

2023 Sustainability Report Energy and Emissions Methodology

30 June 2023

TABLE OF CONTENTS

Introduction	3
Energy and emissions data	3
Energy, scope 1 and scope 2 emissions	3
Scope 3 emissions	9
References	11

Introduction

Downer has prepared selected energy and emissions metrics in accordance with the methodologies set out in this document.

Energy and emissions data

Energy, scope 1 and scope 2 emissions

Downer has prepared the 2023 Sustainability Report data in accordance with the broad principles for reporting energy, Scope 1 and Scope 2 emissions, as set out in the Australian *National Greenhouse and Energy Reporting Act 2007*¹

Energy, Scope 1 and Scope 2 emissions data reported in this year's Sustainability Report includes data from operational control sites. We have used actual data with estimates made for contractors and suppliers where data was unavailable, as consistent with previous years.

Downer has used the Envizi environmental data management system for the whole of the Group.

Defining the Corporate Group

Downer reports energy consumed, energy produced and Scope 1 and Scope 2 emissions from its Corporate Group for the annual Sustainability Report and the annual NGER Report (Australian sites only).

The controlling corporation's group is defined using the NGER Act definition and this definition has been adopted and applied across all the countries in which Downer operated. Section 8(1) of the NGER Act defines the controlling corporation's group as comprising:

- the controlling corporation;
- the controlling corporation's subsidiaries covered by subsection (3) (if any);
- the joint ventures covered by subsection (4) (if any); and
- the partnerships covered by subsection (5) (if any).

Only those group members with operational control over facilities for at least part of the financial year need to be included – these are defined as 'affected Group Members'. During FY23, Downer sold portions of the Infrastructure Projects Business Unit, linked with the Downer EDI Works Pty Ltd entity. As per the Clean Energy Regulator's Supplementary Guideline: Acquisitions, disposals and mergers: treatment of change in ownership of a group member, Downer will report the Group Member's data for the period until 20 June 2023. This is because no entity was divested as part of the sale, rather, the sale represented a transfer of contracts that were bundled by the purchaser, Gamuda, into a new standalone business, DT Infrastructure Pty Ltd.

Downer has undertaken a rigorous process to identify the affected Group Members which have operational control over facilities as defined by the NGER Act. The list of facilities included in each year's energy and GHG inventory has been reviewed by Downer Business Units to identify and confirm all operational control facilities and joint ventures for Sustainability and NGER reporting purposes.

Boundaries for the following Business Units, include Downer, Contractors, Joint Ventures and Scope 3 data: Asset & Development Services, Corporate, Downer Defence, Infrastructure Projects, Utilities, Roads Services, Facilities & Asset Services, Rail & Transit Systems, Mineral Technologies, New Zealand (Including Spotless NZ and Hawkins).

¹ *National Greenhouse and Energy Reporting Act 2007*, as amended, Compilation No. 23, effective 12 April 2023

Identification of Covered Energy and GHG Emissions

Downer has included energy and GHG emissions sources for the 2023 Sustainability Report and these are described in this section.

Energy consumption and emissions from the combustion of fuels.

- any energy consumed including electricity and energy sources with or without consumption

Energy production including sources that are used to produce energy for consumption on-site, include:

- any energy production at project sites; and
- any energy produced by solar or other alternative energy generation.

Emission Factors

Each year the emission factors for Scope 1 and Scope 2 emissions are checked against the relevant Australian, Aotearoa New Zealand and international references for the current reporting year.

The emission factors used in the Envizi data management system are managed by Envizi and are updated to match the relevant country-based emission factors for Australia, Aotearoa New Zealand and other countries.

The table below details the emission factors that have been applied.

Table 1 Emission factors used for the reporting period for Scope 1 and 2 emissions.

Country	Reference
Australia	All energy sources: National Greenhouse and Energy Reporting (Measurement) Determination 2008 (effective 1 July 2022).
Brazil	Electricity: International Energy Agency (IEA) Emissions Factors 2022 Other energy sources: National Greenhouse and Energy Reporting (Measurement) Determination 2008 (effective 1 July 2022).
India	Electricity: International Energy Agency (IEA) Emissions Factors 2022 Other energy sources: National Greenhouse and Energy Reporting (Measurement) Determination 2008 (effective 1 July 2022).
New Zealand	Electricity Measuring emissions: A guide for organisations: 2021 summary of emission factors Energy sources where no specific NZ factor is available: National Greenhouse and Energy Reporting (Measurement) Determination 2008 (effective 1 July 2022).
South Africa	Electricity: International Energy Agency (IEA) Emissions Factors 2022 Other energy sources: National Greenhouse and Energy Reporting (Measurement) Determination 2008 (effective 1 July 2022).
Vanuatu & Samoa	Electricity: International Finance Corporation (IFC) Carbon Emissions Estimator Tool - Emission Factors for OECD Asia Oceania. (2014) Other energy sources: National Greenhouse and Energy Reporting (Measurement) Determination 2008 (effective 1 July 2022).

Methods Assessment

Downer has elected to use Method 1 from the NGER Determination, for estimating emissions in Australia and other countries (where the NGER determination is used). This methodology and its

associated factors, or country-specific emission factors where available (as noted in Table 1 and have been applied to all Scope 1 and Scope 2 emission sources for all of Downer's operations.

For Aotearoa New Zealand, and other non-Australian countries, default emission factors have been used as published in their respective sources.

Estimates

In preparing the Sustainability Report, it has been necessary to apply estimates where it was not possible to obtain actual data. Downer considers the basis of any estimates used to be reasonable for reporting GHG emissions and energy data and in keeping with the NGER reporting principles. Downer reviews any manual estimates that are included within the dataset to ensure compliance with NGER Act principles and requirements.

Automated Estimation

Estimations for the financial year are largely based on the Envizi system's 'Accrual' system, whereby a system-generated estimate is produced for blank data points, contingent on pre-defined qualifying factors. These are described in the following sections.

All of Downer's GHG emissions and energy data are covered by the automated estimation process, except where actual data and manual estimations are entered.

For 'Event' data types where it is known that data input into Envizi is complete for the year, a manual override of accruals has been performed, by placing 'zeros' into the months after the final actual data point for the reporting period. Completeness of actual data has been confirmed through the Business Unit sign-off process before initiating this process on select accounts.

First, to determine the quantum of the estimate across the reporting period, two 'data types' have been set in Envizi. A data type is a setting for each energy source (for example, Electricity) which determines 'when' an estimate calculation will be performed.

Contiguous Data: Contiguous data is that which is expected to be unbroken throughout the reporting period. For any missing data points throughout the reporting period, an estimate will be generated. Envizi/Downer² has classified electricity, natural gas, business flights and rental cars into this category, where it is assumed that consumption will be continuous throughout any given reporting period.

- *Example: For FY20, for a given data source, data is received for the months of July, August, September, December, January, March, and April. Under the Contiguous Data setting, estimates will be generated for all missing months (i.e., October, November, February, May, and June)*

Event Data: Event data is that which is expected to be sporadic throughout the reporting period, based on a particular event (for example, a fuel delivery). Data is only accrued for complete months forward from the last month containing actual data. Envizi/Downer³ has classified transport fuels and stationary fuels into this category where the expectation is that fuel is recorded on an 'as delivered' basis, which can sometimes be sporadic throughout the reporting period.

- *Example: For FY20, for a given data source, data is received for the months of July, August, September, December, January, March, and April.*
- *Under the Event Data setting, the only months that are accrued are those which are after the final month containing actual data. As the last month for which actual data was received was April, estimates are only generated for May and June.*

Second, to determine the basis of an estimate, a 'calculation method' has been set. A calculation method determines 'how' an estimate is performed for each energy source, based on an assessment of the usage of the energy source and any inherent factors to be considered, such as seasonality.

Weighted Average: A weighted average calculation has been chosen for all variables in the reporting period. In calculating an estimate, this gives the most weight to surrounding months of the same

² Dependent on whether or not the data type is part of Envizi's 'default' library, or whether it is a Downer custom data type.

³ Dependent on whether or not the data type is part of Envizi's 'default' library, or whether it is a Downer custom data type.

reporting period, while also giving a smaller weight to surrounding months of the previous reporting period, to acknowledge seasonality. The calculation is as follows:

- For any given missing period, data from its immediate month before and immediate month after, are given a weight of 3, and data from the same month last year and the month before in last year, are given a weight of 1. The accruals are calculated as the weighted average of these 4 months. For example, if Mar-2020 data is missing, then the accruals will be calculated as $Accruals\ for\ Mar-2020 = (Daily\ Average\ of\ Feb-2020 * 3 + Daily\ Average\ of\ Apr-2020 * 3 + Daily\ Average\ of\ Mar-2019 * 1 + Daily\ Average\ of\ Feb-2019 * 1) / (3 + 3 + 1 + 1) * \# \text{ of missing days in Mar-2020}$.

When some actual data points are missing in the months within the formula, these are weighted as '0'. This is also the case when the estimate has been taken at the end of the reporting period (e.g. the estimate for June 2020 will necessarily not be based on any data for July 2020, being outside the reporting period).

When all actual data points are missing in the months within the formula, the 'Last available month' method is used (explained below).

The anomalies check will confirm whether this is due to the inability to obtain data (and therefore an estimate is appropriate), or whether the site has actually closed (and therefore an estimate is not appropriate).

Manual Estimation of Energy and GHG Emissions

For certain accounts, related to sub-contractor data, the Envizi accruals system is not sufficient to generate a complete and accurate estimate of energy and emissions data. The process for estimating this data is outlined below:

Sub-contractor Data

Downer evaluated the materiality of sub-contractor data. The following table represents the initial 'materiality' assessment, based on the qualitative importance of sub-contractors per Business Unit.

Table 2. Summary of inclusion of Business Unit lines of business subcontractor data

Business Unit	Sub-contractors' estimation evaluated as material.	Subcontractors - data collected via sub-contractors form	Methodology of estimation	Source of information
Asset & Development Services	No	N/A	N/A	N/A
Corporate	No	N/A	N/A	N/A
Downer Defence	No	N/A	N/A	N/A
Infrastructure Projects	Yes	Yes*	See below	See below
Utilities	Yes ⁴	Yes	See below	See below
Roads Services	Yes	Yes	See below	See below
Facilities & Asset Services	No	N/A	N/A	N/A
Rail & Transit Services	No	N/A	N/A	N/A
Mineral Technologies	No	N/A	N/A	N/A

⁴ Limited to the Utilities Tech & Comms business

Business Unit	Sub-contractors' estimation evaluated as material.	Subcontractors - data collected via sub-contractors form	Methodology of estimation	Source of information
New Zealand (Including Spotless NZ and Hawkins)	Yes	No	See below	See below

Sub-contractor estimation methodology - Australia

Roads Services (RS), Infrastructure Projects (IP) and Utilities – Tech & Comms Business Units have an extensive sub-contractor base which it uses to conduct activities on its behalf. For the IP business, Downer has been collating actual data from subcontractors on the project level. This is entered into a corresponding location within Envizi. However, some Business Units do not have adequate records of energy consumed during activities undertaken in particular RS and Utilities.

Due to the extent of the sub-contractor base and the unavailability of accurate data it has been necessary to include a degree of estimation in this process. For this reporting period, proxies have been calculated using the average of actual data, as a proportion of dollars spent for each subcontractor. The methodology for estimating data is described below:

Sub-contractors were grouped into categories on the basis that they perform similar types of work when engaged by Downer and therefore are very likely to use similar types and relative volumes of energy-consuming resources. These categories are as follows:

Roads Services:

- Cartage
- Other
- Bitumen

Utilities – Tech & Comms Division

- Tech & Comms projects

Sub-contractor estimation methodology – Road Services

Other

In this financial year, internal managerial codes were used to differentiate between various activities in the 'other' category. In the presence of actual data within a managerial code, an average is calculated for that managerial code. If there is no managerial code or no actual data associated with a managerial code, the overall 'Other' proxy is used, based on the average L/\$ spent across all 'Other' subcontractors.

Bitumen

The L/\$ proxy applied to subcontractors for which actual data was not obtained is consistent with that applied in the FY22 reporting period, which in turn, was based upon FY20 actual data v spend.

Cartage

The L/\$ proxy applied to subcontractors for which actual data was not obtained is based on the ratio of actual usage v spend for data obtained in FY23.

Exclusions:

Within the 'Other' dataset, Downer performed vetting across the top 188 subcontractors during interim data collection (01 July 22 to 31 December 22), and classifications carried over to the H2 period (01 January 23 to 30 June 23). Subcontractors were entirely excluded if they were deemed to be part of the following categories:

- Raw material purchases – payments to sub-contractors purely for purchases are not related to activity, and therefore no fuel consumption has occurred from these.

- Consultants spend – office based or where no/little fuel was consumed in the course of activities performed while sub-contracted by Downer.

For the remaining Subcontractors, Downer deemed that the \$ spent and therefore the likely resource usage was not material enough to perform additional vetting. Downer has included an estimate for all of these subcontractors (for where actual data was not obtained) based on proxy calculations.

The information received from these suppliers formed the actual resource usage data. The remaining energy reported was based on a ratio between actual energy versus equivalent spend which was applied across the remaining spend per category, in accordance with the following formulas:

- Calculate the unique fuel ratio for each category:
- Average actual resource usage (for relevant FY, in raw units) / \$ of actual spend = A
- Calculate estimated fuel usage for the remaining contractors in that category
- $A * \$ \text{ of remaining contract spend per category (for contractors who did not return any actual data)} = B$

For these calculations, 'remaining spend' is represented by contractors who did not return a contractor evaluation form. For example, if Contractor A returned a form that stated that it used 1,000L of diesel, but no petrol, no extrapolation will be performed for this contractor for petrol, as it has represented that has used zero petrol.

Sub-contractor estimation methodology – Utilities Tech & Comms

Downer has obtained actual data from a sample of subcontractors and calculated a spend-based estimate to apply to the remainder of Utilities Tech & Comms subcontractor spend. Downer performed an investigation into the makeup of Utilities Tech & Comms contracts and found that there were no material changes to the composition of subcontractor activity compared to the previous reporting period. This involved interrogation of Downer's top 5 contracts and confirmation that activities within these were consistent with previous reporting periods. The majority of works were civil, electrical, installation and technical works across Telstra and Wireless programs of work which is consistent with the previous reporting period.

Sub-contractor estimation methodology – New Zealand

It was not possible to collect sub-contractor data for New Zealand during this reporting period due to resource constraints and hence the Downer standard procedure for estimating the sub-contractor emissions could not be used. The same estimation methodology which was applied to the RS and Business Units in Australia was applied to New Zealand, using New Zealand's entire contract spend.

Ad-hoc estimates

Manual estimations have been maintained for some sites. These include extrapolations of data for the H1 period, prior to the implementation of the automatic accruals system, and data collected directly from subcontractors, where these subcontractors have indicated that their data is an estimate. The total quantum of estimates using this method for Scope 1 emissions is 0.71%, and for Scope 2 emissions is 0.22% and is not considered material.

Restatements

Downer has disclosed targets, and associated baselines, that relate to Scope 1 and Scope 2 emissions. For these targets to be credible, they must be set on a like-for-like basis with the current year's emissions inventory. To that end, Downer has applied the following rules to determine whether any restatements are required to baselines and targets, derived from guidance from the GHG Protocol⁵, as well as NGER Supplementary Guidelines for acquisitions, disposals and mergers⁶

⁵ Base year recalculation methodologies for structural changes – Appendix E to the GHG Protocol Corporate Accounting and Reporting Standard – Revised Edition <https://ghgprotocol.org/corporate-standard>

⁶ Supplementary Guideline – Acquisitions, Disposals and Mergers: treatment of change in ownership of a group member

Table 3. Summary of restatements

	Base Year	Year impacted
Acquisition	<p>When an acquisition of a legal entity is made, if the acquisition results in a change in absolute emissions greater than 5% of the previous reporting period's totals, then the base year shall be restated with a full year's worth of data from the Acquisition.</p> <p>If Base Year data is unavailable, an appropriate estimate shall be utilised utilising data from a subsequent period.</p>	Data shall be included for the full year, irrespective of %.
Divestment	<p>When a divestment of a legal entity is made, if the divestment results in a change in absolute emissions greater than 5% of the previous reporting period's totals, then the base year shall be restated with a full year's data removed from the Base Year.</p> <p>If Base Year data is unavailable, an appropriate estimate shall be utilised, utilising data from a subsequent period.</p>	Data shall be removed for the full year, irrespective of %.
Data error	<p>If an error is discovered that impacts the base year, and this error is greater than 5% of the previous reporting period's totals, then the base year shall be restated with the amended data.</p> <p>If a data error is discovered that does not impact the base year, then there is no restatement to base year emissions.</p>	Data shall be amended for the period in which the error applies within the year impact.
Organic Growth (e.g. growth of existing facility, acquisition of new facility)	No restatement to base year emissions	Data shall include organic growth (e.g. new facility or increase in consumption commensurate with expansion in operations).

Scope 3 emissions

The below table provides the methodology of calculation for the differing categories of Downer's Scope 3 assessment as per the Corporate Value Chain (Scope 3) Accounting and Reporting Standard from the Greenhouse Gas Protocol.

Table 4. Methodology of calculation for Scope 3 assessment

Category name	Description
1. Purchased goods and services	<p>DESCRIPTION: Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in Categories 2 - 8.</p> <p>BOUNDARY: For Downer, this is all goods and services purchased within the reporting period excluding fuels, intercompany transfers, capital goods and subcontractors as these are either included within other categories or within Scope 1 and 2 disclosures.</p> <p>DATA SOURCES: Carbon Disclosure Project (CDP) Climate Change survey results from requested suppliers within the Supply Chain program & supplier spend data from procurement's system.</p> <p>METHODOLOGY: Hybrid method using actual emissions allocated to Downer-related activities by suppliers within the CDP Supply Chain program. If this was not available or suitable, self-reported intensities or CDP sector averages from disclosing companies were used against their FY23 spend. If a company was not within the requested CDP Supply Chain program, the company was allocated a CDP category based on Downer's procurement categories. Subsequently, the CDP sector average emission factor was applied.</p> <p>CHANGES FROM PREVIOUS YEARS: Previously, spend-based data was used and entered into the Quantis Scope 3 Evaluator, whereas this year factors from CDP Supply Chain were used.</p>

Category name	Description
2. Capital goods	<p>DESCRIPTION: Extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year.</p> <p>BOUNDARY: For Downer, this is specifically property, plant and equipment additions (PPE) within the reporting period.</p> <p>DATA SOURCES: PPE additions provided by Downer's finance team</p> <p>METHODOLOGY: Spend-based method using the dollar value of PPE additions in the reporting period, converted to USD and inputted into the Quantis Scope 3 Evaluator</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
3. Fuel and energy related activities	<p>DESCRIPTION: Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year.</p> <p>BOUNDARY: Fuel and energy used by sites/activities under Downer's operational control as defined by Downer's Scope 1 and 2 boundaries.</p> <p>DATA SOURCES: Direct supplier invoices with usage and accruals based on the aforementioned actual data.</p> <p>METHODOLOGY: Average-data method using the total calculated quantities and applying the latest relevant emission factors e.g. the National Greenhouse Accounting (NGA) Factors (2022) was used for Australia in FY23 and Measuring Emissions: A Guide for Organisations – 2023 Summary of Emission Factors was used for New Zealand. International operations had Australian emission factors applied.</p> <p>CHANGES FROM PREVIOUS YEARS: Emissions from Category 4 have moved into Category 3 due to boundary changes</p>
4. Upstream transportation and distribution	<p>DESCRIPTION: Transportation and distribution of products and services purchased by the reporting company in the reporting year between a company's tier 1 suppliers and its operations/ facilities (in vehicles and facilities not owned or controlled by the reporting company), including inbound logistics, outbound logistics (e.g., of sold products).</p> <p>BOUNDARY: This category is not applicable due to associated emissions being captured within CDP's sector averages in Category 1 and within lifecycle assessments in Category 11.</p> <p>CHANGES FROM PREVIOUS YEARS: Emissions from Category 4 have moved into Category 3 due to boundary changes</p>
5. Waste generated in operations	<p>DESCRIPTION: Disposal and treatment of waste generated in the reporting company's operations in the reporting year (in facilities not owned or controlled by the reporting company)</p> <p>BOUNDARY: Waste generated by sites/activities under Downer's operational control as defined by Downer's Scope 1 and 2 boundaries</p> <p>DATA SOURCES: Total actual waste generated in operations directly sourced from primary waste providers and spend by supplier/project value</p> <p>METHODOLOGY: Waste-type-specific method using total waste generated and applying the appropriate emissions factor e.g. for FY23, the commercial & industrial factor from the NGA Factors (2022) was used for all non-hazardous waste generated.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
6. Business travel	<p>DESCRIPTION: Transportation of employees for business-related activities during the reporting year (in vehicles not owned or operated by the reporting company)</p> <p>BOUNDARY: Scope 3 emissions associated with Downer using other providers to travel for business purposes, but not for Downer's direct operations. E.g., air travel, car hire.</p> <p>DATA SOURCES: Air travel data sourced from Downer's travel booking system, CTM, in km travelled. Car Rental data sourced from Downer's rental car suppliers, in km travelled.</p> <p>METHODOLOGY: Distance-based method where total km travelled was multiplied by emission factors from DEFRA (UK Government GHG Conversion Factors for Company Reporting) 2022.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
7. Employee commuting	<p>DESCRIPTION: Transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting company)</p> <p>BOUNDARY: Employee commuting, not already included in Scope 1 emissions (where travel is undertaken in a tool of trade vehicle to carry out work on a Downer site)</p> <p>DATA SOURCES: Employee headcount derived from Downer HR systems. Commuting data based on Australian national averages from: 2071.0.55.001 Census of Population and Housing: Commuting to Work - More Stories from the Census, 2016</p> <p>METHODOLOGY: Average-data method using Downer's employee headcount multiplied by national average km travelled multiplied by emission factors from DEFRA (UK Government GHG Conversion Factors for Company Reporting) 2022.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
8. Upstream leased assets	<p>DESCRIPTION: Operation of assets leased by the reporting company (lessee) in the reporting year and not included in Scope 1 and Scope 2 – reported by the lessee.</p> <p>BOUNDARY: For Downer, this category is not applicable due to operational control boundary as any upstream leases are included in Scope 1 and 2.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>

Category name	Description
9. Downstream transportation and distribution	<p>DESCRIPTION: Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company)</p> <p>BOUNDARY: This category only includes emissions associated with the transportation and distribution of products used by the Mineral Technologies business. All other associated transportation & distribution emissions are accounted for within other categories.</p> <p>DATA SOURCES: Weights and distances of freight transported are sourced from the Mineral Technologies logistics teams.</p> <p>METHODOLOGY: Weight and distance data is entered into the GHG Protocol's Transport Tool v2.6 to capture emissions from freight.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
10. Processing of sold products	<p>DESCRIPTION: Processing of intermediate products sold in the reporting year by downstream companies (e.g., manufacturers)</p> <p>BOUNDARY: All products sold by Downer are 'final' and hence this is not applicable.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
11. Use of sold products	<p>DESCRIPTION: End use of goods and services sold by the reporting company in the reporting year</p> <p>BOUNDARY: Downer sells 3 products that have included asphalt, bitumen and concrete.</p> <p>DATA SOURCES: Total asphalt, bitumen and concrete quantities produced sourced from road services and VEC engineering.</p> <p>METHODOLOGY: Total quantities had appropriate lifecycle analysis emissions applied and Scope 1 and Scope 2 emissions were subtracted. Asphalt LCA factors were obtained from the Review of Emissions Reduction Opportunities – Department of Planning, Transport and Infrastructure. Bitumen LCA factors were obtained from Sustainable Asset Management (Subtopic: Carbon emissions modelling of road pavement treatment strategies). Concrete LCA factors were obtained from the Centre for Earth Systems Engineering and Management (Life Cycle Assessment of pre-cast concrete vs cast-in-place concrete).</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
12. End-of-life treatment of sold products	<p>DESCRIPTION: Waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life.</p> <p>BOUNDARY: End-of-life treatment, where applicable, is considered within Category 11, to the extent that it is considered in the LCA factors used.</p> <p>CHANGES FROM PREVIOUS YEARS: None.</p>
13. Downstream leased assets	<p>DESCRIPTION: Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not included in Scope 1 and Scope 2 – reported by lessor</p> <p>BOUNDARY: This category is not applicable to Downer. Downer does not lease assets to third parties.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
14. Franchises	<p>DESCRIPTION: Operation of franchises in the reporting year, not included in Scope 1 and Scope 2 – reported by the franchisor</p> <p>BOUNDARY: This category is not applicable to Downer. Downer does not operate a franchise model.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
15. Investments	<p>DESCRIPTION: Operation of investments (including equity and debt investments and project finance) in the reporting year, not included in Scope 1 and Scope 2</p> <p>BOUNDARY: This relates to Downer's joint ventures and associates, which fall outside of Downer's operational control boundary.</p> <p>DATA SOURCES: Based on the dollar value of revenue from joint ventures and associates throughout the year, sourced from Downer's financials.</p> <p>METHODOLOGY: Average-data method using Joint Ventures and Associates revenue for the reporting period and inputting into the Quantis Scope 3 Evaluator tool.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>
16. Other	<p>DESCRIPTION: Emissions associated with upstream water usage.</p> <p>BOUNDARY: This relates to all of Downer's operations.</p> <p>DATA SOURCES: Direct invoices and supplier spending from procurement.</p> <p>METHODOLOGY: Hybrid method using actual data and proxies from invoices.</p> <p>CHANGES FROM PREVIOUS YEARS: None</p>

References

Australian Government Department of the Environment (2019) *National Greenhouse and Energy Reporting (Measurement) Determination 2008 Compilation No. 11, effective 1 July 2019*. Published by the Department of the Environment. July 2019
<http://www.cleanenergyregulator.gov.au/NGER/Legislation/Measurement-Determination>)

International Energy Agency (2019). World CO2 Emissions from Fuel Combustion database, Published 2019. <http://data.iea.org/>

International Finance Corporation (IFC) February 2014 Carbon Emissions Estimator Tool- Emission Factors for OECD Asia Oceania.

https://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUK EwiH36Pv3PHUAhUC2LwKHYjSDFYQFgggtMAA&url=https%3A%2F%2Fwww.ifc.org%2Fwps%2Fwcm%2Fconnect%2F9b74ef8043e641679e7dbe869243d457%2FIFC_CEET_Feb2014.xlsm%3FMOD%3DAJPERES&usg=AFQjCNE7nKXIs7Lgrmn7Zic3VcvKIWsSUQ

Intergovernmental Panel on Climate Change (2007). *IPCC Fourth Assessment Report: Climate Change 2007, published 2007*. https://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html

NZ Ministry for the Environment *Measuring emissions: A guide for organisations, 2019 summary of emission factors (using data from the 2016 calendar year)*. Published in May 2019 by the Ministry of the Environment, Wellington, New Zealand. <https://www.mfe.govt.nz/publications/climate-change/measuring-emissions-guide-organisations-2019-detailed-guide>