REPORT

DIB Sustainable Sukuk Impact Assessment Methodology

For eligible sustainability assets under the DIB Sustainability Finance Framework.

December 2023

The Carbon Trust's mission is to accelerate the move to a decarbonised future.

Authors:

Pietro Rocco
Head of Sustainable Finance
pietro.rocco@carbontrust.com

Toby Kwan
Senior Manager, Sustainable Finance
toby.kwan@carbontrust.com

Marc Mohajer
Associate, Sustainable Finance
marc.mohajer@carbontrust.com

Maria Fernanda Velez
Associate, Sustainable Finance
maria.fernandavelez@carbontrust.com

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Abbreviations

DIB	Dubai Islamic Bank
GBP	Green Bond Principles
GLP	Green Loan Principles
PCAF	Partnership for Carbon Accounting Financials
IFI	International Financial Institutions Working Group on Greenhouse Gas Accounting
SDG	Sustainable Development Goals
LED	Light Emitting Diodes
DCS	District Cooling Systems
HVAC	Heating, Ventilation and Air Conditioning
ICE	Internal Combustion Engines
UAE	United Arab Emirates

Introduction

Who we are

The Carbon Trust's mission is to accelerate the move to a decarbonised future. We are an expert guide to turn your climate ambition into impact. We have been climate pioneers for over 20 years, partnering with leading businesses, governments, and financial institutions to drive positive climate action. To date, our 400+ experts globally have helped set over 200 science-based targets and guided 3,000+ organisations and cities across five continents on their route to Net Zero.

DIB Sustainability Sukuk Overview

Aligned with international and country-specific sustainability initiatives, Dubai Islamic Bank ("**DIB**") is intending to issue green, social or sustainability sukuks and other financing instruments ("**Sustainable Financing Instruments**") to finance and / or refinance loans that meet the requirements as described in the DIB Sustainable Finance Framework ("**Framework**")[1]. The objective of the Framework, and subsequent Sustainable Financing issued from it, is to fund Sustainable Projects that conform to the sustainable finance principles listed below:

- the International Capital Market Association ("**ICMA**") Green Bond Principles ("**GBPs**") 2021, Social Bond Principles ("SBPs") 2021 and Sustainability Bond Guidelines ("**SBGs**") 2021; and/or
- the Loan Market Association ("**LMA**") Green Loan Principles ("**GLPs**") 2021 and Social Loan Principles ("**SLPs**") 2021.

The Framework has received a Second Party Opinion from ISS ESG[2].

The GBP, SBP, SBG, GLP and SLP (the "**Principles**") are a set of voluntary guidelines that recommend transparency and disclosure, and promote integrity in the development of the sustainable finance market by clarifying the approach for issuing sustainable instruments. The Framework therefore has four key components for each sustainable issuance, which DIB asserts that it will adopt:

1. Use of Proceeds,
2. Process for Project Evaluation and Selection,
3. Management of Proceeds, and,
4. Reporting.

DIB, at its discretion but in accordance with the Principles, will allocate an amount at least equivalent to the net proceeds of the Sustainable Financing Instruments in whole or in part to eligible sustainable projects which meet the eligibility criteria ("**Sustainable Finance Register**" or "Register"). The

[1] DIB Sustainable Finance Framework

[2] DIB Second Party Opinion

Sustainable Finance Register is to be financed and/or refinanced in whole or in part by an allocation of the issuance proceeds. The Eligible Green Project Categories Register includes:

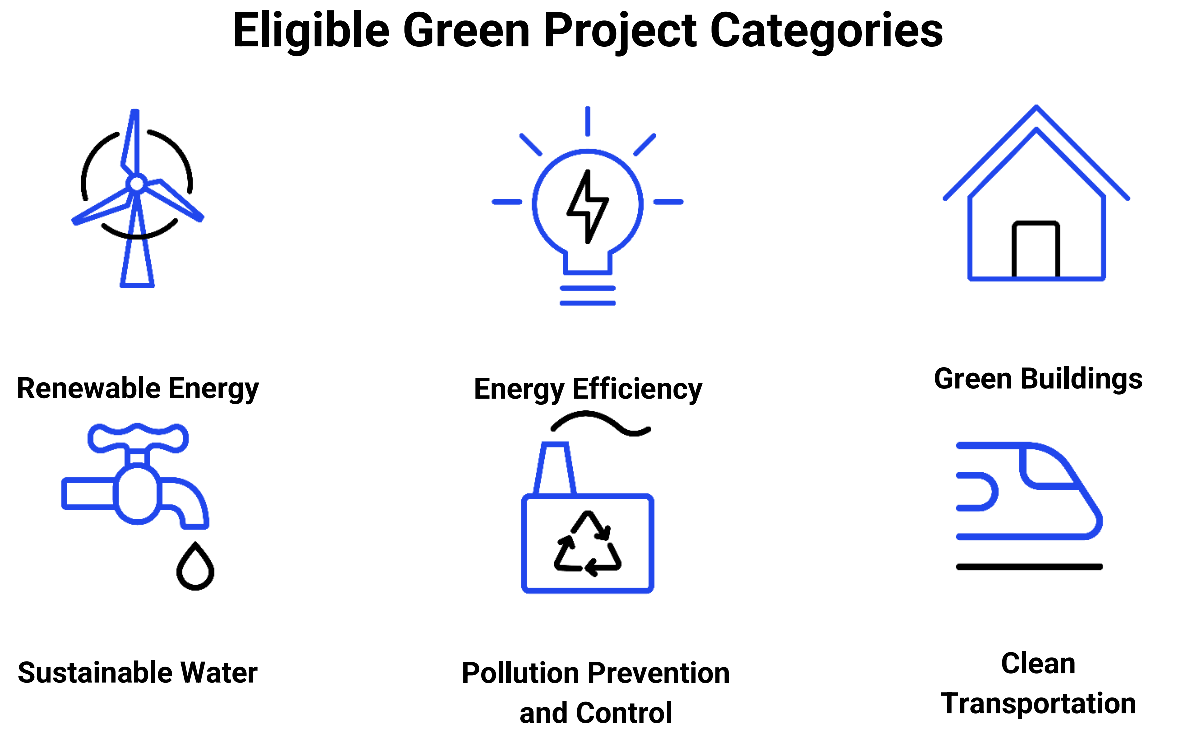

Figure 1: Eligible Green Project Categories

Reporting Principles

Reporting of the environmental impacts of green bonds is evolving and is still a relatively new concept. However, the Carbon Trust is committed to reporting on the method used to calculate the avoided GHG emissions based on:

- PCAF's The Global GHG Accounting and Reporting Standard for the Financial Industry (November 2020), Chapter 5.3 Project Finance[3],
- Climate Bonds Standard V3.0[4]
- IFI GHG Accounting for Grid Connected Renewable Energy Projects (July 2019),
- Green Loan Principles (Feb 2021),
- Green Bond Principles, Voluntary Process Guidelines for Issuing Green Bonds (2021), and,
- ICMA Harmonised Framework for Impact Reporting (2023)[5].
- WBCSD Guidance on Avoided Emissions[6]

[3] The Global GHG Accounting and Reporting Standard for the Financial Industry (Dec 2022)

[4] Climate Bonds Standard V3.0 | Climate Bonds Initiative

[5] Handbook Harmonised framework for impact reporting (June 2023)

[6] WBCSD Guidance on Avoided Emissions (Mar 2023)

DIB follows the key recommendations outlined in the Principles, with external reviewers present across their reporting process. In addition, DIB is committed to reporting greenhouse gas emissions in accordance with the five principles contained within the Greenhouse Gas Protocol, namely: relevance, completeness, consistency, transparency, and accuracy. DIB further commits to transparent disclosure of any assumptions and estimations used in the calculation of its reporting framework.

Scope of Calculations and Reporting

DIB intends to report the expected or actual quantitative environmental impact of the Sustainability Projects it finances or co-finances through its sustainable finance issuance. The reporting includes the reduction or avoidance of greenhouse gases ("**GHGs**") estimated to have occurred from its sustainability holdings. DIB also evaluates other indicators that are appropriate to report for environmental impact and performance, such as energy generation figures by type of technology.

DIB undertakes to report the environmental impact of projects it finances or co-finances through its sustainable finance issuances based, where possible, on the actual environmental performance of the asset. Where this is not possible, expected performance is used. The reporting includes both green indicators and resulting emissions reductions or avoidance, both of which require assumptions and calculations. The reporting is based on the net benefit resulting from the asset in a given period of operation, rather than the gross emissions change before or after the life of the asset or project.

Calculations include project-by-project impacts, as well as aggregated results across the portfolio of assets financed or co-financed with the proceeds of DIB sustainable financing. Environmental indicators are attributed to DIB on a project-by-project basis, based on the current percentage share financed (where applicable) and disbursed by the bank. The reporting is undertaken on an annual basis, covering the previous 12-month period and considers any dynamic changes in the assets financed or co-financed that occur from one reporting period to another. As this is the first year of reporting, this impact assessment includes a 3-year look-back period. In accordance with the principles of reporting described above, DIB has and continues to commit to transparent disclosure of any assumptions and estimations used in the calculation of its reporting framework.

Avoided Emissions

Avoided emissions form a core component of the impact assessment. It provides an insight into the wider positive impact in the form of GHG emissions avoided or reduced as a result of the product and/or services in comparison to a base reference scenario. Existing as a subsection of avoided emissions, this assessment will also consider the enablement from a solution (product/service) and whether that allows for the same or similar function to be performed with significantly less GHG emissions. By providing these solutions, companies enable avoided emissions in the wider system, outside of their value chain. Avoided emissions, along with the entire impact assessment will be calculated on a year-by-year basis.

At the core of the avoided emissions assessment, is the reference scenario. This portion of the assessment looks to understand the context of the investment and what is directly being replaced/reduced as a result of the investment. The reference scenario must be a credible alternative to reflect the reality of the region. Where avoided emissions are calculated, the reference scenario will be described in each of the relevant sector methodology sections. This is summarised in the graph and equation below:

$$\textbf{Avoided emissions} = \sum \textit{Reference Scenario Emissions} - \textit{Solution Emissions}$$

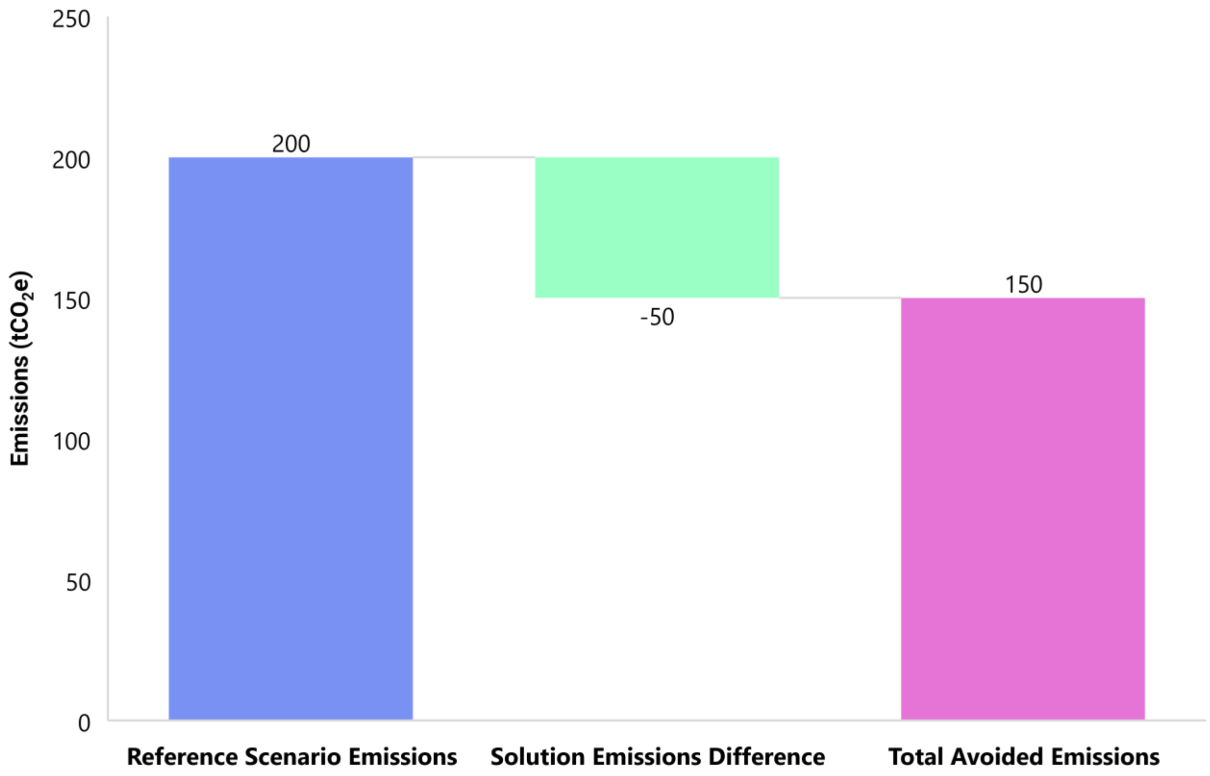

Figure 2 - Avoided emissions calculation example

DIB Financed Emissions and Attribution

When carrying out the impact assessment, an attribution factor was applied to all assets in line with PCAF's methodology. This factor helps understand the share of DIBs exposure and contribution to the impact of the project. In the case of investments made via DIBs subsidiaries and owned entities, including joint ventures entered into by its subsidiaries, only the issuer's share of the investments will be applicable as an allocation to the eligible projects.

$$\textbf{Financed Emissions} = \textit{Attribution Factor} \times \textit{Project Emissions}$$

In the process of considering investments for allocation under the Sustainable Financing Instruments, DIB will discount the portion of the Eligible Sustainable Projects that have been disbursed by one or several other issuers.

The calculation of the attribution of emissions and avoidance takes the outstanding investment amount and divides it against the total project value. This is summarised in the equation below:

$$\textbf{Attribution Factor} = \frac{\textit{DIB Outstanding Investment Amount}}{\textit{Total Project Value}}$$

Methodology

The following section breaks down the methodologies used to calculate the impact of each eligible category included within the assessment. The assessment looks to calculate the impact of DIBs investments between the timeframe of September 2022 to September 2023.

In line with the ICMA Harmonised Framework for Impact Reporting[7], the impact assessment will consist of both a qualitative and quantitative assessment. Where possible, a qualitative assessment will accompany the qualitative calculations detailed below. Many of the projects included within DIB's Register are currently under construction; to that end, some client information is not yet available to make the calculation on the respective impact metrics. In these cases, a qualitative assessment was carried out around the expected regional benefits of the technologies that are being invested in.

Renewable Energy

As disclosed within the Framework, DIB has committed to investing in renewable energy assets in the production, transmission and storage of energy from the following renewable sources:

- Solar (PV and Concentrated Solar Power with a minimum of 85% power generation derived from solar sources),
- Wind energy (including onshore and offshore),
- Biofuels produced from waste sources, such as used cooking oil, and,
- Biomass from sustainable feedstock only.

Projects related to production of green hydrogen projects (including either hydrogen produced (a) under a GHG emissions threshold of 3 tCO_2e / tH_2 OR (b) by electrolysis powered using 100% wind and/or solar power) with, storage and distribution and R&D.

This category is designed to be aligned to the Sustainable Development Goal ("**SDG**") 7, Affordable and Clean Energy, with a particular focus on achieving the goal of "By 2030, increase substantially the share of renewable energy in the global energy mix".

The resulting metrics that will be included in the assessment where applicable are:

- Capacity of renewable energy plant(s) constructed or rehabilitated in (MW)
- Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy)
- Avoided emissions (tCO_2e)

Solar PV and Wind Energy Impact Methodology

Renewable energy generation is a low GHG emissions energy source and has an environmental benefit in replacing energy generated from fossil fuel-based power generation. Energy generated from renewable sources reduces the demand for fossil fuel sources and therefore reduces emissions of

[7] Handbook Harmonised framework for impact reporting (June 2023)

greenhouse gases into the atmosphere. In an electricity grid, renewable generation will displace fossil fuel sources and reduce the emissions intensity of the electricity grid.

For wind and solar PV assets, the actual (or estimated) energy generation was multiplied by a consolidated country-specific electricity emissions factor for the relevant country grid electricity mix. In line with PCAF recommendations, the Operating Margin ("**OM**") was used as the emission factor. The OM represents the marginal generating capacity in the existing dispatch hierarchy that will most likely be displaced by the project. The full dataset for the OM emissions factors is published by IFI AHG-001[8]. This approach was undertaken instead of using the IFI combined margin as the OM provided the best outlook on which operations would most be affected, and ultimately which technologies were most likely to have been reduced over a year. The emissions associated with RE are calculated based on the actual energy generation/export from the facility, multiplied by the emission factor for energy generation.

The equation for estimating the avoided emissions from RE can be seen below (where "i" is half hours from 1 – 17,520 for the measurement year):

$$\begin{aligned}\boldsymbol{Avoided\ emissions\ (tCO_2)} &= \left(\sum_{i=1}^{n} Generation\ (MWh)_i \times Renewable\ Energy\ Specific\ Emission\ Factor\right) \\ &- \left(\sum_{i=1}^{n} Generation\ (MWh)_i \times UAE\ Grid\ Operating\ Margin\ Carbon\ Intensity\right)\end{aligned}$$

All qualifying assets began operation in years dating prior to the base year (2023) and therefore were operating and generating energy during the reporting period. Assets that are not yet operational are reported on separately within the assessment to highlight future potential impacts. For each asset, DIBs portfolio companies provided the energy generation in the given year through actual generation figures on a half-hourly, monthly or annual basis. Where actual data is unavailable, P50 estimates are to be used. P50 estimates are a reasonable estimate in statistical modelling of energy generation and are commonly used in the evaluation of renewable energy assets. Where actual generation or suitable estimates were not available, average load factors were used to estimate generation based on the capacity of the projects.

Energy Efficiency

DIB has committed to invest in projects that reduce energy consumption by at least 20% compared to the average of national energy consumption of an equivalent project or technology, such as:

- District cooling systems,
- Upgrade in grid infrastructure to improve electricity transmission efficiency and reduce transmission losses, and

[8] Renewable Energy GHG accounting approach

- Investment in smart energy grids, energy meters, management systems and battery storage facilities

For the avoidance of doubt, improvement activities that result in the lock in of fossil fuel technologies will be excluded.

This category is designed to be aligned with SDG 7, Affordable and Clean Energy. With a particular focus on achieving the goal of "By 2030, double the global rate of improvement in energy efficiency".

Where applicable, the metrics produced through the assessment include:

- Annual energy savings in MWh (electricity) and GJ/TJ (other energy savings);
- Number and breakdown by type of energy-efficient technologies and products installed;
- Avoided emissions (tCO_2e).

District Cooling Impact Calculation

As a community-focused product, district cooling systems ("**DCS**") create a network of pipes to cool buildings across a neighbourhood or region. DCS typically provides significantly higher energy efficiency by providing greater flexibility of cooling generation over time, reducing electricity usage compared to air conditioning systems. The implementation of district cooling is anticipated to be a direct replacement to conventional air conditioning units which are used to cool individual units.

To calculate the emissions associated with DCS, the energy consumption required was multiplied against the consolidated country-specific EF. For the baseline, the energy consumption required to produce the equivalent amount of refrigeration for a conventional air conditioning unit was multiplied against the consolidated country-specific EF. The equation for estimating the energy saved and avoided emissions from district cooling can be seen below (where "i" is half hours from 1 – 17,520 for the measurement year):

$$\begin{aligned}\boldsymbol{Avoided\ emissions}\ (\boldsymbol{tCO_2}) &= \left(\sum_{i=1}^{n} District\ Cooling\ Electricity\ Consumption\ (MWh)_i \times UAE\ Grid\ Emission\ Factor\right) \\ &- \left(\sum_{i=1}^{n} Equivalent\ A/C\ \ Refrigerant\ Electricity\ Consumption\ (MWh)_i \times\ UAE\ Grid\ Emission\ Factor\right)\end{aligned}$$

Based on the Refrigeration Tonnage of the DCS, the consumption was determined against the equivalent tonnage of an individual unit. As a close comparison in geography and system, the data was sourced from a study carried out for the Government of Dubai. The data can be seen in Table 2: District Cooling Efficiency.

Green Buildings

Investment in new or existing commercial or residential buildings that belong to the top 15% in terms of energy efficiency of their local market or have received, or expect to receive based on its design, construction and operational plans, certification according to third-party verified green building standards, such as:

- LEED “Gold” or above
- BREEAM “Excellent” or above
- Estidama Pearl Building Rating System (4 Pearl and above)
- Global Sustainability Assessment System (GSAS) “4 star” or above

This category is designed to be aligned with SDG 11, Sustainable Cities and Communities. With a particular focus on achieving the goal of “By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums”.

Where applicable, the metrics produced through the assessment include:

- Level of certification by property
- Energy efficiency gains in MWh or % vs. baseline
- Annual energy savings (MWh pa)

Green Buildings Impact Calculation

With expected lifetimes of around 100 years, there is significant importance around the sustainable credential related to new and existing building stock, ensuring that high-carbon reliance is not locked in. To assess the impact of DIBs investments in Green Buildings, the Sustainable Finance Register was assessed on a parcel-by-parcel basis. The boundary of the carbon emissions assessment includes the carbon emissions associated with the electricity and fossil fuel (e.g., oil, natural gas) used in the property on an annual basis. With all properties meeting LEED Gold standards, property certification was used as the proxy for this information. Data was provided per parcel from the representative portfolio companies as the total expected energy consumption, the total gross floor area and a breakdown in floor area by property type as a percentage.

The identified baseline is the annual carbon emissions of the average property type for the equivalent floor area, in the relevant geography. This aligns with the approach used in the green bond market for assessing the impact of green bonds that are financing/ refinancing residential and commercial properties. The specific approaches for respective baseline calculations and proxy data are given below.

$$\boldsymbol{Avoided\ emissions}\ (\boldsymbol{tCO_2}) = \sum (Total\ Parcel\ Energy\ Consumption\ (kWh) \times UAE\ Grid\ Emissions\ Factor) - \sum (Property\ Type\ Average\ Estimated\ \ Use\ Intensity\ (kWh\ per\ m^2) \times Property\ Type\ Floor\ Area\ \times UAE\ Grid\ Emissions\ Factor\ )$$

The property type estimated energy use intensities were sourced from a variety of scientific journals, the full list of emissions factors can be found in Table 3: United Arab Emirates Building Emissions Factors. Properties within projects where no floor area or energy consumption data available were excluded from the assessment.

Clean Transportation

DIB Financing related to electric and low carbon vehicles and associated infrastructure for public, passenger and freight transportation, including auto financing programs, including:

- Non-electric vehicles will meet the following criteria:
  a. passenger cars and public rail transportation (under 75gCO_2/p-km up to 2020, and 50gCO_2/p-km thereafter up till 2030);
  b. freight transportation (under 25gCO2/t-km up till 2030, 21gCO2/t-km from 2030 up to 2050)

Projects supporting the deployment of electric vehicles including charging infrastructure.

This category is designed to be aligned with SDG 11, Sustainable Cities and Communities. With a particular focus on achieving the goal of "By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons".

Where applicable, the metrics produced through the assessment include:

- Number and type of clean transportation infrastructure built,
- Number of EVs produced,
- Number of users,
- Renewable energy production (MWh), and
- Avoided emissions (tCO_2e).

Battery Electric Vehicles Impact Calculation

The baseline comparison is the equivalent distance travelled but through an internal combustion engine ("**ICE**") as seen in the equation below:

$$\boldsymbol{Avoided\ emissions\ (tCO_2)} = \sum(\text{EV Vehicle Specific Efficiency (kWh per km)} \times \text{Distance Travelled per Annum (km)} \times \text{UAE Grid Emissions Factor}) - \sum(\text{ICE Vehicle Fuel Efficiency (CO}_2\text{ per km)} \times \text{Distance Travelled per Annum (km)})$$

The make and model of each vehicle was provided by DIBs relevant portfolio companies. Using this information, CT carried out desktop research to determine the average distance driven within UAE per annum along with the average ICE vehicle fuel efficiency for the country. A summary of the emissions factors used can be seen in Appendix: Clean Transportation.

Hybrid Vehicles Impact Calculation

The baseline comparison is the equivalent distance travelled but through an internal combustion engine ("**ICE**") as seen in the equation below:

$$\begin{aligned}\boldsymbol{Avoided\ emissions}\ (\boldsymbol{tCO_2})\\ &= \sum(\text{Hybrid Vehicle Specific Emissions (gCO}_2\text{ per km)}\\ &\times \text{Distance Travelled per Annum (km)} \times \text{UAE Grid Emissions Factor)}\\ &- \sum(\text{ICE Vehicle Fuel Efficiency (gCO}_2\text{ per km)}\\ &\times \text{Distance Travelled per Annum (km))}\end{aligned}$$

The make and model of each vehicle was provided by DIBs relevant portfolio companies. Using this information, CT carried out desktop research to determine the average distance driven within UAE per annum along with the average ICE vehicle fuel efficiency for the country. For the vehicles where only the make and fuel type were available, an average emission factor was created combining make and fuel type from DIB's pool to attribute it to the vehicle with missing data.

A summary of the emissions factors used can be seen in Appendix: Clean Transportation.

Appendix

Appendix: United Arab Emirates Grid Electricity

Table 1: Grid Emissions Factor

Emissions Factor	Value	Unit	Source
UAE Grid Emissions Factor	528.5	kgCO_2e/MWh	IEA Emissions Factor
UAE Operating Margin	556.5	kgCO_2e/MWh	Harmonized_IFI_Default_Grid_Factors_2021_v3.2_0

Appendix: Energy Efficiency

Table 2: District Cooling Efficiency

Conversion Factors	Value	Unit	Source
TR to kWh	3.52	Standard Unit	
Hours in a day	4,380	Standard Unit	
Energy efficiency of district cooling	0.92	kw/TR	Cooling in Dubai: A Market Share and Efficiency Study (rsbdubai.gov.ae)
Cooling systems weighted average energy efficiency	1.51	kw/TR	Cooling in Dubai: A Market Share and Efficiency Study (rsbdubai.gov.ae)

Appendix: Green Buildings

Table 3: United Arab Emirates Building Emissions Factors

Property Type	Value (kWh/m2)	Source	Comments
Office	257.1	Sustainability | Free Full-Text | Impact of Human Actions on Building Energy Performance: A Case Study in the United Arab Emirates (UAE) (mdpi.com)	
Retail	274.4	1901010-BEA-Report-Final-2.pdf (emiratesgbc.org)	59% of the consumption of a mall was estimated to be for a tenant
Hotel	252.0	Benchmarking Program | EmiratesGBC	Median hotel in Dubai
Entertainment/ Cultural	82.8	The Non-Domestic National Energy Efficiency Data-Framework 2022 (England and Wales) (publishing.service.gov.uk)	As no data for entertainment was available, the increase in emissions use intensity between offices and entertainment in the UK was used as an estimate of the value (19/59=0.32)

Appendix: Clean Transportation

Table 4: General Emissions Factors

Emissions Factor	Value	Unit	Source
UEA Average ICE Vehicle Emissions Factor	186.21	gCO_2e/km	Electric cars & pollution: facts and figures | Virta
United Arab Emirates Average BEV Emission Factor	188.85	Wh/km	Average from DIB database
UEA Average Distance Travelled per Annum	23,500	km	How do used cars fare by mileage in UAE? - Offbeat - Emirates24|7 (emirates247.com)

Table 5: EV Specific Emissions Factor

Vehicle make and model	Vehicle fuel efficiency make and model	Fuel Type	Fuel efficiency	Unit	Source
Audi	Audi E Tron GT	Audi e-tron GT quattro	Electric	203.19	Wh/km
Audi	Audi ETRON S B 55	Audi SQ8 e-tron Sportback	Electric	219.34	Wh/km
Audi	Audi QUATTRO 350 KW	Audi Q8 e-tron 50 quattro	Electric	212.51	Wh/km
BMW	BMW I4	BMW I4	Electric	263.16	Wh/km
BMW	BMW I4 M50I	BMW i4 M50	Electric	178.95	Wh/km
BMW	BMW I7	BMW i7 xDrive60	Electric	200.70	Wh/km
BMW	BMW I7 60I	BMW i7 xDrive60	Electric	200.70	Wh/km
BMW	BMW IX	BMW IX 50	Electric	207.54	Wh/km
BMW	BMW IX 40	BMW iX xDrive 40	Electric	200.70	Wh/km
BMW	BMW IX 40I	BMW iX xDrive 40	Electric	200.70	Wh/km
BMW	BMW IX 50	BMW iX xDrive 50	Electric	207.54	Wh/km
BMW	BMW IX Drive50 SPORT	BMW iX xDrive 50	Electric	207.54	Wh/km
BMW	BMW IX XDRIVE40	BMW iX xDrive 40	Electric	200.70	Wh/km
BMW	BMW IX XDrive40 Sport Suit	BMW iX xDrive 40	Electric	200.70	Wh/km

BMW	BMW IX XDRIVE40 Sport Suite	BMW iX xDrive 40	Electric	200.70	Wh/km
BMW	BMW IX XDRIVE50	BMW iX xDrive 50	Electric	207.54	Wh/km
BMW	BMW IX1	BMW iX1 eDrive20	Electric	167.77	Wh/km
BMW	BMW IX3	BMW iX3	Electric	191.38	Wh/km
BYD	BYD ATTO3	BYD ATTO 3	Electric	183.30	Wh/km
BYD	BYD DOLPHIN	BYD DOLPHIN 60.4 kWh	Electric	178.95	Wh/km
DAMANI	DAMANI DMV 300		Electric		Wh/km
Ford	Ford MUSTANG MACH E	Ford Mustang Mach-E GT	Electric	213.13	Wh/km
Honda	Honda ENP1		Electric		Wh/km
Honda	Honda ENS1		Electric		Wh/km
Hongqi	Hongqi EHS9 FLAGSHIP	Hongqi E-HS9 84 kWh	Electric	239.00	Wh/km
Hyundau	Hyundau IONIQ 5 EV	Premium	Electric	170.00	Wh/km
Maserati	Maserati GRECALE GT HYBRID	Maserati Grecale Folgore	Electric	236.12	Wh/km
Maserati	Maserati GRECALE GY HYBRID	Maserati Grecale Folgore	Electric	236.12	Wh/km
Mercedes	Mercedes Benz EQA	EQA Model Year 2024 - EQA 250	Electric	154.00	Wh/km
Mercedes	Mercedes Benz EQA 250	EQA Model Year 2024 - EQA 250	Electric	154.00	Wh/km

Mercedes	Mercedes Benz EQA-350 4M	EQA 350 4MATIC	Electric	174.00	Wh/km
Mercedes	Mercedes Benz EQB	EQB Model Year 2023 - EQB 350 4MATIC	Electric	181.00	Wh/km
Mercedes	Mercedes Benz EQB 350	EQB Model Year 2023 - EQB 350 4MATIC	Electric	181.00	Wh/km
Mercedes	Mercedes Benz EQC	EQC Model Year 2023 - EQC 400 4MATIC	Electric	213.00	Wh/km
Mercedes	Mercedes Benz EQC 400	EQC Model Year 2023 - EQC 400 4MATIC	Electric	213.00	Wh/km
Mercedes	Mercedes Benz EQE	EQE Model Year 2023 - EQE 300	Electric	160.00	Wh/km
Mercedes	Mercedes Benz EQE 300	EQE Model Year 2023 - EQE 300	Electric	160.00	Wh/km
Mercedes	Mercedes Benz EQE 350	EQE Model Year 2023 - EQE 350	Electric	165.00	Wh/km
Mercedes	Mercedes Benz EQE 350 PLUS	EQE Model Year 2023 - EQE 350	Electric	165.00	Wh/km
Mercedes	Mercedes Benz EQE350	EQE Model Year 2023 - EQE 350	Electric	165.00	Wh/km
Mercedes	Mercedes Benz EQS 580	Mercedes EQS SUV 450 4MATIC	Electric	224.32	Wh/km
Mercedes	Mercedes Benz EQS580 4M	Mercedes EQS SUV 450 4MATIC	Electric	224.32	Wh/km
MG	MG ZS EV	MG ZS ev 115kW 71kWh 2021MY -SE long range	Electric	178.00	Wh/km
Peugeot	Peugeot 2008 EV	Electric 54 kWh (VL)	Electric	142.00	Wh/km
Peugeot	Peugeot E - EXPERT VAN L3	Peugeot e-Expert Combi Standard 75 kWh	Electric	257.00	Wh/km
Polestar	Polestar Polestar 2	Polestar 2 Standard Range Single Motor	Electric	165.00	Wh/km

Porsche	Porsche TAYCAN		Electric	169.00	Wh/km
Porsche	Porsche Taycan 4S		Electric	171.00	Wh/km
Porsche	Porsche Taycan Cross Turismo	4S Cross Turino	Electric	190.00	Wh/km
Porsche	Porsche Taycan GTS		Electric	186.00	Wh/km
Porsche	Porsche Taycan Turbo		Electric	188.00	Wh/km
Rabdan	Rabdan RABDAN ONE		Electric		Wh/km
Skywell	Skywell		Electric		Wh/km
Skywell	Skywell ET5		Electric		Wh/km
Tesla	Tesla Model 3		Electric	137.32	Wh/km
Tesla	Tesla Model 3 long range		Electric	147.89	Wh/km
Tesla	Tesla Model 3 Performance		Electric	165.00	Wh/km
Tesla	Tesla Model S	(Sb1D)	Electric	175.00	Wh/km
Tesla	Tesla Model X	(Xb1D)	Electric	191.00	Wh/km
Tesla	Tesla Model Y		Electric	165.91	Wh/km
Tesla	Tesla Model Y Long Range		Electric	169.00	Wh/km
Tesla	Tesla Model Y long Range Dual Motor		Electric	169.00	Wh/km

Toyota	Toyota BZ4X		Electric	189.52	Wh/km
Volkswagen	Volkswagen ID3	ID.3 Pro	Electric	166.00	Wh/km
Volkswagen	Volkswagen ID4	ID.4 Pro	Electric	177.00	Wh/km
Volkswagen	Volkswagen ID4 CROZZ		Electric		Wh/km
Volkswagen	Volkswagen ID4 CROZZ PRO		Electric		Wh/km
Volkswagen	Volkswagen ID4 CROZZ PURE		Electric		Wh/km
Volkswagen	Volkswagen ID4 PRO	ID.4 Pro	Electric	177.00	Wh/km
Volkswagen	Volkswagen ID4 pure plus	ID.4 Pure	Electric	182.00	Wh/km
Volkswagen	Volkswagen ID6		Electric		Wh/km
Volkswagen	Volkswagen ID6 CROZZ		Electric		Wh/km
Volkswagen	Volkswagen ID6 CROZZ PRO		Electric		Wh/km
Volkswagen	Volkswagen ID6 PRIME		Electric		Wh/km
Volkswagen	Volkswagen ID6 PRO		Electric		Wh/km
Volkswagen	Volkswagen ID6 PRO LITE		Electric		Wh/km
Volkswagen	Volkswagen ID6 X PRO		Electric		Wh/km
Volvo	Volvo C40	Recharge Core	Electric	193.00	Wh/km

Volvo	Volvo XC40	Recharge Core	Electric	185.00	Wh/km

Table 6: Average Emission Factors by Make and Fuel Type

Vehicle make	Fuel Type	Vehicle make and fuel type	Fuel efficiency	Unit
Audi	Electric	Audi Electric	211.68	Wh/km
BMW	Electric	BMW Electric	202.42	Wh/km
BYD	Electric	BYD Electric	181.13	Wh/km
DAMANI	Electric	DAMANI Electric	-	Wh/km
Ford	Electric	Ford Electric	213.13	Wh/km
Honda	Electric	Honda Electric	-	Wh/km
Hongqi	Electric	Hongqi Electric	239.00	Wh/km
Hyundau	Electric	Hyundau Electric	170.00	Wh/km
Jeep	Electric	Jeep Electric	-	Wh/km
Lexus	Electric	Lexus Electric	-	Wh/km
Maserati	Electric	Maserati Electric	236.12	Wh/km
Mercedes Benz	Electric	Mercedes Benz Electric	-	Wh/km
MG	Electric	MG Electric	178.00	Wh/km
Peugeot	Electric	Peugeot Electric	199.50	Wh/km

Polestar	Electric	Polestar Electric	165.00	Wh/km
Porsche	Electric	Porsche Electric	180.80	Wh/km
Rabdan	Electric	Rabdan Electric	-	Wh/km
Skywell	Electric	Skywell Electric	-	Wh/km
Suzuki	Electric	Suzuki Electric	-	Wh/km
Tesla	Electric	Tesla Electric	165.01	Wh/km
Toyota	Electric	Toyota Electric	189.52	Wh/km
Volkswagen	Electric	Volkswagen Electric	175.50	Wh/km

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+44 (0) 20 7170 7000

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