



Climate account 2021

Scope 1, 2 & 3
NIRÁS A/S

August 2022

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1 Executive summary

This climate account reports the Scope 1, 2 and 3 emissions for the Danish consultancy company NIRAS A/S Denmark. NIRAS is an international multidisciplinary consultancy company headquartered in Denmark with activities in countries across the world.

The aim of the climate account is to estimate the greenhouse gas (GHG) emissions caused by NIRAS' activities in Denmark in 2021. NIRAS A/S climate account 2021 is based on the standards and methods of the Greenhouse Gas Protocol¹. NIRAS publishes annual climate accounts, but due to delays in data from external suppliers, the climate accounts are a half a year behind the financial reports.

The total scope 1, 2 and 3 emissions from NIRAS' Danish activities **in 2021 are 10.471 ton CO₂e equivalents (CO₂e)**. The development of emissions in the years 2018-2021 is shown in Table 1.1 and Figure 1-1.

Table 1.1 Total scope 1, 2 and 3 emissions in 2018-2021 (following the location based approach) distributed in scopes and consumption categories.

Ton CO ₂ e Scopes	2018	2019	2020	2021	% Distribution in 2021	% Development 2020-2021
Scope 1	577	725	662	811	8%	23%
Scope 2	577	504	351	347	3%	-1%
Scope 3	13.007	11.767	8.427	9.313	89%	11%
Total	14.161	12.995	9.439	10.471	100%	11%

Ton CO ₂ e Consumption categories	2018	2019	2020	2021	% Distribution in 2021	% Development 2020-2021
Energy	1.037	1.096	860	1.052	10%	22%
Transport	3.108	3.127	1.755	1.732	17%	-1%
Purchase of goods and services	10.016	8.771	6.824	7.687	73%	13%
Total	14.161	12.995	9.439	10.471	100%	11%

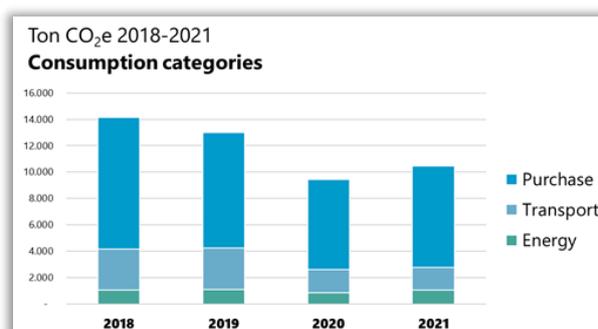
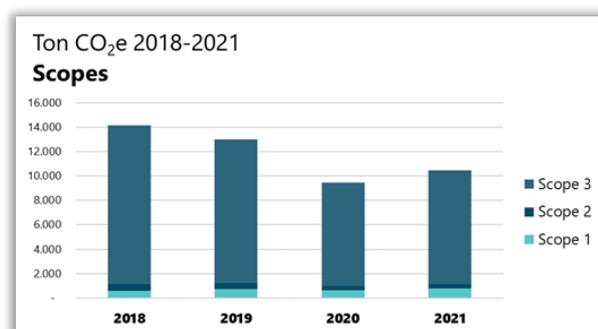


Figure 1-1 Total emissions in 2018-2021 distributed in scopes (left) and consumption categories (right).

Total emissions have increased by 11% from 2020 to 2021 after a decrease of 27% from 2019 to 2020, mainly due to the pandemic causing work from home, less travel etc.

¹ ghgprotocol.org/standards

In 2021, emissions from energy consumption have increased by 22%. This is mainly due to 2021 being a relatively cold year compared to 2020 and a higher CO₂e-emission per kWh of electricity on the Danish electric grid in 2021 compared to 2020.

Emissions from transport activities decreased by further 1 %, after a drastic decrease of 44% in 2020, indicating that travel activities have still been on a hold due to the pandemic.

Emissions from purchases has increased by 13%. The largest contribution to the increase is employee benefits with 58%, which is back to the 2019 level. Emissions from IT related purchased stayed approximal the same as in 2020 and emissions from canteen operations decreased by 11 %.

2 Introduction

This climate account reports the Scope 1, 2 and 3 emissions for the Danish consultancy company NIRAS A/S Denmark. NIRAS is an international multidisciplinary consultancy company headquartered in Denmark with activities in countries across the world.

The aim of the climate account is to estimate the greenhouse gas emissions caused by NIRAS A/S Denmark's activities in 2021. NIRAS A/S climate account 2021 is based on the standards and methods of the Greenhouse Gas Protocol².

2.1 Reporting period

This climate account covers NIRAS' activities in Denmark in the period January 1st to December 31st 2021. The 2018 account is calculated as the base year and results are presented from 2018-2021.

The climate account is reporting annually and currently reported half a year behind the financial reports, due to delays in data from landlords and suppliers.

2.2 Organizational boundaries and method

This climate account includes the Danish part of NIRAS A/S which constitutes more than 70 % of its business. The operational boundary covers emissions caused by activities executed out of NIRAS' operations in offices located in Denmark. All Danish offices are included in NIRAS' Climate Account 2020. These are:

Allerød	Kolding	Holstebro	Esbjerg*
Aalborg	Odense	København	
Aarhus	Holbæk	Næstved	

*The Esbjerg office moved address from Esbjerg Brygge 30 til Esbjerg Brygge 28 in the middle of 2021.

For this inventory, all internal activities are included. In this context, external activities refer to those conducted on behalf of projects, for which NIRAS act as consultant. As an example, the purchases for external projects, such as material for construction of roads, is excluded from the account. Activities related to NIRAS services on the project are included. As an example the business travel activities for NIRAS employees on projects is included.

This climate account includes all scope 1 and 2 emissions, as well as the majority of 3 emissions, from NIRAS' activities. The following consumption categories within scope 1 and 2 are included:

Categories included	
Scope 1	Natural gas for heating Use of company cars*
Scope 2	Electricity District heating
* In the 2021 account, electricity use in company cars is also included, from which emissions lie in scope 2.	

Within the 15 scope 3 emission categories³, Table 2.1 shows which categories are included and which are excluded. Six categories are included (white) and nine categories excluded (grey) or included in one of the other categories .

² NIRAS' climate account is reported based on the principles of The Greenhouse Gas Protocol A Corporate Accounting and Reporting Standard, revised edition, GHG Protocol Scope 2 Guidance and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

³ Following the Greenhouse Gas Protocol.

Table 2.1 Overview of included and excluded scope 3 categories, following the Greenhouse Gas Protocol, in this climate account.

Scope 3 categories	Comment
1. Purchased goods and services	Included.
2. Capital goods	Included in category 1, and not specified separately.
3. Fuel- and energy-related activities	Included.
4. Upstream transportation and distribution	Included in category 1, and not reported separately.
5. Waste generated in operations	Included in category 1, and not reported separately.
6. Business travel	Included as both transport in employee cars and airplane.
7. Employee commuting	Not included.
8. Upstream leased assets	No leased assets, besides company cars included under cat 1 and Scope 1 / 2 (for fuel / electricity consumption).
9. Downstream transportation and distribution	Not relevant.
10. Processing of sold products	Not relevant - no sale of physical products.
11. Use of sold products	Not relevant - no sale of physical products.
12. End-of-life treatment of sold products	Not relevant - no sale of physical products.
13. Downstream leased assets	Not relevant - no leased assets.
14. Franchises	Not relevant - no franchises.
15. Investments	Not relevant.

The results of this climate account are presented on both a location based and market based calculation approach. NIRAS has chosen the location based approach as the primary reporting for historic reasons and as NIRAS does not currently purchase renewable energy via market based mechanisms. The difference between the two methods is shortly explained in section 6.1 and the results following a market based approach are presented in section 4 and elaborated in the method section 6.1.

2.3 Improvements and re-calculation

NIRAS has conducted their climate account since 2013. 2018 was the first year that the climate account included a full scope 3 inventory, including emissions from purchased goods and services. For the climate account of 2020, a list of data quality updates and improvements to the methods were made, which required a recalculation of former years' scope 1 and 2 results in 2018 and 2019.

During the preparation of this 2021 account updates which effect the scope 3 emissions, have been made. The most significant update is within flight data, where in the former years data has been missing for a part of the travel activities which employees pay for themselves, without purchasing it through NIRAS' travel agency Carlton Wagonlit Travels (CWT). This results in an almost doubling of emissions from air travel compared to the old method and has therefore been recalculated for the former years 2018-2020 also.

An error in the activity data for canteen operations was also discovered in the datasets for 2021 and previous years, requiring a recalculation of all the years, resulting in a lower level of calculated emissions from canteen operations in all years reported.

In this 2021 account the scope 1, 2 and 3 results from 2018-2020 are calculated after the same principles and methods as the 2021 account which means that all four years can now be compared, using 2018 as base year.

3 Results 2018 - 2021

The total emissions from NIRAS A/S' Danish activities in 2021, calculated by the location based method, were **10.471 Ton CO₂e**. Results are listed in scopes and consumption categories in Table 3.1 and visualized in scopes in Figure 3-1.

Table 3.1 Total emissions 2018-2021 in scope 1, and 2 as well as scope 3 distributed in relevant scope 3 categories.

Ton CO ₂ e		2018	2019	2020	2021	% of 2021 emissions	% Development 2020-2021	
Scope 1		577	725	662	811	8%	23%	
Natural gas for heating		277	382	346	501	5%	45%	
Use of company cars		300	343	316	310	3%	-2%	
Scope 2		577	504	351	347	3%	-1%	
Electricity		467	408	294	286	3%	-3%	
District heating		110	96	57	58	1%	1%	
Electricity in company cars		-	-	-	3	0,03%	-	
Scope 3		13.007	11.767	8.427	9.313	89%	11%	
Purchased goods and Services*	Category**	1	10.016	8.771	6.824	7.687	73%	13%
		3	274	297	240	285	3%	19%
		6	1.284	1.230	875	848	8%	-3%
		6	1.433	1.469	487	493	5%	1%
Total		14.161	12.995	9.439	10.471	100%	11%	

*Includes emissions from categories 2, 4, 5 and 6, that are not reported separately.

**Scope 3 category following the Green House Gas Protocol Scope 3 Guidance.

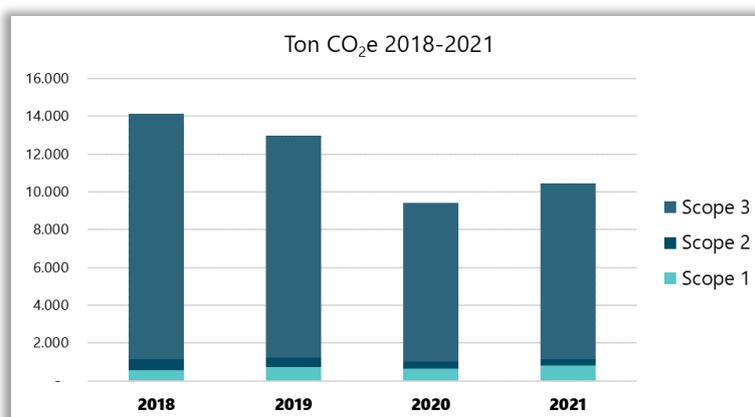


Figure 3-1 Distribution of emissions on scopes for 2018-2021.

In Table 3.2 and Figure 3-2 the total emissions are distributed into energy-, transport- and purchase related emissions.

Table 3.2 Scope 1, 2 and 3 emissions distributed in energy use, transport and purchase from 2018-2021.

Ton CO ₂ e*	2018	2019	2020	2021	% of 2021 emissions	% Development 2020-2021
Energy (Electricity**, districts heating and natural gas)	1.037	1.096	860	1.052	10%	22%
Transport (Company cars (petrol and electricity), business travel by employee vehicles and air)	3.108	3.127	1.755	1.732	17%	-1%
Purchase of goods and services (All other purchases)	10.016	8.771	6.824	7.687	73%	13%
Total	14.161	12.995	9.439	10.471	100%	11%

*Incl. scope 1, 2 and 3 emissions.

**Not including electricity use in company cars in 2021.

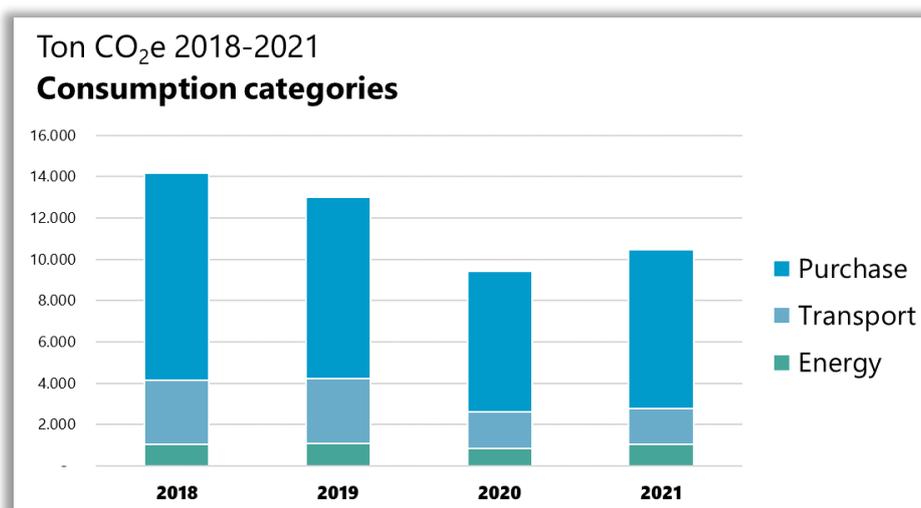


Figure 3-2 Scope 1, 2 and 3 emissions distributed in energy use, transport and purchase from 2018-2021.

In all four years, purchase is the source of the majority of emissions, constituting 73% of the emissions in the 2021 account, an increase of 13% from 2020. Energy related emissions increased by 22% since 2020 and constitutes 10% of the 2021 account. Transport related emissions have not changes much since 2020 and constitutes 17% of the 2021 account. In the following section, each of the three categories are further detailed.

3.1 Emissions from energy

Table 3.3 and Figure 3-3 show the distribution of the emissions from NIRAS' energy consumption which constitutes 10% of the total emissions in 2021. Table 3.4 and Figure 3-4 show the development of NIRAS' actual energy use, regardless of the emissions per energy use.

Table 3.3 Energy related emissions 2018-2021.

Ton CO ₂ e*	2018	2019	2020	2021	% of 2021 emissions	% Development 2020-2021
Natural gas for heating	277	382	346	501	48%	45%
Electricity**	467	408	294	286	27%	-3%
District heating	110	96	57	58	5%	1%
Upstream energy***	183	211	163	208	20%	27%
Total	1.037	1.096	860	1.052	100%	22%
% of total account	7%	8%	9%	10%		

*Emissions from scope 1 and 2 and upstream energy use in scope 3.

**Only electricity from energy use in offices, not including electricity use in company cars.

***Upstream energy from natural gas, electricity and district heating. Not including company cars.

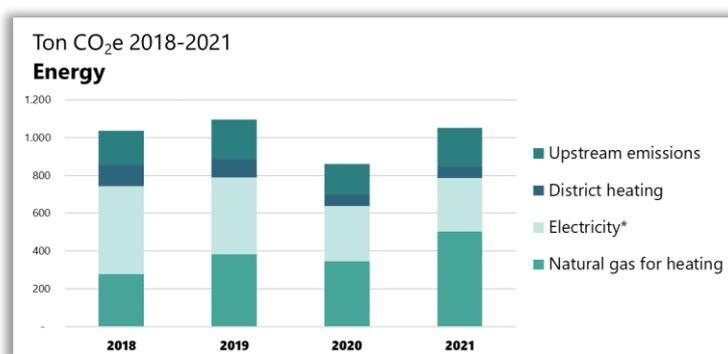


Figure 3-3 Energy related emissions 2018-2021.

Table 3.4 Actual energy use in 2018-2021.

Actual energy use	Unit	2018	2019	2020	2021	% Development 2020-2021
Total electricity use*	kWh	2.654.645	2.915.973	2.511.637	2.256.716	-10%
Electricity from the grid	kWh	2.312.492	2.732.940	2.349.447	2.100.256	-11%
Electricity from own production	kWh	342.153	183.033	162.190	156.460	-4%
District heating	kWh	873.570	921.494	587.258	618.682	5%
Natural gas	m ³	132.048	217.934	211.824	277.655	31%

**Only electricity from energy use in offices, not including electricity use in company cars.

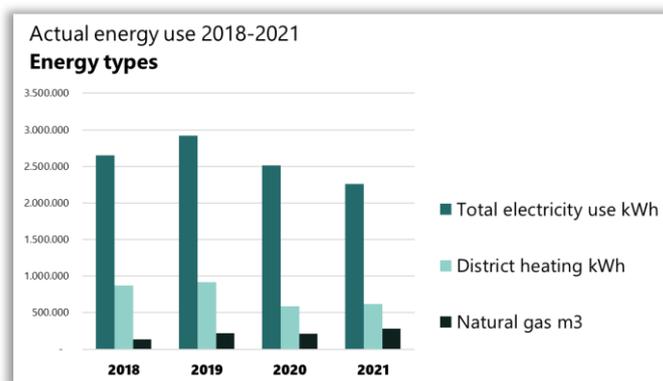


Figure 3-4 Actual energy use 2018-2021.

2021 was greatly influenced by employees working from home. The emissions from use of electricity in offices has decreased by 3%, from 2020. The actual use of electricity in offices has however decreased 10%. The difference between decrease in use and emission is due to a higher emissions factor (kg CO₂e per kWh electricity) in 2021. From 2019 to 2020 the emissions from electricity consumption decreased by 28%.

2021 was a cold year compared to 2020 which has influenced the use of and emissions from heating. The use of district heating has increased by 5% in 2021 whereas emissions from district heating only have increased by 1%, due to generally lower emissions per unit of district heating from the various district heating networks.

The use of natural gas has increased by 31% compared to 2020. As natural gas is the energy source used in the largest office in Allerød and is an energy source with a higher level of emissions per unit of heat, compared to district heating, an increase in gas consumption highly influences the overall emissions from energy. The natural gas related emissions have increased by 45% from 2020. This is in part due to a colder year in 2021 compared to 2020, but is also due to an actual increase in the heating demand and consumption in the main offices.

3.2 Emissions from transport

Table 3.5 and Figure 3-5 show the distribution of the emissions from NIRAS' transport activities which constitutes 17% of the total emissions in 2021.

Table 3.5 Transport related emissions 2018-2021.

Ton CO ₂ e*	2018	2019	2020	2021	% of 2021 emissions	% Development 2020-2021
Use of company cars	391	429	393	391**	23%	-0,4%
Business travel by employee cars	1.284	1.230	875	848	49%	-3%
Business travel by airplane	1.433	1.469	487	493	28%	1%
Total	3.108	3.127	1.755	1.732	100%	-1%
% of total account	22%	24%	19%	17%		

*Emissions from scope 1 and 2 and 3.

**Emissions from electricity use in electrical vehicles constitutes about 5 ton CO₂ in 2021.

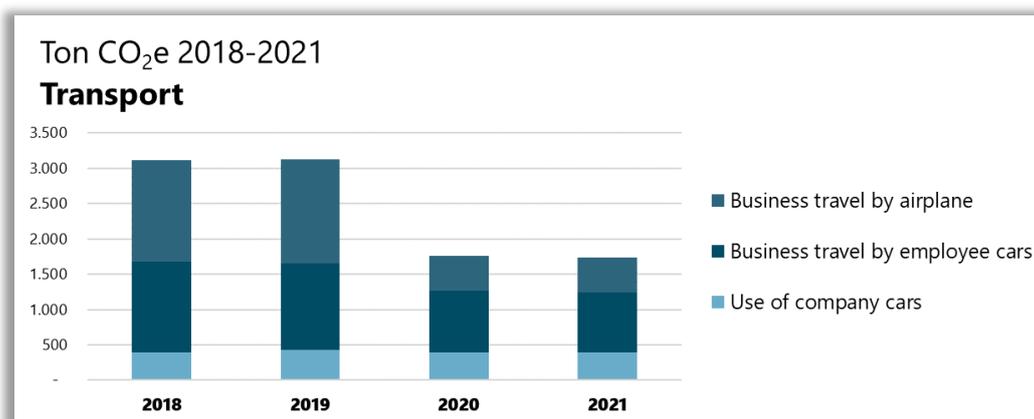


Figure 3-5 Transport related emissions 2018-2021.

Emissions from driving NIRAS' company cars to and from meetings and customers constitutes 23% of emissions from transport and lies on the same level as 2020 with a small decrease of 0,4%. 2021 is the first year which NIRAS has electrical vehicles in their fleet of company cars with only a couple on the roads from late 2021. The effects of this on the emissions are not significant in 2021 and will first fully manifest in the 2022 climate account.

A larger share of road transport is through employees' using their own vehicles for business travel which constitute 49% of the emissions from transport and have decreased by 3% compared to 2020.

28% of emissions from transport are from business travel by airplane, which is close to the same level as in 2020, with a small increase of 1%. The emissions from air transport are roughly one third of the pre-lockdown level in 2019.

3.3 Emissions from purchased goods and services

Table 3.6 and Figure 3-6 show the distribution of NIRAS' purchase related emissions which constitutes 73% of the total emissions in 2021.

Table 3.6 Purchase related emissions 2018-2021.

Ton CO ₂ e	2018	2019	2020	2021	% of 2021 emissions	% Development 2020-2021
Rent of premises	1.694	1.205	1.181	1.199	16%	1%
Employee benefits	1.359	1.098	748	1.178	15%	58%
IT	1.161	1.090	1.142	1.141	15%	0%
Canteen	1.840	1.859	1.234	1.094	14%	-11%
Operation and maintenance of buildings	695	943	668	652	8%	-2%
Other consultancy services	468	481	498	576	7%	16%
Meetings and catering	372	318	193	392	5%	103%
Vehicles	393	407	419	392	5%	-7%
Various purchases	345	137	106	191	2%	81%
Insurance	123	93	129	191	2%	47%
Education	74	106	98	155	2%	58%
Equipment	149	145	151	150	2%	-1%
PR, communication and print	168	170	109	137	2%	26%
Hotel	422	264	61	85	1%	39%

Conference	203	269	31	68	1%	121%
Telephones	98	35	4	39	1%	778%
Office supplies	50	42	34	32	0,4%	-6%
Post and freight	26	32	15	12	0,2%	-24%
Various transport- and travel activities	377	78	1	3	0,04%	135%
Total	10.016	8.771	6.824	7.687	100%	13%
% of total account	71%	67%	72%	73%		

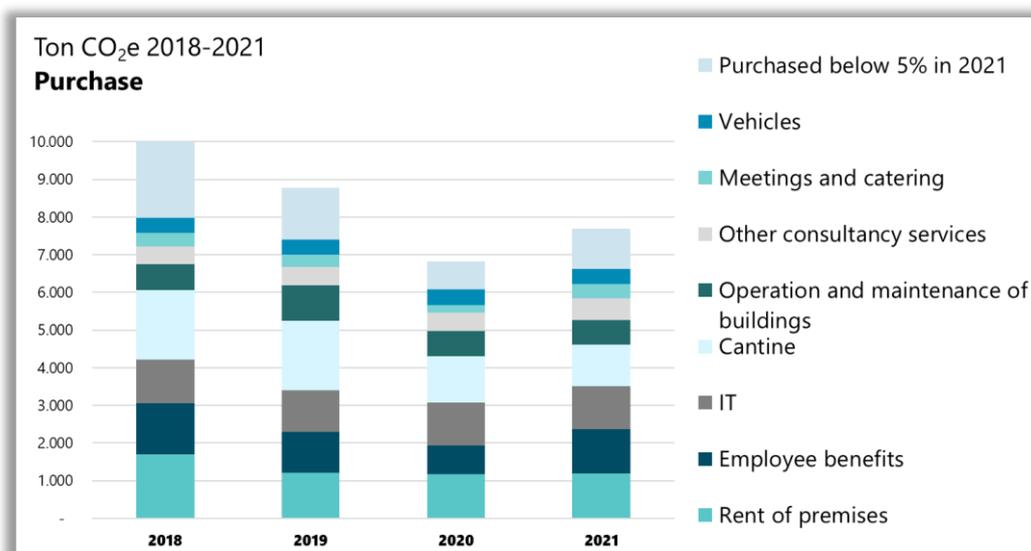


Figure 3-6 Purchase related emissions 2018-2021.

The largest contribution to emissions is the rent of premises contributing with 16% of emissions from purchases, as NIRAS leases many office locations. These emissions have increased by only 1%.

The second largest contributor is purchase of goods and services for a range of employee benefits which contributes to 15% of emissions and have increased by 58%. This is the largest contribution to the overall increase in emissions from purchase at 13%.

Emissions from IT related purchased also contributes to 15% of the total emissions from purchases, and has not changed from 2020.

The canteens at NIRAS' office locations is the fourth largest contributor to emissions from purchase. Emissions have decreased by 11% since 2020. The data used to calculate emissions from canteens includes some uncertainty in terms of quality. The data is currently collected through NIRAS' accounting system and processed hereafter to best reflect the purchased food and services. In the future accounts, the aim is to apply data collected directly from suppliers of the canteen service, at least for the largest location in Allerød, as well as further refine the data processing and calculation approach.

4 Market based approach

Table 4.1 and Figure 4-1 present the total emissions calculated by a market based approach. The main difference from the location based method, is that the market based approach takes into account the purchase and sale of renewable energy based electricity based on certificates in the market. The approach is further explained in the method section.

Table 4.1 Total market based emissions 2018- 2021.

Ton CO ₂ e					% distribution in	% development
Market based	2018	2019	2020	2021	2021	2020-2021
Scope 1	577	725	662	811	7%	23%
Scope 2	1.012	1.115	1.012	1.006	9%	-1%
Scope 3	13.030	11.799	8.468	9.316	84%	10%
Total	14.619	13.639	10.141	11.133	100%	10%

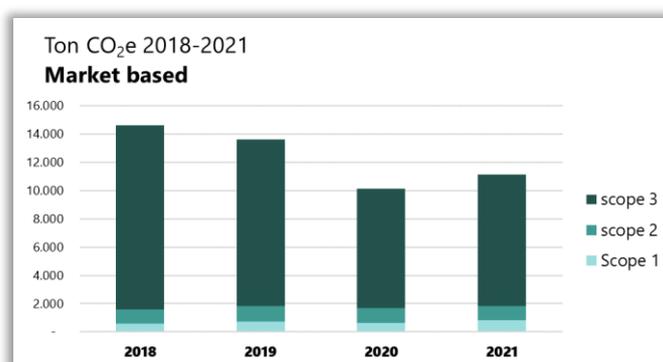


Figure 4-1 Total emission calculated using the market based approach 2018-2021.

5 Key Performance Indicators

The following section provides selected Key Performance Indicators (KPIs) for the energy consumption of NIRAS A/S' Denmark.

Table 5.1 Key Performance Indicators: Total energy consumption and Renewable energy share 2019- 2021.

KPI	Unit	2018	2019	2020	2021	% Development 2020-2021
Total energy consumption	GJ	21.434	27.031	23.251	25.008	7,5%
Renewable energy share	%	45,0	42,9	45,5	42,0	8,2%

The total energy consumption includes all energy sources and transportation, converted to GJ using standard factors for energy units conversion and conversion factors from the Danish Energy Authority. To calculate the renewable energy share, the average renewable energy share of the electric and district heating grids have been used as stated by the Danish Energy Authority in the yearly published Energistatistik for the grid purchased energy, as well as the electricity produced and consumed from solar panels installed at NIRAS offices. For the renewable share of the gas and fuels consumption, the share of biogas in the Danish gas grid and the share of biobased fuels in fuels have been used.

Following the RE100 technical guidelines a renewable energy share of the electricity consumed by the company must be calculated separately based on the share of electricity the company has a unique claim on. As NIRAS does not

purchase renewable electricity via certificates or other market measures, this only includes the electricity produced on and consumed from PV solar cells installed at NIRAS offices.

In 2021 NIRAS consumed 156,4 MWh of electricity produced on solar cells installed at NIRAS offices, out of a total electricity consumption of 2.281,6 MWh (including electricity for electrical vehicles). This gives a renewable energy share of the electricity consumption of 7% (rounded) following the RE100 approach.

6 Method

The following section briefly describes the method and data used to establish NIRAS A/S Denmark's 2021 climate account.

NIRAS' climate account follows the Greenhouse Gas Protocol (GHG Protocol), which is an internationally recognized standard for the calculation of climate accounts⁴. The emissions are calculated in CO₂-equivalents (CO₂e).

Six greenhouse gases are addressed in the GHG protocol, which are calculated as CO₂e, based on the global warming potential (GWP values) for the individual gases. Greenhouse gases have various effects and lifespan in the atmosphere and thereby affect the climate differently.

This climate account includes emissions from the following greenhouse gases and their GWP value:

- Carbon dioxide (CO₂): 1 kgCO₂e/ kg
- Methane (CH₄): 28 kg CO₂e/ kg
- Nitrous oxide (N₂O): 265 kg CO₂e/ kg

Additional greenhouse gases (SF₆, HFCs, PFCs) are not included and their contribution is considered neglectable.

The climate account does not include biogenic CO₂-emissions.

6.1 Location based and market based method

When applying the location based method, emissions are calculated using an emission factor corresponding to the average composition of the electricity grid.

When applying the market based method, the trading of renewable energy is taken into account and affects the applied emission factor. As illustrated in Figure 6.1, part of the electricity produced from renewable energy sources is purchased as green certificates on the market (a). These are therefore not considered a part of the residual electricity grid for companies and organization that do not contribute to the trading of green certificate (b) and therefore the emissions factor applied (when not trading) is based on a higher share of non-renewable energy (c). As a consequence, if a company does not purchase green certificates, its electricity consumption is associated with higher emissions under the market based approach than under the location based approach.

⁴ NIRAS' climate account is reported based on the principles of The Greenhouse Gas Protocol A Corporate Accounting and Reporting Standard, revised edition, GHG Protocol Scope 2 Guidance and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

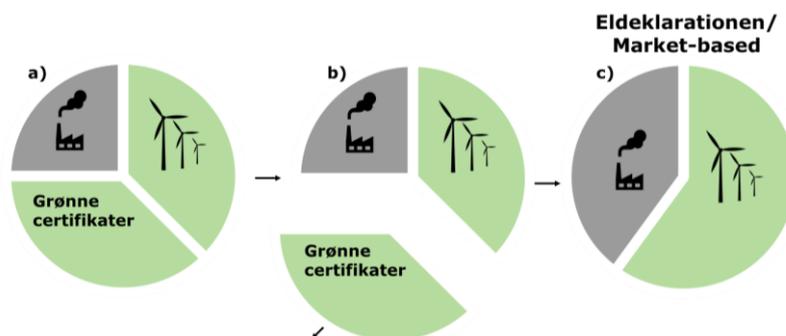


Figure 6.1 Illustration of the market based method.

6.2 Data

6.2.1 Energy data and estimates

The energy consumptions included in the accounts are based on physical data on amounts of consumption of electricity (in kWh), district heating (in MWh) and natural gas (in nm³). Data is primarily collected from invoices from landlords, as NIRAS leases most of their office spaces. Some data from the Allerød office is measured directly from meters.

In a few cases, energy consumption of electricity and district heating is based on estimates. These estimates were used when no reliable data was available from landlords. Estimates for district heating are based on the average consumption per m² in the given year, calculated from the locations with actual data. In the 2021 account, the consumption of district heating has been estimated for four out of a total of nine locations using district heating. The offices are as a rule smaller offices with a limited energy consumption, compared to the energy consumption in larger offices and the total energy consumption in NIRAS' offices in the given year.

For office locations with no data on electricity consumption, the only available data has been spend data in DKK. Therefore an average price of 2 DKK per kWh electricity has been used to calculate the electricity use for all the relevant years. In 2021, electricity was estimated for two locations out of a total of twelve locations⁵.

6.2.2 Fuel use in company vehicles

Values for the amount of gasoline and diesel consumed in NIRAS' company vehicle, are based primarily on data collected from the leasing company, reported in liters and divided into gasoline and diesel.

A small amount of NIRAS' fuel use is not purchased with the leasing company's petrol card but from an employee's own expense, and is thereby not included in the data from the leasing company. This data is found in NIRAS' economy management system as purchase data.

6.2.3 Business travel by air flight

NIRAS uses a travel agency for booking of air transport, Carlson Wagonlit Travels (CWT). They supply NIRAS with annual reports on calculated emissions which is used directly in the climate account. The emission reports are based on the total Green House Gas (GHG) emissions, reported in carbon dioxide equivalent (CO₂e kg) and includes carbon dioxide plus methane (CH₄) and nitrous oxide (N₂O), converted to carbon dioxide equivalents and based on guidelines produced by DEFRA's GHG Conversion Factors. The emissions are calculated from total distance of a flight,

⁵ The climate account covers nine offices in total. In the energy data, the offices Odense and Allerød have multiples locations/addresses which thereby totals twelve locations when talking about energy data.

based on origin and destination airports as well as class of flight (economy, premium economy, business, first). Factors used do not include an “uplift” for Radiative Forcing (RF).

NIRAS also purchases flight transportation through other booking sites, which is located in spend data. The emissions from this are calculated by using the emission factor from EXIOBASE for air transport. This top down approach provides less accurately calculated emissions than the bottom-up approach used by CWT. In 2021 the emissions from the two data sources of flight constituted close to the same size.

6.2.4 Business travel in employee vehicles

The emissions from the amount of km which employees have driven in their own cars for company related business travel is based on data collected from NIRAS’ economy management system’s “kørselsgodtgørelse”. Data is specified in km driven from which emissions are calculated based on average data for liter gasoline/diesel used per km as well as statistics on percentage gasoline and diesel driven vehicles on the Danish roads.

6.2.5 Purchase data

Purchase data is extracted directly from NIRAS’ accounting system Maconomy. The data is specified on the detail level of streamlined accounts, used every year, and only for the Danish company numbers in the system. The data is further handled by removing spend on taxes, salary and other spends that do not cause CO₂ emissions. The spend data is then matched with the relevant emission factors from the EXIOBASE database as well as assigned a consumption category in order to group emissions into a tangible amount of categories, which are the same every year, for more streamlined reporting.

Appendix 1: Emissions factors

2021

	Unit	Scope 1	Scope 2	Scope 3	Data Source
Petrol (Company cars)	Kg CO ₂ e/L	2,171	-	0,590	Calculated from percentage mix (ENS, 2021), Energistatistik 2021 (Energistyrelsen, 2021), and (DEFRA, 2021).
Diesel (Company cars)	Kg CO ₂ e/L	2,604	-	0,617	Calculated from percentage mix (ENS, 2021), Energistatistik 2021 (Energistyrelsen, 2021), and (DEFRA, 2021).
Business travel with employee cars	Kg CO ₂ /km	-	-	0,2495	Calculated from DCE (2020), (DST, 2021), and (DEFRA, 2021).
Natural gas	Kg CO ₂ e/m ³	1,805	-	0,241	Calculated from Energistatistik 2021 (Energistyrelsen 2021) and upstream emissions from DEFRA and Evida.
Electricity - Location based	Kg CO ₂ e/kWh	-	0,14	0,06	Scope 2 - Final environmental declaration of 1 kWh electricity, 2021 (Adjusted for transmission loss 102,56 %) - 125 % method. Scope 3 - 5 % distribution loss (Energinet, 2022) and upstream emissions (DEFRA).
Electricity - Market based	Kg CO ₂ e/kWh	-	0,412	0,057	Scope 2 - Energinet, Eldeklaration, General declaration 2021. Scope 3 - Upstream emissions (DEFRA 2019).
ARHK Fjernvarme	Kg CO ₂ e/kWh	-	0,05704	0,014	Data about district heating supply 2020 ("Varmevirkningsgradsmetoden" with 125%) (Energistyrelsen). The 125 % methods relates to the allocation of CO ₂ -emissions when coproducing electricity and heat. This method has been chosen to align with the methods used for calculating the emission factors for electricity. Upstream emissions are calculated as a 20% distribution loss.
ALBK Fjernvarme	Kg CO ₂ e/kWh	-	0,14129	0,035	
NFAK Fjernvarme	Kg CO ₂ e/kWh	-	0,22203	0,056	
CPHO Fjernvarme	Kg CO ₂ e/kWh	-	0,06869	0,017	
LOLK Fjernvarme	Kg CO ₂ e/kWh	-	0,06109	0,015	
ESBK Fjernvarme	Kg CO ₂ e/kWh	-	0,18036	0,045	
HOLK Fjernvarme	Kg CO ₂ e/kWh	-	0,08126	0,020	
ODEK Fjernvarme	Kg CO ₂ e/kWh	-	0,10912	0,027	
FRHK Fjernvarme	Kg CO ₂ e/kWh	-	0,16566	0,041	
NAEO Fjernvarme	Kg CO ₂ e/kWh	-	0,12115	0,030	

Emission factors used for calculating emissions from purchase data are from the latest updated version of the database EXIOBASE v3.3.16b2 (2011 hybrid), published August the 7th 2020.