

Oracle Financial Services Climate Change Analytics

Oracle Climate Change Analytics Cloud Service is a reporting and analytics solution that helps the financial services industry to achieve statutory compliance for climate changerelated reporting, reduce climate change-related risks, and integrate climate risk into the overall credit risk management and investment decision-making process.

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Unify your climate change reporting

In the era of multiple and overlapping reporting frameworks, use a single solution to meet all climate change statutory, financial, and management reporting requirements. Oracle Climate Change Analytics Cloud Service provides pre-built support for global standards and frameworks such as International Sustainability Standards Board (ISSB), European Sustainability Reporting Standard (ESRS) by the European Financial Reporting Advisory Group (FRAG) under the Corporate Sustainability Reporting Directive (CSRD), U.S. Securities and Exchange Commission (SEC) and Task Force on Climate-related Financial Disclosures (TCFD).

| 36 | 6.39M | 175.63K | 47.0 | 06M 1 | .1. | 94M | 307. | 40M | 31.57 |
|-----------|--------------------------|--|--------------|--------------------------------|------------------|-------------------------------|----------------------|-----------------------|----------------------------|
| mission | s Summary | | | | | GHG Savings Sum | mary | | |
| Scope | Emission Source Category | Emission Category | tCO2e (mt) | Financial Impact (in millions) | | Activity | Sub Category Type | tCO2e (mt) Fina | ncial Impact (in millions) |
| Scope 1 | Direct Emissions | Fuels | 2.71K | 10.12K | - | Avoided Emissions | Hydro | 298.78 | 1.12K |
| | | Refrigerant and Other | 295.58 | 1.10K | | Solar | 312.55 | 1.17K | |
| | | Owned Transportation | 613.30 | 2.29K | | | Wind | 308.65 | 1.15K |
| Scope 1 T | otal | | 3.62K 13.51K | | | Avoided Emissions Total | | 919.98 | 3.43K |
| Scope 2 | Indirect Emissions | District Cooling | 322.03 | 1.20K | Emissions Remova | | Direct Air Capture | 308.48 | 1.15K |
| | | Electricity | 296.38 | 1.11K | | Forest Restoration | 298.20 | 1.11K | |
| | | Heat and Steam | 299.83 | 1.12K | | | Farms | 309.03 | 1.15K |
| Scope 2 T | otal | | 918.23 | 3.43K | | Emissions Removal Te | otal | 915.70 | 3.42K |
| Scope 3 | Indirect Emissions | Capital Goods | 309.63 | 1.16K | | Purchase of Carbon Offsets | Reduction Projects | 294.48 | 1.10K |
| | | Downstream Transportation and Distribution | 299.23 | 1.12K | | | Removal Projects | 298.23 | 1.11K |
| | | End of Life Treatment of Sold Products | 318.38 | 1.19K | | Purchase of Carbon C | offsets Total | 592.70 | 2.21K |
| | | Processing of Sold Products | 301.50 | 1.13K | | Grand Total | | 2.43K | 9.06K |
| | | Business Travel | 603.95 | 2.25K | | Activity Avoid | ed Emissions 📕 Purch | ase of Carbon Offsets | Emissions Removal |
| | | Employee Commuting | 2.74K | 10.21K | | | | | |
| | | Franchises | 315.35 | 1.18K | | | | | |
| | | Fuel and Energy related activities | 3.35K | 12.49K | | | | | |
| | | Investments | 7.28K | 27.16K | | | | | |
| | | Purchased Goods and Services | 2.43K | 9.06K | - | | | | |
| | | Scope 📕 Scope 1 📕 Scope 2 📕 Scop | ie 3 | | | | | | |

Perform carbon accounting

Calculate Greenhouse Gas (GHG) emissions for your owned operations and entire value chain based on the GHG Protocol Corporate Accounting and Reporting Standard across Scope 1, 2 and 3 reporting classifications and emission categories, including Fuels, Owned Transportation, Employee Commuting, Investments etc.

Use the Emissions Calculator to confidently disclose emission numbers for your customers in the form of Financed, Facilitated, Avoided Emissions and Emissions Removal based on the Partnership for Carbon Accounting Financials (PCAF) guidelines across asset classes, including Equity, Loans, Bonds, Sovereign Debt, etc.

GHG Emissions Calculator key features:

- Out-of-the-box support for major emission factor database sources, like DEFRA, EPA, UNFCC, GHG Protocol, PCAF, IFI etc.
- An approval-based Expression Builder to view and modify formulas and logics.
- Ul screen to map relationships across emission category, activity type, measurement method, and emission factor.
- Calculate carbon intensity metrics and KPIs, like carbon footprint, weighted average carbon intensity (WACI), economic emissions intensity, production emission intensity, and consumption emission intensity.
- Calculate carbon dioxide equivalent for all greenhouse gases using global warming potential (GWP) as per assessment reports 4, 5 and 6 published by the Intergovernmental Panel on Climate Change (IPCC).
- Pre-built dashboards to visualize, analyse, and take business decisions using Oracle Analytics.
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Integrate climate risk into enterprise risk

Oracle Climate Change Analytics helps to embed climate change risk into overall enterprise risk management. The solution offers a flexible and scalable climate scoring framework to assign a climate rating at the customer account-level. This rating is computed on a mix of qualitative and quantitative variables to perform portfolio-level analytics and can easily link climate change risks and opportunities with financial impacts.

Climate Scorecard key features:

- More than 15 out-of-the-box qualitative and quantitative parameters to compute climate rating.
- Flexibility to add custom qualitative and quantitative parameters, sub-parameters.
- An interactive UI screen to configure parameter weights, slabs, thresholds, scores, and rating levels.
- Ability to configure sector, industry and customer size (Large, SME etc.) specific rule for calculation.
- Use pre-built reports for in-depth insights into the entire climate rating process with Oracle Analytics.
- Perform portfolio analytics, peer-to-peer analysis, drive future investments, and engage with customers in their journey of sustainability.

| | Customer | Climate Rating | Rating Reference | Counterparty Country Mexico | | | 2.77 | | 2.7 | |
|-----------------|--|------------------|--------------------------------|--------------------------------|-------|-------------------------------------|-------------------|---------------------------------------|----------|--|
| | Autonomy Corp plc | B1C- | Neutral | | 89.0 | | | | | |
| | The Link Towers of Paris Australia & New Zealand Banking Group Ltd. | B1C- | Neutral Moderately Positive | Brazil Australia | 85.0 | | | | | |
| | | A1C- B1C- | Moderately Positive | Australia | 75.0 | | | 22 | .54% | |
| | | | Neutral Moderately Positive | Germany | 75.0 | | | | | |
| | Turbodyne Technologies Inc. Brasil Telecom S.A. | A1C++ BC++ | Neutral | Brazil | 67.5 | | 70 | .86% | <u> </u> | |
| | Tubos de Acero de Mexico S.A. | BC++ C1C++ | Very Highly Negative | South Africa | 65.0 | | | | -5.8 | 10% |
| | Iubos de Acero de Mexico S.A. Alibaba | AC++ | Moderately Positive | Germany | 65.0 | | | 15.27% | | |
| | Alibaba Brasil Telecom Participacoes S.A. | BBC++ | Low Positive | Brazil | 57.5 | | | | | |
| | Ruffer Investment Company | BBC++ B1C++ | Low Positive Neutral | Brazil | 54.0 | | | | | |
| | Grand Total | bictt | Heutin | india | 707.0 | | | | | |
| | Rating Reference Neutral | I 📕 Moderately P | ositive 📕 Very Highly Nej | gative 🔳 Low Positive | | Rating Refe Highly N Highly P | legative 🔳 Low Po | sitive Moder ately Negative Neutra | | Very Highly Negative Very Highly Positive |
| istomers at Max | | I 📕 Moderately P | ositive 📕 Very Highly Nej | gative 📕 Low Positive | | Highly N | legative 🔳 Low Po | | | |
| istomers at Max | | I 📕 Moderately P | sitive 🔳 Very Highly Ne | gative 🔳 Low Positive | | Highly N | legative 🔳 Low Po | | | |

Use a powerful data model and advanced data visualizations

Break down informational silos and support complex business decisions for customers, products, business policies, targets, and processes with a comprehensive, flexible data model that can adapt to evolving climate change reporting requirements.

Access more than 100 pre-built, cross-jurisdictional climate change reporting disclosures, analytics, and visualizations that are continuously updated with changes to reporting standards.

Data model and visualization key features:

- Financial Services' specialised data model built on cloud to meet climate risk-specific requirements.
- Import data from various source systems, third-party vendors through APIs and file-based uploads.
- Out-of-the-box region-specific disclosures and reports (ESRS, ISSB, U.S. SEC).
- Pre-built data drill down to granular levels like legal entity, LOB, business unit, counterparty etc.
- Extract and download processed data into local machine across formats (Excel, PPT, PDF, image etc.).

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Ensure data quality

Gather and consume high-quality data for processing purposes. The solution provides more than 300 pre-built data quality checks to improve processing capabilities.

Data quality check key features:

- Perform data quality checks at staging area to ensure high quality data is used for processing.
- Out-of-the-box single column checks across various domains like range, null value, duplicate, list of values, column reference, referential integrity, data length etc.
- Calculate, assign data quality score (incl. PCAF data quality score) based on the type of activity / transaction data and customer's emissions data.
- Expandable data quality framework with user-defined single column and multi-column checks.
- Analyse, compare, and take corrective actions based on pre-built visualizations on data quality score.

Establish climate risk data governance

Climate Change Analytics Cloud Service streamlines the carbon accounting management and reporting process. Its automated workflows and audit trails support governance from data capture to reporting.

Data governance key features:

- User-access based control mechanism for defining and modifying climate rating methodologies, emission formulas, and other alterations to the pre-built setup.
- View and analyze methodology used for estimation, deriving emission factors, and generating data quality scores from PCAF.
- Obtain complete audit trail for all areas of operations across users, comments, and timestamp.



Key business benefits

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