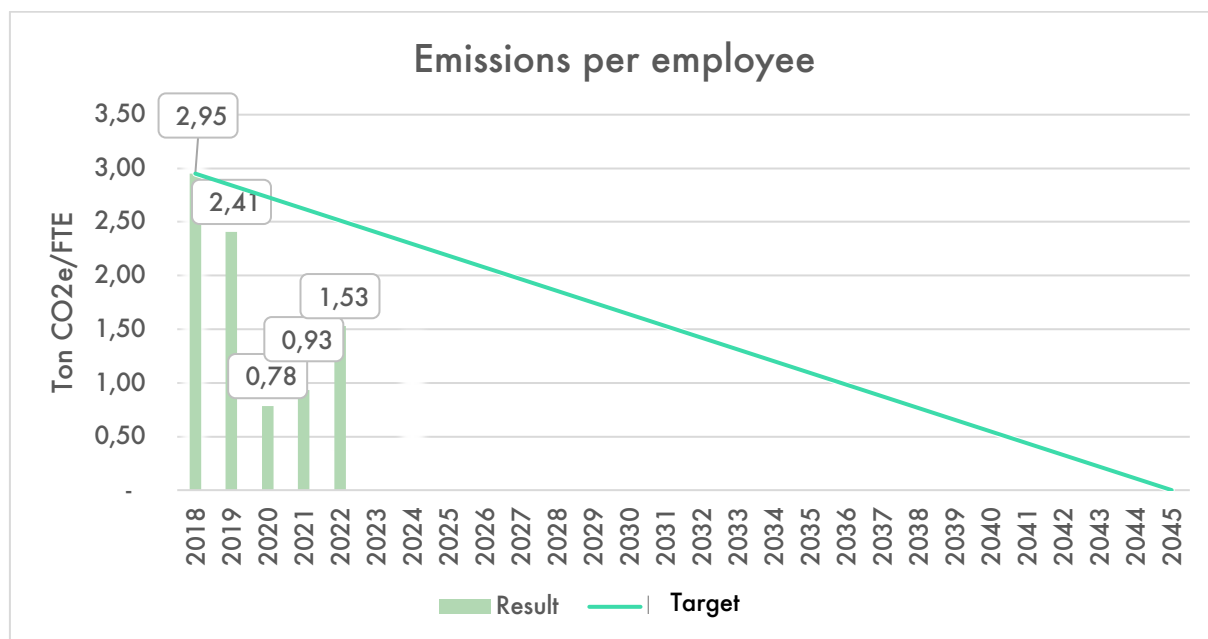

Figure 5 The bars show Knowit's emissions reported in tCO2e / employee 2018–2021. The line shows the Digitalisation Consulting industry's roadmap for fossil-free Sweden's emission reduction targets until 2045.

Carbon Management Plan

Knowit has quantified its emissions for the years 2018–2021, and at the same time is actively working to reduce its emissions. Knowit's carbon management plan spans over 25 years, 2020 - 2045, with sub-targets in 2030 based on the approved Science Based Targets. The plan for how emissions is to be reduced is set out in Knowit's policy document (environmental policy, environmental goals and purchasing routine) and the Digitalisation Consulting industry's roadmap for fossil-free Sweden and is summarized below.

The 2021 emissions are well below the target curve, mainly due to reduced travel because of covid-19. The 2022 emissions are at the same value as the target curve for the year 2036. Now that the pandemic has released its grip on society, Knowit's staff have not fallen back into old travel patterns but have continued to work in accordance with the travel policy. Policy states that Knowit staff will take the train and bus whenever possible and flying or travel by car will only be used when there is no viable alternative.

In 2020, the Digitalisation Consulting industry agreed on a minimum level for employees' knowledge of the effects of digitalisation on the climate and a level of sustainability competence. An education model that is adapted to Knowit has been developed during 2022 and has been presented to all employees.

In its purchasing routine, Knowit classifies the purchase of materials and services such as electricity and heating, transport and travel, hotel nights, food and beverages, IT equipment and more as important from a sustainability perspective. When purchasing, Knowit has decided to primarily choose suppliers who are certified according to ISO 14001 and have sustainability work that complies with Knowit's own Supplier Code of Conduct.

Regarding leased vehicles, Knowit has accepted Fossil-free Sweden's challenge, *The company car challenge*. This means that Knowit only accepts leasing cars classified as "bonus vehicles" according to the Swedish Transport Administration's bonus-malus system.

By 2022 Knowit developed an applied framework for reporting positive CO_2 contributions of completed digitalisation projects which was tested in one of Knowit´s completed project. The framework shall be further developed during 2023 to be able to map a larger part of Knowit´s planned and completed projects.

Plan for Improved Data Collection

An important part of the work towards achieving the 2030 goals and going forwards is to improve the reporting and data collection from the organization. A crucial part of this is the implementation of a new ERP system that is being implemented in 2019-2022. Through the system, Knowit will be able to work with adaptations and Knowit-unique functions to increase data quality.

Carbon Offset

Carbon Offsetting Period 2022

Knowit has carbon offset all emissions during 2022 to become carbon neutral. The offset is made in projects outside Knowit's organization, in line with the rules for certified carbon offsets. The projects are certified with Gold Standard and are ex-post credits. The certification, which is internationally accepted, means that the climate benefit is scientifically measurable, permanent over time and traceable to Knowit's emissions in 2022 via public registers. The certification also proves that the climate benefit is additional, that leakage is managed and minimized and finally that the projects are validated and verified by an auditing third party.

Statement of Purchased Credits

Knowit has purchased credits and carbon offset for a total of 6 657 tonnes (corresponding to 110 percent of all emissions) to achieve carbon neutrality in accordance with PAS 2060 for the period 1 January 2022 to 31 December 2022.

Table 5 Details from the cancellation of the carbon offset credits, including serial numbers.

Project	Standard	Tonnage	Vintage	Date of purchase carbon offset
Solar and efficient stoves in Madagascar	Gold Standard	5028	2021	2023-02-27
GS1-1-MG-GS464-3-2021-23866-9382-14409				
Solar and efficient stoves in Madagascar	Gold Standard	29	2021	2023-04-28
GS1-1-MG-GS464-3-2021-23866-14410-14438				
Effective cook stoves for Siaya communities, Kenya	Gold Standard	1681	2020	2023-02-27
GS1-1-KE-GS879-16-2020-22248-117531-119130				

Description of the carbon offset process

Below is a description of the process, from Knowits purchases of Gold Standard carbon credits.

1. The quantity of carbon credits required to offset their annual emissions is calculated and reported.
2. ZeroMission purchases the required quantity of issued carbon credits from the specified projects.
3. ZeroMission invoices Knowit the cost of the required carbon credits
4. ZeroMission received and retires the purchased credits in Knowits name, in the international environmental registry GS Registry.

Actors and concepts

The process of Cary Groups offsetting their emissions involves several actors along a chain, all with different functions that are described below.

Energy Efficient Cook Stoves for Siaya Communities, Kenya – the name of the Gold Standard project located in Kenya.
https://www.goldstandard.org/projects/energy-efficient-cook-stoves-siaya-communities-kenya

Ex-post credits: Knowit purchases Ex-post credits. This means that the climate benefit occurs and is verified before the credits are issued.

GS Registry: An international environmental register where all sold certificates from Gold Standard are registered and retired and can be tracked. URL:
https://registry.goldstandard.org/credit-blocks

Knowit: Buyer of certified carbon credits

Solar and efficient stoves in Madagascar – the name of the Gold Standard project located in Madagascar. https://www.goldstandard.org/projects/solar-and-efficient-stoves-madagascar

ZeroMission: Reseller of Plan Vivo certified carbon credits www.zeromission.se

Confirmation from ZeroMission AB, Stockholm

Knowit has appointed a second party, ZeroMission AB, to act as an external auditor (so-called "other party validator") to check compliance with the PAS 2060: 2014 standard.

The work has gone through three steps:
1. Inventory of the organization and sources of emissions
2. Calculation and reporting of emissions in accordance with GHG Protocol and preparation of PAS 2060:2014 reporting, including ensuring that calculation, method, management plan, etc. follows the specification.
3. Validated that the statement on climate neutrality is in accordance with the requirements of PAS 2060: 2014

In Summary

Knowit has offset all emissions arising from the organization during 2022 and achieved carbon neutrality in accordance with PAS 2060 for the period 1 January 2022 to 31 December 2022. Knowit has also declared a long-term goal and established a reduction plan with a commitment to reduce emissions per employee during the period 2020 – 2045 with a commitment on climate neutrality for the calendar year 2023.

Statement by ZeroMission AB, Sweden.

Appendices

A. QES Checklist

Checklist for QES supporting declaration of achievement of carbon neutrality

1) Define standard and methodology use to determine its GHG emissions reduction.	p.3-7
2) Confirm that the methodology used was applied in accordance with its provisions and the principles set out in PAS 2060 were met.	p.3, p.19
3) Provide justification for the selection of the methodologies chosen to quantify reductions in the carbon footprint, including all assumptions and calculations made and any assessments of uncertainty. *(The methodology employed to quantify reductions shall be the same as that used to quantify the original carbon footprint. Should an alternative methodology be available that would reduce uncertainty and yield more accurate, consistent and reproducible results, then this may be used provided the original carbon footprint is re-quantified to the same methodology, for comparison purposes. Recalculated carbon footprints shall use the most recently available emission factors, ensuring that for purposes of comparison with the original calculation, any change in the factors used is taken into account).*	p.4-9
4) Describe the means by which reductions have been achieved and any applicable assumptions or justifications.	p. 13-15
5) Ensure that there has been no change to the definition of the subject. *(The entity shall ensure that the definition of the subject remains unchanged through each and every stage of the methodology. In the event that material change to the subject occurs, the sequence shall be re-started on the basis of a newly defined subject.)*	p.12
6) Describe the actual reductions achieved in absolute and intensity terms and as a percentage of the original carbon footprint. *(Quantified GHG emissions reductions shall be expressed in absolute terms and shall relate to the application period selected and/or shall be expressed in emission intensity terms (e.g. per specified unit of product or instance of service* . *plus* whether or not the actual reduction is in line with that forecast in the carbon management plan together with the reasons for any significant variation; . and the time period chosen to measure reduced GHG emissions . and the size of the reduced carbon footprint.	p.13-15

7) State the baseline/qualification date.	p.3
8) Record the percentage economic growth rate for the given application period used as a threshold for recognizing reductions in intensity terms.	N/A
9) Provide an explanation for circumstances where a GHG reduction in intensity terms is accompanied by an increase in absolute terms for the determined subject.	p.12
10) Select and document the standard and methodology used to achieve carbon offset.	p.17
11) Confirm that:	
a) Offsets generated or allowance credits surrendered represent genuine, additional GHG emission reductions elsewhere.	p.17
b) Projects involved in delivering offsets meet the criteria of additionality, permanence, leakage and double counting. (See the WRI Greenhouse Gas Protocol for definitions of additionality, permanence, leakage and double counting).	p.17
c) Carbon offsets are verified by an independent third-party verifier.	p.17
d) Credits from Carbon offset projects are only issued after the emission reduction has taken place.	p.17
e) Credits from Carbon offset projects are retired within 12 months from the date of the declaration of achievement.	p.17
f) Provision for event related option of 36 months to be added here.	N/A
g) Credits from Carbon offset projects are supported by publicly available project documentation on a registry which shall provide information about the offset project, quantification methodology and validation and verification procedures.	p.17
h) Credits from Carbon offset projects are stored and retired in an independent and credible registry.	p.17
12) Document the quantity of GHG emissions credits and the type and nature of credits actually purchased including the number and type of credits used and the time period over which credits were generated including:	p.17
a) Which GHG emissions have been offset.	p.17
b) The actual amount of carbon offset.	p.17

c) The type of credits and projects involved.	p.17
d) The number and type of carbon credits used and the time period over which the credits have been generated.	p.17
e) For events, a rationale to support any retirement of credits in excess of 12 months including details of any legacy emission savings, taken into account.	N/A
f) Information regarding the retirement/cancellation of carbon credits to prevent their use by others including a link to the registry or equivalent publicly available record, where the credit has been retired.	p.17
13) Specify the type of conformity assessment: . a) independent third party certification; ⸢SEP⸥ . b) other party validation; ⸢SEP⸥ c) self-validation.	p.3, p.19
14) Include statements of validation where declarations of achievement of carbon neutrality are validated by a third-party certifier or second party organizations.	p.19
15) Date the QES and have it signed by the senior representative of the entity concerned (e.g. CEO of a corporation; Divisional Director, where the subject is a division of a larger entity; the Chairman of a town council or the head of the household for a family group).	p.4
16) Make QES publicly available and provide a reference to any freely accessible information upon which substantiation depends (e.g. via websites).	Published on knowit.se

B. Detailed results 2022

Table with detailed results for Knowit 2022.

Question group and activity	tCO$_2$e
Business Travel	**1181,97**
Average battery electric car	0,31
Average bus	41,00
Average diesel car	81,91
Average ethanol car (E85)	0,07
Average HVO car	0,03
Average hybrid car	53,38
Average petrol car	87,05
Average petrol motorcycle	2,54
Average taxi	44,43
Bicycle	4,86
Electric scooter	0,00
Hotel night stays	0,01
Light rail/Tram	55,55
Long-haul, average class (RFI 2)	38,30
Medium-haul, average class (RFI 2)	228,62
Short-haul (RFI 2)	148,94
Business travel - External	**12,56**
Average bus	8,86
Average van (unknown fuel)	3,72
Commuting	**635,24**
Average battery electric car	2,60
Average bus	90,54
Average diesel car	213,90
Average ethanol car (E85)	0,54
Average HVO car	0,03
Average hybrid car	52,45
Average petrol car	212,82
Average petrol motorcycle	6,87
Average LPG-car	1,86
Bicycle	0,00
Electric scooter	0,11
Light rail/Tram	53,54
Conferences	**758,90**
Average car (unknown fuel)	7,00
Coach	35,19
Average taxi	3,66
Hotel night stays	88,26
Intercity/National train	1,54
Long-haul, average class (RFI 2)	43,60

Question group and activity	tCO₂e
Medium-haul, average class (RFI 2)	529,05
Short-haul (RFI 2)	41,25
Average ferry	9,35
Electricity and Heating	**1232,75**
District heating (default)	282,04
District heating (country default)	0,17
District heating Norway national average	1,20
District heating EON Hallsberg-Örebro-Kumla	1,65
District heating EON Malmö-Burlöv	21,81
District Heating, Affärsverken Karlskrona AB, Karlskrona	0,13
District Heating, Borlänge Energi AB, Ornäs	1,35
District Heating, Gävle Energi AB, Gävle	0,19
District Heating, Göteborg Energi AB, Göteborg, Partille och Ale (exkl. Bra Miljöval)	41,68
District Heating, Jämtkraft AB, Östersund	2,22
District Heating, Jönköping Energi AB, Jönköping	4,74
District Heating, Karlstads Energi AB, Karlstad	2,63
District heating, Kraftringen, Eslov, Lomma & Lund	0,31
District Heating, Luleå Energi AB, Luleå	0,64
District Heating, Norrenergi AB, Sundbyberg-Solna	2,00
District Heating, Stockholm Exergi AB, Stockholm	30,62
District Heating, Sundsvall Energi AB	12,89
District Heating, Tekniska Verken i Linköping AB, Linköping	26,71
District Heating, Umeå Energi AB, Umeå	0,58
District Heating, Vattenfall AB, Uppsala	2,34
District Heating, Öresundskraft AB, Helsingborg	5,99
Electricity consumption	1,18
Electricity consumption (Nordic Market)	297,29
Electricity intensity, office (national average)	22,31
Food	**240,69**
Coffee and tea	70,54
Milk (liter)	17,69
Mixed fruit	16,97
Portion non-veg (320 g)	104,14
Portion veg (320 g)	15,47
Soda, soft drinks (liter)	15,37
Homeworkers	**71,71**
Home working day - desktop computer	71,71
Hosted servers	**49,19**
Electricity consumption	23,31
Electricity consumption (Nordic Market)	25,89
Materials purchased	**1868,36**
Computer (excluding use-phase)	314,60
Emissions per conference room seat (new furniture)	124,50

Question group and activity	tCO$_2$e
Emissions per conference room seat (reused furniture)	48,00
Emissions per renovated square meter	480,90
Emissions per workstation (new furniture)	317,80
Emissions per workstation (reused furniture)	126,50
Tablet (excluding use-phase)	6,39
Phone (including use phase)	94,17
Screen (excluding use-phase)	355,50
Total	**6051,39**

C. Reporting units, company structure

Unit
Knowit
Sweden
Denmark
Finland
Norway
Germany
Poland