Climate Report 2024

Realkredit Danmark
February 2025

Contents

The information in this report is subject to uncertainties arising from limitations in underlying methodologies and due to constantly evolving data. We strive to capture improvements in the foundation for this report and to be transparent in the changes we make.

Figures for 2024 are based on portfolios as at end of Q3 2024, whereas the figures for previous years are based on portfolios as at year-end of the respective year.

Foreword

Dear reader,

Climate change continues to be an increasingly urgent challenge that we need to address together as a society. At Realkredit Danmark, we remain highly committed to fulfilling our responsibility in the essential transition towards a low-carbon society and to supporting our customers in their individual transitions while maintaining focus on long-term financial stability.

For our customers and for us as a business, the societal transformation required to tackle climate change involves risks, but it also offers opportunities. Throughout 2024, we have developed our interactions with our homeowners and commercial real estate customers to provide focused advice and improved financing options. Together with Danske Bank, we have established strong partnerships that can provide us with insights and enable us to develop specific action plans together with our customers.

To succeed with the sustainability transition in the real estate sector, abundant renewable energy is needed. The development of energy infrastructure is a major societal task involving many aspects – from scaling the production of clean energy and the distribution of electricity and district heating to the integration of this into households and businesses. Linking this with the investments needed within the real estate sector requires the Danish government to provide long-term strategies and frameworks that can enable homeowners and businesses to adopt viable investment solutions.

In 2024, political ambitions for the sustainable development of agriculture in Denmark were formalised, and we have therefore now also set an emission reduction target for our agriculture portfolio of a 30-45% reduction by 2030.

Kamilla Hammerich Skytte, CEO

Realkredit Danmark's emission reduction ambitions

Ambitions for emission intensity reductions

As a part of the Danske Bank Group's Climate Action Plan[1], Realkredit Danmark has set specific 2030 targets for a reduction in carbon emission intensity ($kgCO_2/m^2$) from key customer segments **against a 2020 baseline**. The targets cover **personal mortgages** and **commercial real estate**, with **an expectation for the Danish portfolio of around a 75% emission reduction**. The reduction targets are subject to, and are largely driven by, developments in policy and transition in the utilities sector. We align with the Danish government's planned fossil fuel reductions in power and heat production and the continued conversion of fossil fuel heating sources into electricity-powered heating or district heating. This will result in emission reductions from buildings transitioning away from fossil fuel-based heating.

During 2024, an additional target was added for **agriculture**. This target is based on the historic tripartite agreement for the green transition of the Danish agricultural sector (Aftale om et Grønt Danmark).[2] This tripartite agreement sets a preliminary roadmap for reaching the agricultural sector's CO_2e reduction target and includes a carbon tax. The agreement also addresses the protection and restoration of natural environments. Our ambition is to reduce emission intensity by 2030 by 30-45% ($tCO_2e/mDKK$) for Realkredit Danmark's agriculture portfolio in relation to 2020 levels. The ambition is highly dependent on political action and on the implementation of upcoming technologies to support a sustainable agriculture sector.

Commercial real estate

Commercial real estate **covers both residential and non-residential buildings**.

Emissions data for buildings in Denmark is calculated using energy performance certificates (EPCs), which express the building's expected energy usage multiplied by the emission factors published by the Danish Energy Agency for the corresponding primary energy source.

Personal mortgages

Personal mortgages **covers owner-occupied dwellings and holiday homes**.

For personal mortgages, energy performance certificates and emission factors are used to calculate carbon emissions from owner-occupied dwellings. Emissions data for holiday homes is calculated using Finance Denmark's standard emission for each holiday home. Transitioning from fossil fuel-based power and heating to more sustainable energy sources is needed to reduce emissions in this segment.

Agriculture

Agriculture **covers crop producing farmland and livestock production**.

Our target ambition reflects the Danish national sector ambition recalculated to a 2020 baseline using the most recent data from Denmark's Climate Status and Outlook 2024[3] report and draws on the Science Based Targets initiative's (SBTi) Forest, Land and Agriculture Target-Setting Guidance.[4]

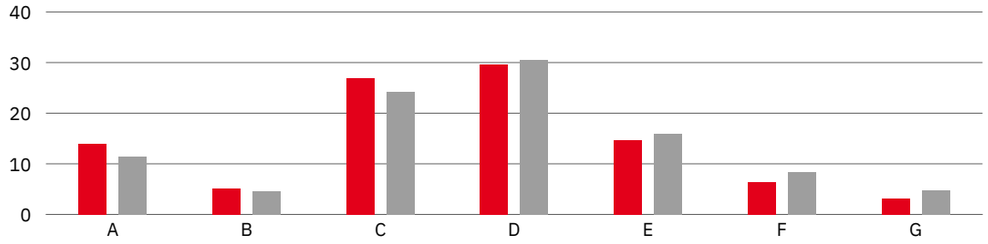
[1] The Danske Bank Group's Climate Action Plan, January 2023: Climate Action Plan
[2] Tripartite agreement (Aftale om et grønt Danmark), 24 June 2024, Aftale om et Grønt Danmark
[3] Klimastatus og –fremskrivning 2024: Klimastatus og –fremskrivning 2024 (kefm.dk)
[4] The SBTi's Forest, Land and Agriculture Target-Setting Guidance: SBTiFLAGGuidance.pdf (sciencebasedtargets.org)

Progress on our climate ambitions

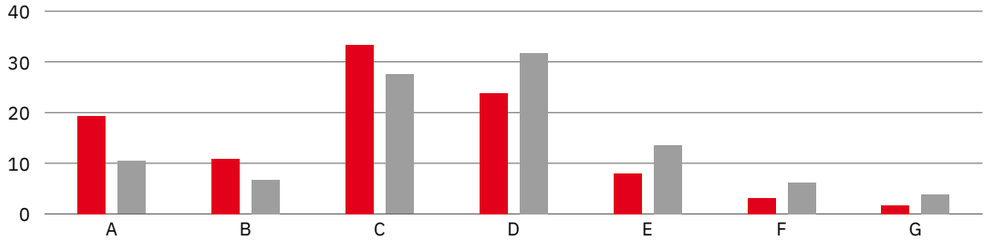
EPC scores are improving

In Realkredit Danmark's portfolio of single-family homes, 19% of buildings with a valid EPC are rated A or B – and 76% have an EPC score of D or better. In our 2020 Greenhouse Gas Footprint report, the corresponding figures were 16% and 71% respectively. At the lower end of the scale, 10% of the portfolio now has an EPC score of F or G. In 2020, the corresponding number was 13%.

Distribution of EPC scores (% of no. of buildings) – single-family homes 2024 (red) vs. 2020 (grey)



Distribution of EPC scores (% of no. of buildings) – total portfolio 2024 (red) vs. 2020 (grey)



Source: The Danish Energy Agency (Energistyrelsen) via e-nettet.

For the total portfolio, the proportion of properties with an EPC score of A and B has increased from 17% in 2020 to 30% in 2024. The proportion of properties rated A to D increased from 76% to 87%, and properties rated F and G decreased from 10% to 5% during the same period.

The figures testify that the transition to a more energy-efficient society is moving in the right direction. Because emission factors published by the Danish Energy Agency have not been updated, the improved EPC distribution indicates an overall improvement across the building stock. However, improved data quality has also contributed to the improvement in the EPC distribution due to more correct links between EPCs and buildings. It is hard to quantify which driver is the most significant. However, both drivers have a positive effect on the distribution of EPCs. For more detailed information about our customer-targeted actions, please see page 11.

Although we see improvements in EPC scores in our Danish portfolio in relation to 2020, progress is slow because EPC scores remain valid for 10 years[5] and are most often renewed only when a property is put up for sale. As a result, energy-efficiency measures taken in the intermediate period will not be reflected in the EPC score of the property until it is put up for sale.

The development in A and B rated properties in the portfolio is mainly a result of the number of new buildings entering the portfolio. In general, homeowners in particular have been more reluctant to carry out energy renovations that would improve the EPC scores of D to G rated buildings. Such energy renovations are typically implemented when a building is retrofitted.

The Energy Performance of Buildings Directive (EPBD), which aims to enhance the energy performance of buildings in the EU, will be transposed into national legislation. The legislation will contain requirements for energy-efficiency improvements in the building stock in Denmark, and consequently it will drive improvement or progress of the energy efficiency of buildings over the coming years.

[5] *Because EPC scores for single-family homes remain valid for a period of 10 years, only 33.5% of single-family homes in our portfolio have a valid EPC – and for the total portfolio of EPC-eligible buildings, this figure stands at 52.4%.*

Single-family homes are switching to more energy-efficient heating sources

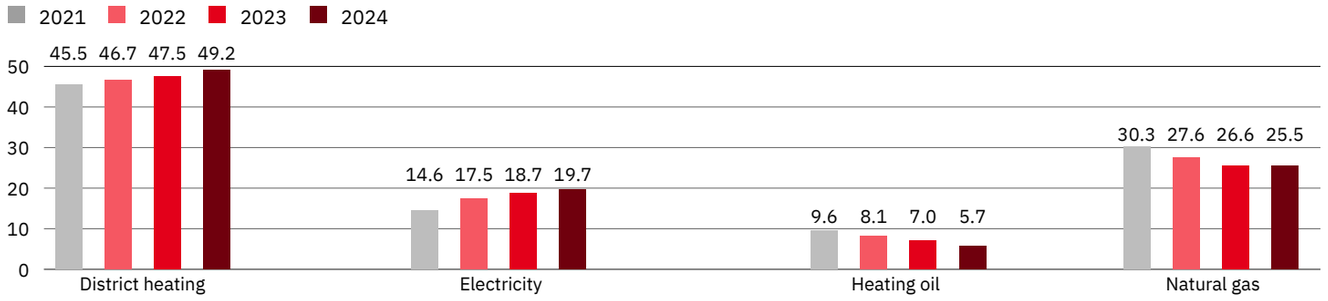
In our Danish portfolio, we see a shift away from fossil fuel-based heating systems, such as oil and natural gas, towards more energy-efficient sources, such as district heating or electricity. This is an important contributor to the positive trends observed in our Danish portfolio.

Taking a closer look at the types of heating in single-family homes[6], it is clear, that the heating source plays a significant role for the building emissions. During 2022, the energy crisis caused many homeowners to change their home's heating source to a more energy-efficient heating source, such as a heat pump. This movement away from fossil fuel-based heating and electricity to more sustainable heating and electricity generation is key to reducing building emissions. The bar chart below illustrates that this effect continued through 2024.[7]

The bar chart shows an increase in the use of electricity as a heating source and shows that the use of oil and gas decreased. Furthermore, there has been an increase in the use of district heating.

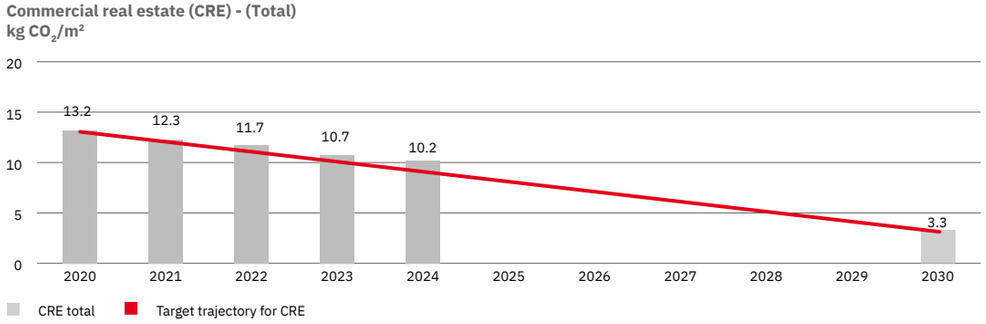
Our ability to achieve an expected 75% emissions reduction is heavily influenced by external factors and relies especially on the ongoing decarbonisation of the utilities sector in Denmark. The expansion of district heating networks as well as the conversion to sustainable green heating production continues to be a cornerstone of Denmark's green and efficient energy system, and the success of this is key to ensuring that households in Denmark have a cleaner energy mix. Achieving this is a significant contributory factor in ensuring we can successfully reach our reduction target.

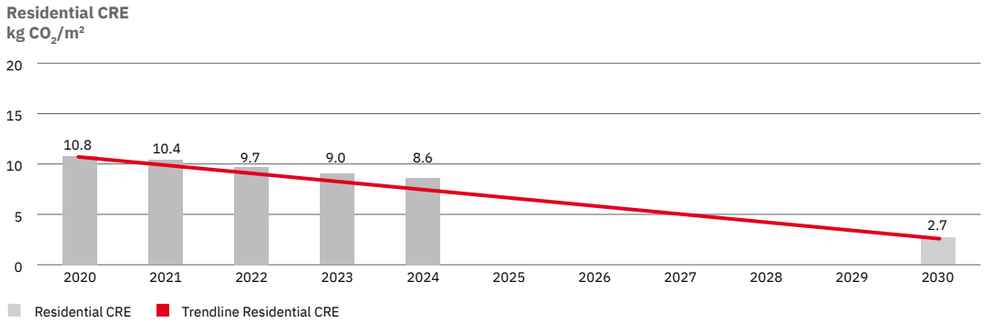
Change of heating source – distribution of single-family homes, % of number of buildings

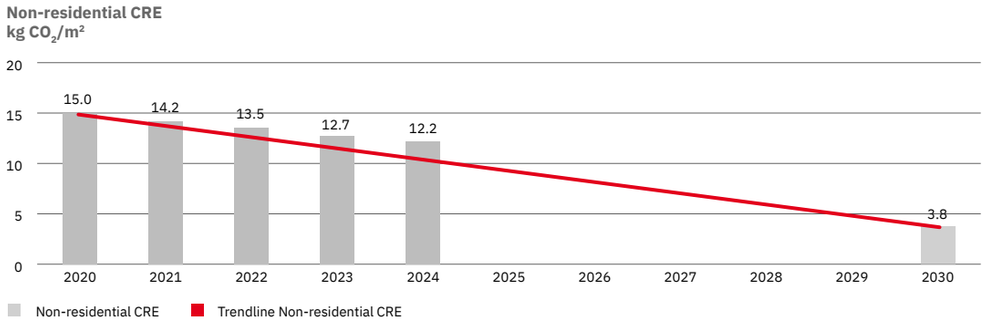


[6] Single-family homes ('parcelhuse') is a subsegment of owner-occupied dwellings.
[7] Figures for 2024 are based on portfolios as at end of Q3 2024, whereas the figures for previous years are based on portfolios as at year-end of the respective year.

Commercial real estate emission reductions remain aligned with linear 2030 target trajectory, aided by customer-focused initiatives and developments in portfolio composition







The building sector plays a pivotal role when it comes to meeting the EU's energy and climate objectives. The European Commission reports that approximately 40% of energy consumption in the EU is attributable to buildings.[8] More than a third of the EU's energy-related greenhouse gas emissions originate from this sector, primarily as a result of construction, heating, cooling, renovation and demolition activities. It is therefore essential to address the commercial real estate segment because this sector also has substantial societal impacts. This sector also presents risks and opportunities for our customers and for our business.

From 2020 to 2024[9], progress within the commercial rel estate (CRE) segment was mainly driven by improved energy performance of buildings in our portfolio[10], with a clear trend towards fewer buildings with low energy-efficiency ratings (EPC scores of D to G) from 2020 to 2024. For low energy-efficiency ratings ranging from D to G, there has been approximately a one-third reduction during this period, assessed at property level.[11]

Emission intensity reductions in the total commercial real estate segment are close to the linear trajectory towards 2030. In 2024, the emission intensity was reduced by 0.5, 0.4 and 0.5 kg CO_2e/m^2 for CRE (total), residential CRE and non-residential CRE, respectively. This corresponds to 5%, 4% and 4%, respectively. Total reductions since 2020 are 3.0, 2.2 and 2.8 kg CO_2e/m^2 in the three segments, corresponding to 22.7%, 20.4% and 18.7%, respectively.

We use the emission factors provided in the Danish Energy Agency's guide used for EPC scoring (Energihåndbogen) as the basis for our emissions calculations; however, these emissions factors have not been updated since 2019. Electricity and heating systems have been substantially decarbonised in recent years, and although this has had a positive impact on our commercial real estate portfolio, this is not reflected in our figures. By conducting an internal best-effort analysis on updating emission factors, we estimate our portfolio to be below the target trajectory line.

[8] Energy Performance of Buildings Directive
[9] For more details on actions made by Realkredit Danmark, see p. 9
[10] Figures for 2024 are based on portfolios as at end of Q3 2024, whereas the figures for previous years are based on portfolios as at year-end of the respective year.
[11] When a single property comprises multiple buildings with varying energy-efficiency ratings, the conservative approach of assigning the lowest energy rating to the entire property is used.

The path towards 2030: Commercial real estate

Actions

- In 2019, Realkredit Danmark launched the first green covered bond in the Danish market. At year-end 2024*, we have issued green bonds to fund RD Cibor6® Green loans totalling DKK 27.9 billion. In 2020, a new SEK-denominated green mortgage covered bond was introduced. At year-end 2024*, the bond is funding a volume of RD Stibor3® Green loans of DKK 1.2 billion.
- In July 2024, Realkredit Danmark was awarded the Euronext prize for having the largest issued volume of green covered bonds (DKK 8.0 billion).
- In 2024, Danske Bank and Realkredit Danmark formed partnerships with Sweco, a leading European architecture and engineering consultancy, and the climate technology firm Comundo, to aid our commercial real estate customers in reducing their CO_2e emissions. Launched in September, these partnerships facilitate automated collection of energy data, monitoring systems and customised plans for energy optimisation.
- Together with Danske Bank, Realkredit Danmark is actively supporting the Real ESG – The Real Estate Reporting Framework (Real ESG) project in Denmark. The Real ESG standard is aligned to the CSRD definitions and provide a basis for sector specific ESG reporting and enable straight forward comparisons of sustainability metrics.
- Within our organisation, we introduced the Sustainability Unlocked learning platform in May 2024, followed by training activities, to boost the skills and competencies necessary for enhancing ESG discussions and advisory services offered to our customers.

Outlook

- We remain committed to discussing and supporting our customer's ESG agendas, and we continue to improve our advisory services to cater for this. We will assess our largest customers' transition plans to gain insights into their work towards more sustainable business practices. Furthermore, we continue to engage with our SME customers about their ESG activities and to inform them of the options available to them to get support from our partners.
- The transition of the utilities sector remains key to the achievement of our emission reduction targets. We support our utilities customers in this transition and highlight the roadblocks for efficient mortgage financing via the financial sector's Climate Partnership with the Danish government.
- The recent update to the Energy Performance of Buildings Directive (EPBD) by the European Parliament in March 2024 holds significant potential for enhancing energy efficiency in buildings. Although specifics regarding its implementation are still under review, the directive is likely to be a key factor in advancing building energy performance. This change presents both potential risks and opportunities for our customers, and we plan to address these risks and opportunities proactively.
- Over the coming years, we expect to see growing momentum in energy renovations among real estate investors. This momentum will be driven by regulation, changing market dynamics in the industry value chain and emerging implications of access to financing.
- We continue to enhance the accuracy and scope of our data, and we support the financial sector in obtaining specific building consumption data through our industry association, Finance Denmark, and through e-nettet. Our work in this area aims to refine our assessments of energy efficiency in commercial buildings and to engage effectively with the customers concerned.

** Amount as at the end of 2024 as opposed to CO_2 calculations in this report, which are based on portfolios as at end of Q3 2024.*

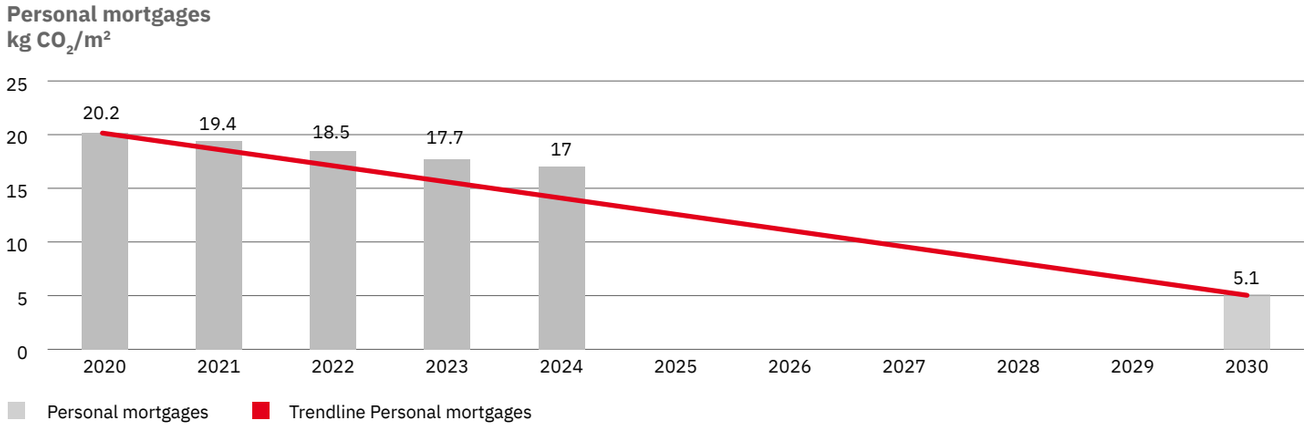
Our personal mortgages segment shows improvements in EPC scores, but emissions remain behind planned trajectory, mainly due to emissions factors that have not been updated

In 2024[12], average emission intensity was reduced by 0.7 kg CO_2e/m^2, corresponding to a 4% reduction. The total reduction since 2020 is 3.2 kg CO_2e/m^2, which represents a 15.8% reduction.

In 2024, Realkredit Danmark conducted a customer survey in cooperation with YouGov. The survey showed a declining interest in energy renovations as energy prices remain low, thereby reducing household costs for heating. Combined with a hike in interest rates and lack of consistency in public subsidy schemes, homeowners are at present more reluctant to undertake energy renovations. Despite the low level of interest in energy renovations, we see improvements in EPC scores in our portfolio compared with 2020.

For our personal mortgages portfolio, the decarbonisation of electricity and heating systems in recent years will have a positive effect on the progression towards our targets. We use the emission factors from the Danish Energy Agency's guide used for EPC scoring (Energihåndbogen) as the basis for our calculation of the emissions, but the current emissions factors have not been updated since 2019. Consequently, the decarbonisation effect is not yet reflected in our figures. By conducting an internal best-effort analysis on updating emission factors, we estimate our portfolio to be below the linear target trajectory line.

The Energy Performance Buildings Directive (EPBD), which aims to enhance the energy performance of buildings in the EU, will be transposed into national legislation in 2026. Realkredit Danmark will engage in the preparation of the Danish implementation and will actively plan for how to support those of our customers who will potentially be affected by this regulation.



[12] *Figures for 2024 are based on portfolios as at end of Q3 2024, whereas the figures for previous years are based on portfolios as at year-end of the respective year.*

The path towards 2030: Personal mortgages

Actions

- Together with Danske Bank, we updated our customer offering with our partnership with the building advisory agency OBH Rådgivende Ingeniører. We have improved the offering to now cover a broader range of advisory services, in which energy improvements are a relevant area for inclusion. At the same time, the offering was expanded to also include advice about climate adaption measures, such as the establishment of perimeter drains or anti-flood valves. Realkredit Denmark customers who are also banking customers with Danske Bank are offered a favourable price for the services provided by OBH Rådgivende Ingeniører.
- We offer loans without establishment fees for energy renovation of individual homes. This year, we expanded the offer to also include measures to reduce the impact of climate change on the property, such as rising groundwater levels and heavy rain.
- To further improve our own insights and to highlight the need for future public initiatives, we have conducted a market survey in partnership with YouGov to ascertain homeowners' views towards and levels of interest in energy renovations.
- We believe that ongoing training is essential for advancing the sustainability transition and for providing our customers with high-value advisory services. Building on our initial mandatory sustainability training, we have expanded access to our Sustainability Unlocked learning platform, which enables our advisers, leaders and relevant support staff to enhance their sustainability knowledge and skills.

Outlook

- Because the emission factors in the guidance for EPC scoring provided by the Danish Energy Agency have not been updated since 2019, our emissions are shown to be above the trajectory line. However, we anticipate improvements once these emissions factors are revised.
- Achieving our target of a 75% reduction in emissions is heavily influenced by external conditions. The expansion of district heating remains a pivotal element of Denmark's clean and efficient energy strategy. Effective implementation of expanded district heating provision is crucial for having a cleaner energy mix in Danish homes, which is vital element for achieving our reduction goals.
- The Energy Performance of Buildings Directive (EPBD), which focuses on improving building energy efficiency in the EU, is expected to be transposed into national law by May 2026. Together with Danske Bank, we will analyse and devise strategies to best support our customers through this transition, aiming to mitigate risks and capitalise on new opportunities.
- We will continue to maintain the focus on sustainability training and competences in order to be able to support our customers in their sustainability transitions.

Ambition for agriculture aims for a 30-45% reduction closely aligned to the tripartite agreement's[13] sector transition pathway — limited observed reductions

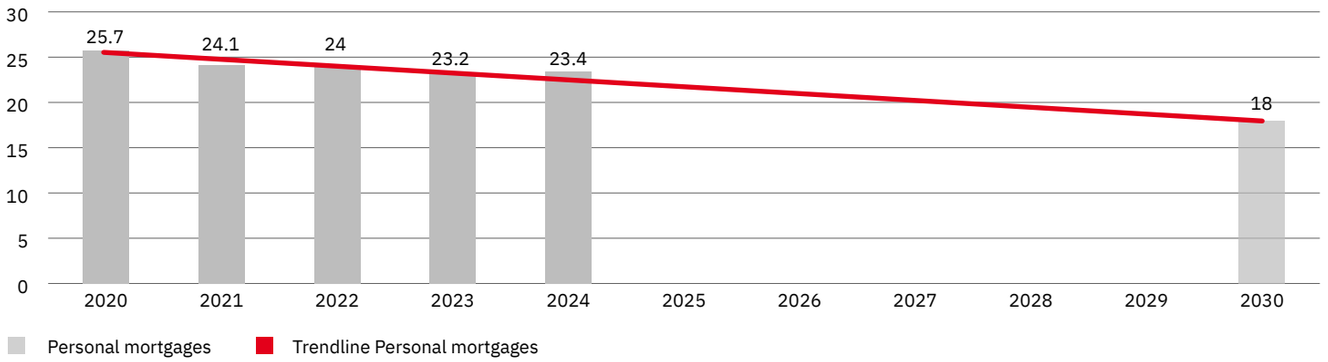
Stable and sustainable agricultural production is vital for ensuring that sufficient food can be supplied to an ever-growing global population. However, one of the key challenges for the sector is its impact on climate and biodiversity. As well as being responsible for around 25%[14] of global CO_2e emissions, the agricultural sector also depletes natural resources and degrades biodiversity through its extensive use of land.

Customers operating in the agricultural sector face both physical and transition risks due to climate change and shifts towards a low-carbon economy, but these challenges also present opportunities for improved agricultural practices.

Realkredit Danmark has an important role to play in supporting our agriculture customers by providing advisory services and products aimed at helping these customers to navigate nature- and climate-related impacts, risks and opportunities.

Our 2030 ambition reflects the Danish national sector's ambition recalculated to a 2020 baseline using the most recent data from Denmark's Climate Status and Outlook 2024[15] report and draws on the SBTi's Forest, Land and Agriculture Target-Setting Guidance[16]. Our ambition is to achieve a 30-45% emissions intensity reduction by 2030 in relation to 2020 levels, primarily by supporting the implementation of the green tripartite agreement through advisory services and loan products. Our ability to reach this ambition depends heavily on the implementation of the green tripartite agreement.

Agriculture
Financed CO_2e / Exposure (t/mDKK)



Since our baseline year of 2020, the emissions intensity within our agriculture portfolio covered by our reduction target has decreased from 25.7 tCO_2e/mDKK in 2020 to 23.4 tCO_2e/mDKK in 2024[17], which corresponds to a 9% reduction. The observed changes in emission intensity appear to be limited, reflecting a constant level of carbon emissions in Denmark's agricultural sector. The results of carbon reduction efforts are expected to become evident in the future.

For a description of the agriculture model and the changes made, please see appendix 1.

[13] Tripartite negotiations between the Danish Government, industry organisations and labour unions have been ongoing during 2024, resulting in a political agreement to reduce carbon emissions and support biodiversity in the agricultural sector. The agreement was approved by the Danish parliament in November 2024: aftale-om-implementering-af-et-groent-danmark.pdf
[14] Our World in Data: Food production is responsible for one-quarter of the world's greenhouse gas emissions - Our World in Data
[15] Klimastatus og –fremskrivning 2024: Klimastatus og –fremskrivning 2024 (kefm.dk)
[16] The SBTi's Forest, Land and Agriculture Target-Setting Guidance: SBTiFLAGGuidance.pdf (sciencebasedtargets.org)
[17] Figures for 2024 are based on portfolios as at end of Q3 2024, whereas the figures for previous years are based on portfolios as at year-end of the respective year.

The path towards 2030: Agriculture

Actions

- In late 2023, we implemented a transition risk assessment together with Danske Bank to steer our engagements with selected agriculture customers and to equip advisers to engage in meaningful transition dialogues. Monthly feedback sessions were facilitated throughout 2024 to ensure knowledge sharing and collation of the information learned.
- Since the end of 2023, we have engaged with more than 300 customers from our agriculture portfolio on the topic of climate and biodiversity.

Outlook

- During 2025, we plan to analyse the data collected from the transition risk assessment together with Danske Bank. The results will enhance our understanding of where our customers are in their climate transition and nature-related journeys, and they will also provide us with farm-specific operational data. By identifying key challenges, risks and opportunities, we can focus our efforts more effectively and refine our customer interactions to have the greatest positive impact.
- We will continue to engage with our customers, focusing on those with the biggest potential impact, and we will develop and adjust our initiatives based on the implementation of the green tripartite agreement.
- Our ability to reach our 2030 target depends heavily on the implementation of the green tripartite agreement for the Danish agricultural sector.

CO_2e emissions Total portfolio

Continued reductions in financed CO_2e emissions of Realkredit Dannmark's total portfolio

Further to our intensity targets, we also monitor financed emissions of the total portfolio of Realkredit Danmark. It should be noted that the customer segments used in the Climate Action Plan differ from those used in this report (see box 1).

When looking at financed emissions, all customer segments have seen a reduction in financed emissions throughout the period covered.

The owner-occupied segment has shown an even decrease in financed emissions during the reporting period and a total reduction of 39% since 2020. During 2022, many customers switched to a greener heating source. The conversions were driven primarily by the energy crisis caused by the war in Ukraine. The transition was supported by various government incentives as well as by Realkredit Danmark and Danske Bank offering customers discounted energy-improvement loans. Since 2022, we have seen a decline in the number of energy renovations as gas prices fell, thereby lowering household energy costs.

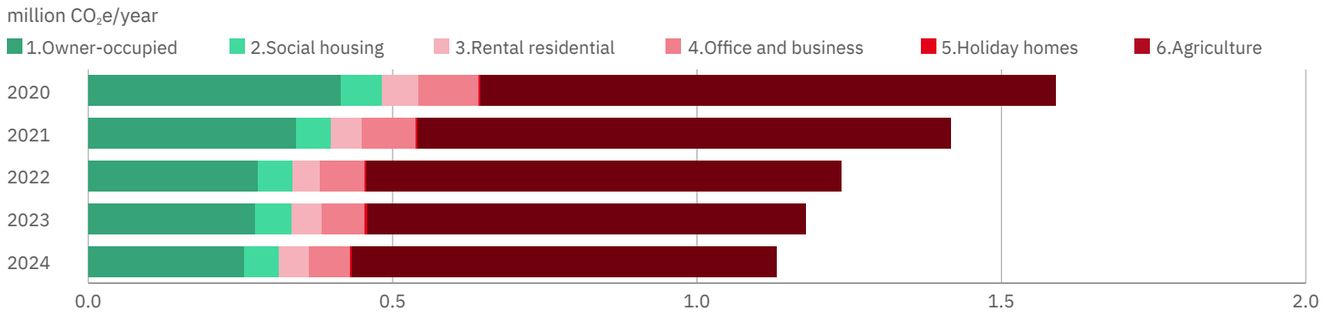
The offices and business segment has also shown an annual reduction in financed emissions, resulting in a total reduction of financed emissions of 30% during the period. Agriculture is the segment with the highest level of financed emissions. However, this segment has also experienced reduced annual financed emissions of 26% since 2020.[18]

The remaining segments experienced reductions in financed emissions during 2024[19] of 2-5% and have seen total reductions since 2020 (see table). All segments have experienced a downward trend in emissions. However, due to the loan size and price volatility in these segments, the value of the underlying assets is more volatile due to price changes, which in turn affects the loan-to-value (LTV) ratios and consequently the financed emissions. For further details on the development in emissions, please refer to appendix 2.

Regarding intensity calculations, emission factors from the Danish Energy Agency in the guidance used for EPC scoring have not been updated, so updated emissions factors have not been used in our calculation of financed emissions. If emissions factors were updated, our internal best-effort indicates that our emissions calculation would show a further reduction in emissions.

Changes in LTV ratios affect financed emissions. If house prices increase, the LTV ratio declines, which in turn will result in a reduction in financed emissions (=total emission x LTV). Therefore, for comparison of the development in different customer segments, please also refer to the total emissions detailed in appendix 2.

Financed GHG emissions



Box 1: Differences in customer segments

Climate Action Plan (intensity targets)	Realkredit Danmark's total portfolio and appendix 2
Commercial real estate (residential)	Residential rental
Commercial real estate (non-residential)	Offices and business
Personal mortgages	Owner-occupied (single-family homes + owner-occupied flats)
Agriculture	Agriculture
Not monitored	Social housing Holiday homes

Change in financed emissions	2020-2024	2023-2024
Owner-occupied	-39%	-7%
Social housing	-14%	-4%
Rental residential	-19%	-2%
Office and businesses	-30%	-4%
Holiday homes	-25%	-5%
Agriculture	-26%	-3%
Total	**-29%**	**-4%**

[18] Please note that there has been a change of model for this segment. See appendix 1 for more details.
[19] Figures for 2024 are based on portfolios as at end of Q3 2024, whereas the figures for previous years are based on portfolios as at year-end of the respective year.

Appendix 1
Data and methodologies

Accounting principles and methodological considerations

The financed emission calculation of Realkredit Danmark's lending portfolio relies on a combination of internally developed models and external emission data sources. Generally, the setup follows the industry-wide standard set by the Partnership for Carbon Accounting Financials (PCAF) and additional guidance developed by Finance Denmark. Some deviations have been implemented when considered appropriate.

In line with general efforts to increase data quality and data coverage and to reflect evolving industry practices, the carbon emission models are subject to continuous improvements and updates. In accordance with our recalculation policy, every model change has been applied to previous years' estimates and restated in this report. This is a natural consequence of model improvements and causes some of the historical emission figures to change in relation to previous reporting.

Significant changes and revisions made since the publication of our Climate Report 2023 are the changes to our calculation of emissions from the agricultural segment (described in more detail in the following).

The financed emission calculation applies the most recently available information associated with the reporting year at the time of calculation. For agriculture, financed emissions for 2024 are based on portfolio and exposure data from the end of September 2024 as well as customers' emission data from 2023. This can result in situations where the exposure, financial data and the year of emissions are temporally misaligned. However, the calculation represents our most updated estimate given the available data.

For **personal mortgages** and **commercial real estate, financed** emissions for 2024 are based on portfolio and exposure data from the end of September 2024 as well as property emission data from end of September 2024.

Baseline recalculation policy – To consistently track and ensure relevance of the reported CO_2e emissions data and progress made on our climate targets, we recalculate baseline-year emissions if there are significant developments relating to changes in calculation methodologies, improvements in data accuracy or discovery of significant errors.

Deviations from the PCAF standard – Although the setup is designed to follow the industry-wide standard, some deviations have been implemented to match the Group's internal data structure and data availability, or to lower the expected volatility and complexity of calculating financed emissions over time. The most notable deviations from the PCAF standard, and the PCAF secretariat's recommendations, are that attribution factors for buildings are based on the market value of the asset at reporting date instead of value at origination.

Please refer to Danske Bank Group's Climate Progress Report 2024, appendix 3, for more details on this matter.

High-level overview of financed emission sources and methodologies

Segment	Emission data source	Methodology
Agriculture	ConTerra's farm-level emission estimates on Danish farms	The farm-level estimates from ConTerra are based on size of farmland, crop type, animals, fertiliser use, manure management, etc. The same methodology and emission factors as applied in the Danish National Inventory Report. Emissions related to agriculture customers with no match in the ConTerra data are estimated using extrapolations from the ConTerra-covered part. Note that forestry is currently not included in emission data from ConTerra and is therefore not part of the financed-emission calculation for agriculture customers either. The ConTerra data covers scope 1 emissions only. Attribution factors follow PCAF's business loan approach.
Commercial real estate	e-nettet, Danish Energy Agency	Covers scope 1 and 2 emissions related to heating. Energy consumption estimated from EPC scores, or distribution of EPC scores from buildings with similar characteristics, combined with energy and emission factors related to primary heating source. Follows the guidance from Finance Denmark's Framework for Financed Emissions Accounting with some adjustments related to data availability. Attribution factors are based on property value at reporting date.
Personal mortgages	e-nettet, Danish Energy Agency	Covers scope 1 and 2 emissions related to heating. Energy consumption estimated from EPC scores, or distribution of EPC scores from buildings with similar characteristics, combined with energy and emission factors related to primary heating source. Follows the guidance from Finance Denmark with some adjustments related to data availability. Attribution factors are based on property value at reporting date.

Effects of the change in the agricultural model

In this report, Realkredit Danmark has changed the model for calculating emissions from the agricultural portfolio. Previously, Realkredit Danmark used its own model developed with input from Aarhus University and based on number and type of animals along with farm size and land use. The livestock herd was transformed into 'animal units' using standard conversion rates, and the use of land was translated into CO_2e emissions per hectare using standards based on use of land and according to whether the land was used for organic or conventional farming. Information about livestock herds, use of land and organic/conventional farming was collected from Realkredit Danmark's internal valuation reports.

Note that forestry was not included in emission data from the original agricultural model – nor the new model.

In this report, Realkredit Danmark has used emission figures from ConTerra, which are based on financial statements from agriculture customers. Because the model is based on financial statements, the emissions for 'private agriculture customers' are no longer part of the report. The effect of this is a reduction in agriculture emissions of approximately 15% (measured against the previous model).

Realkredit Danmark has recalculated emissions based on the ConTerra model dating back to 2020 so that the trend in emissions from Danish agriculture may be deduced. For the years 2020 till 2023, the data for both emission and portfolio exposure is year-end data, so there is no misalignment. For 2024, the emissions data is from year-end 2023, but portfolio exposure data is from the end of September 2024, so there is a data misalignment for that year.

Appendix 2
CO_2e emissions per capital centre

CO_2e emissions by capital centre 2024[20]

2024	Total CO_2e (t)	Financed CO_2e (t)	Total CO_2e footprint (t/bn)	Financed CO_2e footprint (t/bn)	Portfolio coverage	Total CO_2e (t) 100% coverage	Kg CO_2e/m^2 (total)	Kg CO_2e/m^2 (financed)
Capital centre S	**664,908**	**252,086**	**2,635**	**999**	**96.6**	**731,961**	**14.4**	**4.9**
1.Owner-occupied	268,019	112,084	1,726	722	93.9	284,400	17.3	7.2
2.Social housing	102,586	15,279	4,559	679	99.7	102,856	13.3	2.0
3.Rental residential	65,185	19,617	1,533	461	99.0	65,851	10.5	3.2
4.Office and business	53,964	18,767	2,678	931	90.1	59,304	13.9	4.8
5.Holiday homes	3,157	1,089	416	144	98.2	3,213	3.8	1.3
6.Agriculture*	171,997	85,248	39,990	19,821	74.2	216,337	-	-
Capital centre T	**1,667,331**	**825,987**	**4,181**	**2,071**	**96.1**	**1,939,848**	**13.1**	**5.7**
1.Owner-occupied	296,391	134,762	1,336	608	95.0	311,082	16.2	7.4
2.Social housing	17,748	3,088	4,198	730	99.8	17,776	8.0	1.4
3.Rental residential	56,315	27,638	762	374	99.3	56,731	8.3	4.1
4.Office and business	121,407	48,457	1,986	792	88.2	135,740	12.9	5.2
5.Holiday homes	3,803	1,414	320	119	98.5	3,861	3.5	1.3
6.Agriculture*	1,171,667	610,629	45,474	23,700	79.3	1,414,657	-	-
Capital centre A	**50,265**	**24,727**	**1,006**	**495**	**99.2**	**50,653**	**9.4**	**4.6**
2.Social housing	50,265	24,727	1,006	495	99.2	50,653	9.4	4.6
Other reserves	**86,512**	**26,905**	**4,472**	**1,391**	**98.1**	**91,368**	**7.0**	**2.1**
1.Owner-occupied	26,225	7,724	8,024	2,363	89.9	28,887	20.9	5.0
2.Social housing	47,833	15,180	3,574	1,134	99.2	48,210	5.2	1.6
3.Rental residential	5,943	1,436	4,189	1,012	97.3	6,106	6.8	1.6
4.Office and business	3,185	1,053	3,117	1,031	90.3	3,493	7.0	2.3
5.Holiday homes	179	39	984	212	98.5	181	3.6	0.8
6.Agriculture*	3,147	1,474	44,978	21,070	57.3	4,491	-	-
Total	**2,469,016**	**1,129,706**	**3,427**	**1,568**	**96.9**	**2,813,829**	**12.6**	**4.8**

* *Agriculture is not calculated based on m^2. Calculations are based on the new ConTerra model.*

[20] *Figures for 2024 are based on portfolios as at end of Q3 2024, whereas the figures for previous years are based on portfolios as at year-end of the respective year.*

CO_2e emissions by capital centre 2023

2023	Total CO_2e (t)	Financed CO_2e (t)	Total CO_2e footprint (t/bn)	Financed CO_2e footprint (t/bn)	Portfolio coverage	Total CO_2e (t) 100% coverage	Kg CO_2e/m² (total)	Kg CO_2e/m² (financed)
Capital centre S	**705,469**	**275,076**	**2,756**	**1,075**	**96.6**	**778,689**	**15.2**	**5.2**
1.Owner-occupied	284,116	119,652	1,785	752	94.0	301,023	18.0	7.6
2.Social housing	103,339	15,517	4,725	709	99.8	103,579	13.8	2.1
3.Rental residential	66,484	19,597	1,567	462	99.0	67,122	10.9	3.2
4.Office and business	54,878	18,756	2,766	945	90.3	60,210	15.1	5.2
5.Holiday homes	3,439	1,194	437	152	98.2	3,499	4.0	1.4
6.Agriculture*	193,214	100,360	40,610	21,094	74.1	243,256	-	-
Capital centre T	**1,715,599**	**845,699**	**4,359**	**2,149**	**96.1**	**1,987,709**	**13.5**	**5.8**
1.Owner-occupied	314,862	143,766	1,410	644	95.2	330,064	16.8	7.6
2.Social housing	17,788	1,844	9,551	990	99.9	17,813	7.6	0.8
3.Rental residential	58,275	28,236	819	397	99.2	58,744	8.5	4.1
4.Office and business	127,735	51,273	2,131	855	88.0	143,088	13.2	5.3
5.Holiday homes	3,907	1,442	328	121	98.3	3,975	3.5	1.3
6.Agriculture*	1,193,032	619,138	46,972	24,377	79.8	1,434,025	-	-
Capital centre A	**50,938**	**26,756**	**1,007**	**529**	**99.4**	**51,259**	**10.0**	**5.3**
2.Social housing	50,938	26,756	1,007	529	99.4	51,259	10.0	5.3
Other reserves	**97,394**	**31,467**	**4,660**	**1,506**	**98.3**	**103,306**	**7.3**	**2.3**
1.Owner-occupied	31,107	9,449	7,314	2,222	91.0	33,919	21.9	5.0
2.Social housing	50,644	16,881	3,695	1,232	99.4	50,966	5.2	1.7
3.Rental residential	6,255	1,620	4,130	1,070	97.1	6,433	7.1	1.8
4.Office and business	3,766	1,114	3,524	1,042	90.9	4,110	8.2	2.4
5.Holiday homes	208	43	958	196	98.6	211	3.6	0.7
6.Agriculture*	5,415	2,361	39,250	17,116	58.4	7,667	-	-
Total	**2,569,400**	**1,178,999**	**3,564**	**1,635**	**96.9**	**2,920,963**	**13.0**	**5.1**

* *Agriculture is not calculated based on m². Calculations are based on the new ConTerra model.*

CO_2e emissions by capital centre 2022

2022	Total CO_2e (t)	Financed CO_2e (t)	Total CO_2e footprint (t/bn)	Financed CO_2e footprint (t/bn)	Portfolio coverage	Total CO_2e (t) 100% coverage	Kg CO_2e/m^2 (total)	Kg CO_2e/m^2 (financed)
Capital centre S	**796,338**	**296,391**	**3,006**	**1,119**	**96.6**	**883,927**	**16.4**	**5.1**
1.Owner-occupied	306,651	120,197	1,825	715	94.1	324,815	18.9	7.4
2.Social housing	112,928	14,043	5,623	699	99.8	113,164	15.8	2.0
3.Rental residential	68,043	17,387	1,623	415	98.9	68,769	11.5	2.9
4.Office and business	60,681	18,298	2,875	867	90.1	66,670	17.1	5.1
5.Holiday homes	3,286	1,075	395	129	98.0	3,350	3.7	1.2
6.Agriculture*	244,748	125,392	44,534	22,816	74.5	307,159	-	-
Capital centre T	**1,793,282**	**884,304**	**4,634**	**2,285**	**96.0**	**2,068,841**	**14.2**	**5.8**
1.Owner-occupied	339,930	147,082	1,514	655	95.1	356,599	17.6	7.6
2.Social housing	21,658	1,925	9,500	844	99.9	21,681	9.0	0.8
3.Rental residential	58,620	25,774	927	408	99.1	59,162	8.9	3.9
4.Office and business	142,551	54,059	2,434	923	88.4	159,158	13.6	5.2
5.Holiday homes	3,908	1,345	326	112	98.1	3,983	3.4	1.2
6.Agriculture*	1,226,615	654,119	46,615	24,858	80.3	1,468,258	-	-
Capital centre A	**55,681**	**23,972**	**1,201**	**517**	**99.4**	**56,017**	**11.2**	**4.8**
2.Social housing	55,681	23,972	1,201	517	99.4	56,017	11.2	4.8
Other reserves	**109,127**	**33,914**	**5,020**	**1,560**	**98.2**	**115,199**	**7.9**	**2.4**
1.Owner-occupied	36,321	11,205	7,537	2,325	91.3	39,477	22.6	5.6
2.Social housing	56,348	17,534	4,104	1,277	99.3	56,716	5.6	1.7
3.Rental residential	7,096	1,744	3,901	959	97.0	7,312	7.5	1.9
4.Office and business	4,368	1,153	4,356	1,150	91.2	4,753	9.0	2.4
5.Holiday homes	246	52	926	194	98.4	250	3.6	0.7
6.Agriculture*	4,749	2,226	47,362	22,202	59.1	6,692	-	-
Total	**2,754,427**	**1,238,580**	**3,826**	**1,720**	**96.8**	**3,123,984**	**13.9**	**5.0**

* *Agriculture is not calculated based on m^2. Calculations are based on the new ConTerra model.*

CO_2e emissions by capital centre 2021

2021	Total CO_2e (t)	Financed CO_2e (t)	Total CO_2e footprint (t/bn)	Financed CO_2e footprint (t/bn)	Portfolio coverage	Total CO_2e (t) 100% coverage	Kg CO_2e/m² (total)	Kg CO_2e/m² (financed)
Capital centre S	**954,797**	**449,741**	**3,268**	**1,539**	**95.7**	**1,099,172**	**17.5**	**7.2**
1.Owner-occupied	344,314	167,394	1,747	849	94.1	364,687	19.7	9.6
2.Social housing	89,894	13,786	6,212	953	98.7	91,041	17.4	2.7
3.Rental residential	60,000	21,755	1,460	529	98.0	61,189	12.4	4.5
4.Office and business	64,513	26,416	3,020	1,236	89.2	71,504	17.5	7.2
5.Holiday homes	3,626	1,568	379	164	97.8	3,704	3.8	1.6
6.Agriculture*	392,451	218,822	45,610	25,431	70.8	507,046	-	-
Capital centre T	**1,741,373**	**905,265**	**4,787**	**2,488**	**95.7**	**2,033,827**	**15.1**	**6.6**
1.Owner-occupied	352,781	160,252	1,716	779	94.9	370,627	18.4	8.3
2.Social housing	20,886	4,299	3,021	622	98.7	21,160	10.5	2.2
3.Rental residential	57,367	27,182	1,035	490	98.6	58,152	9.3	4.4
4.Office and business	140,157	59,725	2,364	1,007	88.0	157,014	14.5	6.2
5.Holiday homes	3,709	1,348	332	121	98.1	3,778	3.2	1.2
6.Agriculture*	1,166,472	652,457	45,997	25,728	78.0	1,423,096	-	-
Capital centre A	**42,239**	**20,412**	**1,280**	**618**	**99.1**	**42,611**	**11.8**	**5.7**
2.Social housing	42,239	20,412	1,280	618	99.1	42,611	11.8	5.7
Other reserves	**120,367**	**42,151**	**5,612**	**1,965**	**97.4**	**130,843**	**9.7**	**3.3**
1.Owner-occupied	41,799	13,527	7,871	2,547	91.6	45,300	23.4	4.0
2.Social housing	51,269	18,838	4,014	1,475	98.8	51,897	6.7	2.4
3.Rental residential	7,032	1,844	4,656	1,221	95.4	7,355	8.4	2.2
4.Office and business	5,182	1,517	4,658	1,363	89.2	5,743	9.5	2.8
5.Holiday homes	293	66	938	213	98.2	298	3.8	0.9
6.Agriculture*	14,792	6.359	34,589	14,869	63.1	20,251	-	-
Total	**2,858,777**	**1,417,568**	**4,024**	**1,995**	**96.2**	**3,306,453**	**15.2**	**6.4**

* *Agriculture is not calculated based on m². Calculations are based on the new ConTerra model.*

CO_2e emissions by capital centre 2020

2020	Total CO_2e (t)	Financed CO_2e (t)	Total CO_2e footprint (t/bn)	Financed CO_2e footprint (t/bn)	Portfolio coverage	Total CO_2e (t) 100% coverage	Kg CO_2e/m² (total)	Kg CO_2e/m² (financed)
Capital centre S	**935,755**	**480,502**	**3,513**	**1,804**	**95.7**	**1,074,011**	**18.6**	**8.7**
1.Owner-occupied	348,324	193,206	1,930	1,070	94.1	36,921	20.9	11.6
2.Social housing	90,221	15,553	6,581	1,134	98.7	9,394	18.0	3.1
3.Rental residential	59,712	23,909	1,641	657	97.9	60,990	13.5	5.4
4.Office and business	63,635	28,605	3,260	1,465	89.1	70,582	18.9	8.5
5.Holiday homes	3,344	1,650	385	190	98.0	3,413	3.7	1.8
6.Agriculture*	370,520	217,580	48,852	28,687	70.8	478,711	-	-
Capital centre T	**1,889,441**	**1,040,049**	**4,999**	**2,752**	**95.7**	**2,202,625**	**15.7**	**7.6**
1.Owner-occupied	396,870	202,545	1,834	936	95.0	416,911	19.0	9.7
2.Social housing	28,861	8,638	2,866	858	98.8	29,216	11.4	3.4
3.Rental residential	64,700	33,790	1,212	633	98.6	65,636	10.0	5.2
4.Office and business	151,615	67,164	2,519	1,116	88.0	169,841	15.1	6.7
5.Holiday homes	3,962	1,644	350	145	98.2	4,034	3.2	1.3
6.Agriculture*	1,243,432	726,269	46,687	27,269	78.0	1,516,987	-	-
Capital centre A	**35,861**	**20,113**	**1,302**	**730**	**99.0**	**36,218**	**13.0**	**7.3**
2.Social housing	35,861	20,113	1,302	730	99.0	36,218	13.0	7.3
Other reserves	**125,909**	**49,239**	**5,260**	**2,057**	**97.2**	**133,909**	**10.3**	**4.0**
1.Owner-occupied	50,394	18,416	7,373	2,694	92.1	54,385	23.9	7.4
2.Social housing	54,213	23,298	3,991	1,715	98.7	54,941	6.8	2.9
3.Rental residential	8,041	2,573	4,645	1,486	95.6	8,396	8.9	2.8
4.Office and business	7,314	2,078	5,819	1,653	88.3	8,169	12.3	3.5
5.Holiday homes	352	101	858	246	98.3	358	3.7	1.1
6.Agriculture*	5,596	2,773	46,938	23,259	63.1	7,661	-	-
Total	**2,986,967**	**1,589,904**	**4,293**	**2,285**	**96.1**	**3,446,762**	**15.9**	**7.5**

* *Agriculture is not calculated based on m². Calculations are based on Realkredit Danmark's original model.*

Definitions used in the tables

Definitions	
Total CO_2e (t)	Calculated total CO_2e emissions based on methodology described in appendix 1
Financed CO_2e (t)	Current LTV x Total CO_2e (tonnes)
Total CO_2e footprint (t/bn)	Total CO_2e (tonnes) per issued loan (billion)
Financed CO_2e footprint (t/bn)	Financed CO_2e (tonnes) per issued loan (billion)
Portfolio coverage	Share of number of buildings in portfolio where it has been possible to calculate CO_2e emission
Total CO_2e (t) 100% coverage	Total emissions if possible to calculate CO_2e on each building in the portfolio ((100 - portfolio coverage) / 100 x Total CO_2e (tonnes)) + Total CO_2e (tonnes)
Kg CO_2e/m^2 (total)	Total CO_2e (tonnes) x 1,000 per m^2
Kg CO_2e/m^2 (financed)	Financed CO_2e (tonnes) x 1,000 per m^2

The calculated CO_2e emissions cover the emissions of a full year and are calculated for the portfolio as at year-end. However, figures for 2024 are based on the portfolio as at the end of September 2024. Please note that the figures cannot readily be compared with the figures stated in the follow-up on the Climate Action Plan because customer segmentation and geographic scope differ. Furthermore, the calculation of CO_2e emissions for agriculture differs from the methodology used in the Climate Action Plan, see appendix 1.

At this stage, Realkredit Danmark has not been able to calculate CO_2e emissions from manufacturing exposures.

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