PRB impact analysis

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Summary

- Climate is a material impact area for Jyske Bank. The estimated CO_2e figures for a business volume totalling about DKK 600 bn show that the CO_2 emission totals 2.7 million tonnes with a distribution of 59% for loans and 41% for investments.

- Corporate loans account for 41% of the total emission. The most important contribution to the emission can primarily be attributed to corporate loans for the transport industry. Loans for personal clients account for 18% of the total emission. Here, the emission is almost equally distributed on home loans and car loans.

- Asset management on behalf of Jyske Bank's clients (inclusive of Jyske Invest) accounts for 34% of the total emission. Of these investments, particularly equity holdings in the CO_2e intensive sectors such as utilities, materials and energy contribute to the emission.

- Jyske Bank considers this first estimation of the CO_2e emission across lending and investing activities one of the first steps in a process of quantifying impact. Hence estimates are primarily seen as a guideline for the further efforts to identify possibilities of reducing negative impacts and enhancing positive impacts, and of course they will change as data quality improves.

- Waste is the next impact area relevant for closer analysis by Jyske Bank. A further analysis will take place in a future impact analysis.

- The analysis was performed as part of Jyske Bank's implementation of the PRB, and it contributes at the same time to the fulfilment of the Forum for Sustainable Finance's recommendations focusing on CO_2e emission.

Background

In the autumn of 2019 - as one of 130 founding signatories - Jyske Bank signed the 'UN Principles for Responsible Banking"[1] (PRB). Jyske Bank applies the PRB as a general framework for its work on sustainability. This analysis forms part of the Jyske Bank Group's implementation of the PRB and is an update and extension of the preliminary impact analysis focusing on greenhouse gas emission, which was published in February 2020. Impact analysis will be a recurring activity.

Progress of the implementation of the PRB will be reported in the Sustainability and Corporate Social Responsibility Report and the Reporting and Self-Assessment Template, which will both be published on Jyske Bank's website in connection with the publication of the Annual Report 2020, scheduled to take place on 23 February 2021.[2]

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[1] UN Principles for Responsible Banking: https://www.unepfi.org/banking/bankingprinciples/

[2] Jyske Bank's reporting on sustainability can be seen on: www.jyskebank.dk/ir/baeredygtighed/rapport

Impact analysis

Financial players, such as Jyske Bank, pursuing lending and investing activities within a wide range of industries will directly or via clients impact all 17 UN Sustainable Development Goals. The purpose of impact analysis is to identify and hence prioritize the most significant areas that are challenged in relation to the UN's 17 Sustainable Development Goals on the basis of the bank's current business model and structure ("negative impacts") and similarly the areas of activity that support sustainability ("positive impacts").

Methodology

The method applied in this analysis is based on the UN Portfolio Impact Analysis Tool for Banks ("Portfolio Impact Tool")[3] and the four elements, scope, scale of exposure, context & relevance, and scale & intensity/salience, contained in the UN guidelines for the implementation of PRB.[4] Figure 1 gives a graphic representation of the method applied.

Figure 1: Impact analysis method
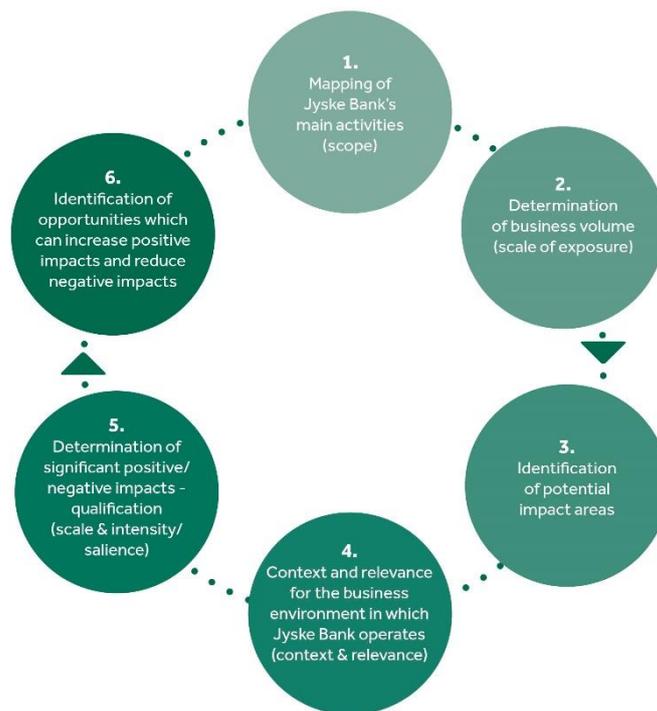
Following the mapping of Jyske Bank's activities in step 1, the total business volume is identified in step 2. In step 3, the total business volume is analysed using the Portfolio Impact Tool, which will result in identification of potential impact areas, after which the context and relevance for these impact areas are assessed in step 4. Through qualification of the impact area, the most important impacts are determined in step 5. Subsequently the most important impacts can form the basis of the identification of possibilities (step 6).

It is expected that impact analysis as a discipline will be developed continuously as tools are being developed, data are made available and actual experience is gained. Naturally the method applied to Jyske Bank's impact

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[3] https://www.unepfi.org/publications/positive-impact-publications/portfolio-impact-tool-for-banks/
[4] https://www.unepfi.org/wordpress/wp-content/uploads/2020/03/Guidance_Document_Impact_Analysis.pdf

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analysis will be adjusted in the coming years. For instance through the introduction of UNEP FI's "Investment Impact Tool", probably in the second quarter of 2021, and as it becomes possible to replace CO_2e data based on sector averages with CO_2e data at the individual company level. On this basis, it is to be expected that the estimated CO_2e emission may also change. Please see the appendix for further elaboration on the choice of method.

Mapping of Jyske Bank's main activities

Jyske Bank is one of the largest financial services companies in Denmark and has been designated as a systemically important financial institution. The Jyske Bank Group's business model focuses on Denmark, and Jyske Bank has only limited business activities with clients outside Denmark[5]. However, the underlying investing activities for Jyske Bank's clients are by nature global. Jyske Bank has a full-service set-up for its Danish clients and a national branch network.

Jyske Bank's main activities consist of:

- Banking and investing activities targeting personal and corporate clients, as well as on private banking clients and also trading and investment products for large corporate and institutional clients

- Mortgage activities aimed mainly at personal clients, corporate clients and subsidised rental housing

- Leasing and financing activities for cars and equipment for the corporate sector

- Management of the Bank's investment portfolio

Essentially, this analysis covers the business volume within the above activities. In some cases, it has been necessary to leave out small parts of the business volume due to data-related challenges.

Identification of business volume

The extensive business volume covered the impact analysis amounts to DKK 616 bn[6] and was calculated on the basis of the business volume at the end of 2019. The business volume is broken down as shown in table 1.

Table 1 - Business volume covered by the analysis

Business volume	DKK bn	%
Loans	**439.6**	**71%**
Personal Clients	197.6	32%
Corporate Clients	232.0	39%
Investment	**179.2**	**29%**
Asset management	114.4	18%
Investment portfolio	64.8	10%
Total	**618.8**	**100%**

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[5] See Jyske Bank Annual Report 2019, Note 4
[6] Business volume is not comparable to Jyske Bank's traditional measuring of total assets. Please refer to the section Description and Delimitations for further details.

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Loans for personal clients consist of loans for owner-occupied homes and means of transport. This means that other loans for personal clients have been left out in comparison to the business volume in the preliminary analysis from February 2020. Loans to corporate clients also include loans granted to Jyske Bank's clients by other credit institutions against Jyske Bank's guarantee.

As regards investments, the Jyske Bank Group is covered extensively as both asset management activities at Jyske Bank and Jyske Invest are included, as are the Jyske Bank Group's investment portfolio. The investment portfolio includes the strategic balance sheet and risk management (ALM) and consists mainly of Danish and to a lesser degree of foreign covered bonds.

The section 'Description and Delimitations' gives further information of the business volume that is encompassed and the delimitations that have been established in connection with the data.

Identification of potential impact areas

The Portfolio Impact Tool is used to gain an indication of the impact areas with the most significant negative and positive impacts considering the composition of Jyske Bank's business volume. The Portfolio Impact Tool allocates to industries and countries various degrees of importance relative to the impact areas. An impact area may be important due the industry's effect on the impact area, but also due to the extent of the activity at Jyske Bank.

The Portfolio Impact Tool targets lending activities, but in this analysis, Jyske Bank has chosen also to apply it as a basis for the identification of impact areas for investing activities. For this use, an adapted version is used, where equities and corporate bonds are mapped to the industry dimension in the Portfolio Impact Tool.

On the basis of the output from the Portfolio Impact Tool, the overall assessment is that Climate is the first negative impact area that Jyske Bank should subject to a closer analysis. In addition, Waste and Soil have also been identified as important negative impact areas. The most important positive impact areas are Housing, Climate and Inclusive, healthy economies.

The negative impact within Climate relates to the fact that a fairly large proportion of Jyske Bank's lending activities consists of loans for owner-occupied homes and residential rental properties, where the many thousand properties affect the climate through consumption and through the CO_2e emission of the properties. Loans for agricultural clients also affect the climate negatively as - from an international perspective - a relatively large part of the land area in Denmark is agricultural land, and also the large livestock production in Denmark causes emission of fairly large amounts of CO_2e. The major part of the loans for agricultural clients in Jyske Bank's loan portfolio consist of loans for Animal Husbandry and Production of 1-year crops.

Loans for the transport sector also affect the climate primarily through a high CO_2e emission.

Relevance and the context in which Jyske Bank operates

Jyske Bank operates mainly in a Danish context, and in Denmark the agenda for sustainability focuses on the emission of greenhouse gasses, and also Denmark is committed to fulfilling the goals of the Paris Agreement. The Danish parliament has set a target of reducing Denmark's greenhouse gas emission by 70% by 2030 at the latest (compared to1990).[7]

Finance Denmark, a business association of the financial sector in Denmark, decided in the autumn of 2018 to establish an advisory Forum for Sustainable Finance, which should offer a number of recommendations on how the Danish financial sector can be a first mover and contribute to the sustainable transition. Two out of 20 recommendations that , the Forum for Sustainable Finance published in December 2019 specifically address CO_2e emission.

Moreover, Danish asset managers - through the business association Investering Danmark (INDA) - established in November 2020 a goal for a 75% reduction of CO_2e emission.[8]

Waste is a relevant impact area - not least in Denmark - which is supported by the Sustainable Development Report[9], in which it is stated that, despite an overall global ranking as No. 1 in the SDG index, Denmark faces challenges relating to Sustainable Development Goal No. 12, Sustainable Consumption and Production, just like a number of other high-income countries. Indicators show that the challenges can be attributed to "E-waste generated" (kg/inhabitant), "Imported SO_2 emissions" (kg/inhabitant) and "Non-recycled Municipal Waste" (kg/day/inhabitant).

Prior to any further quantification of the impact and the performance of an actual impact analysis relating to Waste, a closer analysis of the relevance of the impact area in the context of Jyske Bank will be needed. In the Portfolio Impact Tool, the relationship to the impact areas of the industry dimension was made at a global level and does not allow for the differences that exist, for instance between the agricultural sectors globally. Hence the area should be subjected to further analysis in order to assess the actual relevance of the impact area in both a Danish and a Jyske Bank context.

In conclusion, Climate is the most relevant impact area - both as regards negative and positive impacts - in the context in which Jyske Bank operates. Hence the conclusions from the preliminary impact analysis are confirmed. As an impact area, Waste will require further analysis. This analysis, solely performs qualification of CO_2e with respect to Climate.

Qualification of the impact area of Climate

CO_2e emission

In order to assess the degree of the impact from the activities in Jyske Bank's business volume, quantification via CO_2e emission was chosen as a metric.

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[7] https://kefm.dk/aktuelt/nyheder/2019/dec/klimalov

[8] http://finansdanmark.dk/media/47147/finans-danmark-co2-faktaark.pdf

[9] Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. (2019): *Sustainable Development Report 2019*. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN), http://sustainabledevelopment.report.

Jyske Bank considers this first estimation of CO_2 emission across lending and investing activities one of the first steps in a process of quantifying impact. Hence the estimates are primarily seen as a guideline for the further efforts to identify possibilities of reducing negative impacts and enhancing positive impacts.

Based on recommendations from Forum for Sustainable Finance, Finance Denmark (FIDA) has successfully completed its work towards defining consistent principles and methods for measuring financed emission across a range of financial assets. This work resulted in a common CO_2 model defining calculation methods for various types of financial assets, including loans.[10] The work in Denmark is very much in line with the PCAF methods. [11] The model was developed with a view to obtaining comparability and uniform principles across financial services companies in Denmark.

Jyske Bank has opted to apply the common CO_2e model for estimation.

CO_2e estimation for bank loans is primarily based on Danish sector averages from Statistics Denmark[12]. In some cases it was possible to replace the sector average with company specific CO_2e data. In connection with mortgage loans and bank home loans, the estimates for CO_2e emission are based on the public energy ratings of the properties as well as knowledge of the individual properties (source of energy, age of the building, size, location).

For estimation of CO_2e emission for investments, MSCI data were applied to the calculations relating to equities and corporate bonds. In connection with mortgage bonds, Jyske Realkredit's CO_2e data as published in the Sustainable Transparency Template[13] were used as well as estimated CO_2e data for other Danish mortgage credit institutions based on cover pool reports and data from Statistics Denmark.

The appendix states further details of the estimation of CO_2e as well as an assessment of the quality of the CO_2e data according to the PCAF's 5-score scale.

For limited parts of the business volume, for instance where Statistics Denmark did not have figures showing an industry's CO_2e emission, it was not possible to provide CO_2e data, and therefore the business volume for these industries were omitted. This means that the business volume included in the estimation of CO_2e emission is lower (DKK 596 bn) than the overall business volume of DKK 616 bn.

When combining business volumes and the CO_2e data stated, the following estimates emerge.

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[10] https://finansdanmark.dk/media/47145/finance-denmark-co2-model.pdf
[11] PCAF = Partnership for Carbon Accounting Financials, https://carbonaccountingfinancials.com/files/downloads/PCAF-Global-GHG-Standard.pdf
[12] https://finansdanmark.dk/media/47145/finance-denmark-co2-model.pdf
[13] https://jyskerealkredit.com/sustainable-transparency-template

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Table 2: Estimated CO_2e emission for Jyske Bank's business volume

	Business volume (DKKm)	Proportion	Emission (tonne CO_2e)	Proportion	Emission intensity (tonne CO_2e per DKKm)
Loans	**417,191**	**70%**	**1,607,617**	**59%**	**3.85**
Personal Clients	197,570	33%	499,917	18%	2.53
Corporate Clients	219,621	37%	1,107,700	41%	5.04
Investment	**179,229**	**30%**	**1,097,309**	**41%**	**6.12**
Asset management	114,446	19%	914,095	34%	7.99
Investment portfolio	64,784	11%	183,214	7%	2.83
Total	**596,420**		**2,704,926**		**4.54**

The total estimated CO_2e emission amounts to about 2.7 million tonnes, of which 59% relate to loans and 41% to investments. Of which CO2e emission related to holdngs of own issuances accounts for just about 16,000 tonnes.

In connection with the investing activities, it will be relevant to focus on the activities within asset management, as these account for the largest part of the CO_2e emission relating to investment. Particularly the sectors utilities, materials and energy contribute to the emissions relating to equity investments.

Table 3 shows loans and emission intensity for personal and corporate clients broken down by product or industry.

Table 3: Estimated CO_2e for loans broken down by product (Personal Clients) or industry (Corporate Clients)

	Business volume (DKKm)	Propor-tion	Emission (tonne CO_2e)	Propor-tion	Emission intensity (tonne CO_2e per DKKm)
Personal Clients	**19,570**	**47%**	**499,917**	**31%**	**2.53**
Car loans	10,168	2%	268,014	17%	26.36
Home loans	187,402	45%	231,903	14%	1.23
Corporate Clients	**219,621**	**53%**	**1,107,700**	**69%**	**5.04**
Transport	4,316	1%	484,425	30%	112.23
Agriculture and fishing	15,934	4%	341,738	21%	21.45
Mortgage and mortgage-like loans	163,251	40%	154,357	10%	0.95
Manufacturing industry	8,502	2%	74,245	5%	8.73
Building and construction companies	2,088	1%	15,921	1%	7.62
Motor vehicle trade and repair work	3,020	1%	15,105	1%	5.00
Others	22,510	6%	21,906	2%	0.97
Total Loans	**417,191**		**1,607,617**		**3.85**

69% of the emission for the total loans relate to corporate loans and 31% to loans for personal clients (owner-occupied homes and cars). Wide fluctuations are seen in the emission intensity between the various loan purposes for the Jyske Bank Group's personal clients, and even if car loans account for a much lower proportion of the Group's loan portfolio, the emission from cars financed by the bank is on the whole higher than the emission relating to loans for owner-occupied homes. It is a common characteristic of the Group's loans for owner-occupied homes and cars that the loans are distributed on many thousands of clients. Jyske Bank offers products that support a sustainable development in the form of energy loans for energy improvements of owner-occupied homes and in the form of car loans and car leases with price differentiation according to energy rating.

Also in respect of corporate clients, there are big differences between the emission intensity of the individual industries. Hence, loans for transport account for a small part of the Jyske Bank Group's lending, yet by far the largest part of the total emission. At the statement date (end of 2019), Jyske Bank had no loans to companies that solely have activities within the extraction of oil and gas as well as mining.

With 21% of the emission, the Agriculture and fishing industry accounts for the second largest emission among the loans for corporate clients. For estimation of CO_2e emission, primarily sector averages for various levels in the industry hierarchy have been applied. For Agriculture and fishing, for instance, there is right now only a sector average at an overall level available, and therefore different types of agriculture, such as Animal Husbandry and Crop Farming are calculated on the basis of the same average. The use of these sector averages may affect the robustness of the estimates, as it is assumed, when applying the averages, that the composition of the portfolio corresponds to the general composition of the industries in Denmark.

Generally, Jyske Bank will therefore, going forward, work to enhance the data quality for emission data, among other things, by using emission data from industry associations and client data. For instance, within agriculture, SEGES has launched extensive initiatives to procure both better and more specific sector data and individual CO_2e emission data for individual farms, etc.

Mortgage loans and mortgage-like loans account for the largest proportion of the loan portfolio for corporate clients but account for the lowest emission intensity, thus accounts only for 10% of the emission.

Future activities

In this impact analysis, Jyske Bank has gained an indication of the most important impact areas and subsequently quantified one of the most important impact area, Climate, with CO_2e estimates for both loans and investments. In relation to Climate, the next step will be to identify business opportunities and activities that may contribute to a reduction of the negative impact and increase the positive impact and also to establish targets for these. This will take place in cooperation with relevant business units of Jyske Bank as well as of involvement of relevant external stakeholders and business partners. Generally, focus will be on bringing the impact analysis and the ensuing CO_2e estimates into play as a basis of decision for the business units.

Focus will still be on data quality, and efforts will be made continuously to improve the quality of data for CO_2e emission assessed, among other things, relative to the PCAF 5-step score.

The next update of the impact analysis will also focus on methods, etc. relating to investments. For one thing, it is expected that UNEP FI's "Investment Impact Tool" will be available and, for another, Jyske Bank will also focus on synergies and consistency between the various requirements of the preparation of impact analyses in the area of investment, including and not least the EU Disclosure Regulation's requirement of Transparency of adverse sustainability impacts.

Finally, the indication of Waste as an important impact area be subject to further analysis.

Appendix

Description and delimitations

The extensive business volume encompassed by the impact analysis is based on a selection criterion of whether Jyske Bank has direct access to or a direct influence on the composition of those business activities. With respect to loans, the analysis encompasses essentially the Group's lending and leasing activities (exclusive of impairment charges), including loans granted to Jyske Bank's clients by other credit institutions against Jyske Bank's guarantee.

In connection with personal clients, the analysis covers loans identified as home and car loans, where loans for home financing consist of mortgage financing and bank home loans.

Corporate loans are broken down by industry based on the Central Business Register (CVR) and the hierarchy of industries of Statistics Denmark (DB07). The hierarchy corresponds to a material extent to ISIC codes (used by the Portfolio Impact Tool).

Loans for some clients will be processed as belonging to a different industry than the one stated in the Central Business Register (CVR), if more recent and more exact industry designations are available. In connection with mortgage financing of commercial properties where no energy rating is available and financing of vehicles, reference is made to the same industry as the bank commitments.

For investments, the analysis covers the total portfolio acquired as a result of Jyske Bank's asset management activities as well as the Group's investment portfolio, yet with the exception of the Group's trading portfolios. This also includes investments made by investment associations, including not least Jyske Invest. On the other hand, this means, for instance that assets placed in Jyske Bank's advisory products and services and the clients' self-directed investments are not included in the statements, whether or not the clients' investments are in safe-keeping in custody accounts with Jyske Bank.

Investments in equities, corporate bonds and mortgage bonds are included. With respect to asset management, adjustments are made for "funds of funds" structures so that the individual actual investment

is only included once. The reporting is based on the same business volume as was included in Jyske Bank's UN PRI reporting for 2019.

In respect of ETFs, the CO_2e emission has been estimated as if Jyske Bank owned the corresponding underlying financial assets.

The part of the business volume within investing activities that has not been included consists primarily of government bonds and cash holdings, in connection with which the CO_2e calculation methods are not assessed to be fully developed.

As regards the investment portfolio, the ownership interests in Bankdata, JN Data and Jyske Bank's Wind Turbine are not included.

According to the common CO_2e model adjustments must be made for holdings of own shares, corporate bonds and mortgage bonds in the estimate of the Jyske Bank Group's total CO_2e emission in order to avoid doublecounting of own activities. In this analysis no adjustments have been made for holdings of own issuances, however the CO_2e emission related to these holdings are insignificant and account for less than 16,000 tonnes CO_2e.

On the basis of these selection criteria, the completed analysis covers a total business volume to the value of DKK 616 bn as per year-end 2019. It should be emphasized that the analysis's business volume is not directly comparable to the Group's more traditional measure of assets. The main difference is that assets managed by Jyske Bank's Portfolio Managers in relation to asset management on behalf of Jyske Bank's clients, are not included in the Group's normal asset figures. In addition, the analysis also includes certain assets managed by Jyske Bank, which are not recognised in the balance sheet, but where Jyske Bank is responsible for the overall allocation decisions, provides client advisory services, or assumes the real credit risk by providing guarantees.

When using the Portfolio Impact Tool, the country score (1-4) has a weighting of 25% per score. In other words, 1 = 25%, 2 = 50%, etc.

For estimation of the of CO_2e relating to loans from Jyske Bank, Jyske Bank has chosen to apply the method that was developed in cooperation between Danish financial institutions and Finance Denmark. The method is based on a combination of calculations based on data reported by borrowers, publicly accessible statements of CO_2e emissions and sector averages.

As regards property loans, the emission is estimated on the basis of knowledge about the energy consumption of the individual properties based on energy ratings and energy sources used. If a property has not been assigned an energy rating, the energy consumption is estimated on the basis of source of energy, age, size and location of the property.

Corporate loans: The emission is estimated on the basis of a combination of data for emissions stated by the company and sector averages for the companies for which no specific data are available. Sector averages are based on statements for 2018 from Statistics Denmark.

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Loans for the financing of private cars: As regards cars for personal clients, the emission of greenhouse gasses is estimated on the basis of a combination of knowledge of the individual means of transportation (for instance year of production and type of engine) as well as average numbers for CO_2e emissions. The estimates are based on the car model of the Danish Center for Energy and Environment (DCE). The emission relating to means of transport for corporate clients is estimated on the basis of the client's sector average.

As regards investments, for which no company data, no own estimates for mortgage bonds, nor MSCI estimates are available, multiplication has taken place so the CO_2e numbers amount to an estimate for the entire analysed investment portfolio.

For an elaboration on the calculation of the emission of CO_2e relating to loans, please see the "CO_2 model for the financial sector"[14].

Data quality for CO_2e

The data quality for the CO_2e figures has been assessed on the basis of PCAF's data quality score.[15] Table 4 below shows a weighted data score is stated for the business volume used in the analysis.

Table 4: Business volume distributed according to PCAF's 5 levels on the basis of CO_2e data quality

	Score 1	Score 2	Score 3	Score 4	Score 5	Weighted data quality score
Investments	0%	31%	0%	0%	69%	4.08
Personal Clients, home loans	0%	0%	55%	0%	45%	3.91
Personal Clients, car loans	0%	0%	100%	0%	0%	3.00
Transport	0%	17%	0%	0%	83%	4.48
Agriculture	0%	8%	0%	0%	92%	4.77
Mortgage and mortgage-like loans	1%	0%	74%	0%	25%	3.51
Manufacturing industry	0%	0%	0%	0%	100%	5.00
Building and construction	0%	0%	0%	0%	100%	5.00
Motor vehicle trade and repair work	0%	0%	0%	0%	100%	5.00
Others	0%	0%	0%	0%	100%	5.00
Total loans	<1%	<1%	56%	0%	43%	3.87
Total investments and loans	<1%	10%	39%	0%	51%	3.93

Contact

If you would like further information on Jyske Bank's impact analysis, please contact ir@jyskebank.dk

Read more about Jyske Bank's other sustainability efforts at:
https://investor.jyskebank.com/investorrelations/sustainability

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[14] https://finansdanmark.dk/media/47144/finans-danmark-co2-model.pdf
[15] https://carbonaccountingfinancials.com/files/downloads/PCAF-Global-GHG-Standard.pdf