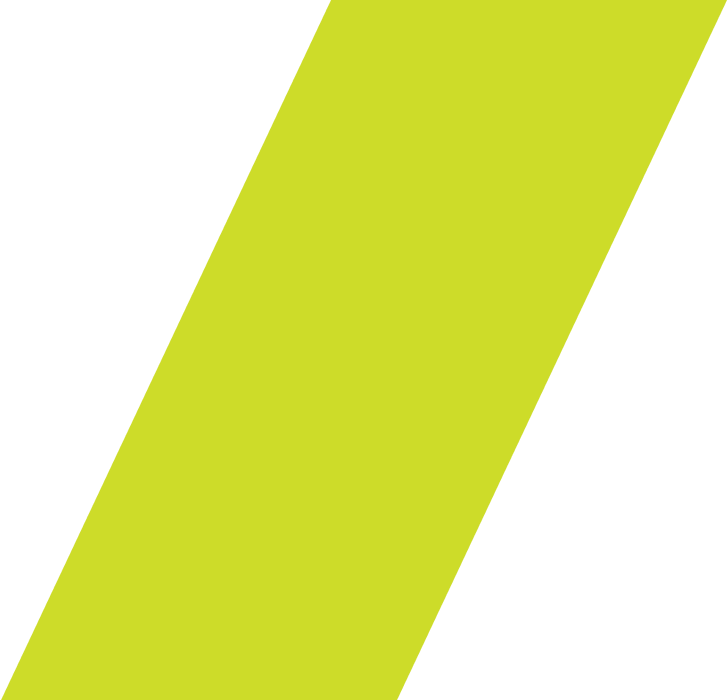
Guidance for FRD 24 reporting

Guidance manual for FRD 24 reporting of environmental data of government entities





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We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria’s land and waters, their unique ability to care for Country and deep spiritual connection to it.

We honour Elders past and present whose knowledge and wisdom   
has ensured the continuation of culture and traditional practices.

DEECA is committed to genuinely partnering with Victorian Traditional Owners and Victoria’s Aboriginal community to progress their aspirations.

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Contents

[Introduction 2](#_Toc165285061)

[General FRD 24 reporting guidance 4](#_Toc165285062)

[Guidance on Tier 1 entity disclosure requirements 9](#_Toc165285063)

[Guidance on FRD reporting by indicator 11](#_Toc165285064)

[Electricity production and consumption 14](#_Toc165285065)

[Stationary fuel use 19](#_Toc165285066)

[Transportation 22](#_Toc165285067)

[Total energy use 27](#_Toc165285068)

[Sustainable buildings and infrastructure 29](#_Toc165285069)

[Sustainable procurement 32](#_Toc165285070)

[Water consumption 34](#_Toc165285071)

[Waste and recycling 36](#_Toc165285072)

[Greenhouse gas emissions 40](#_Toc165285073)

[Appendix 1 – GRI supplement environmental performance indicators 44](#_Toc165285074)

**Changes applied to this Guidance – May 2024**

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** |  | **Change** | **Page reference** |
| General FRD 24 reporting guidance | | | |
| Tier 4 entity simple disclosure approach | | Clarify that Tier 4 entities must choose between a simple disclosure OR disclosing all Tier 4 indicators. | 4 |
| Organisational boundary | | Clarify the application of organisational boundary to entity-owned assets managed by a private entity under a public-private partnership. | 6 |
| Guidance on Tier 1 entity disclosure requirements | | | |
| Climate-related risk and opportunity disclosure | | Update to reference International Financial Reporting Standards S1 and S2. | 9 |
| Table 1 | | | |
| FRD 24 indicators | | Update page references. | 11-13 |
| Electricity production and consumption (EL) | | | |
| Definitions | | Specify that that a whole of building perspective should apply when accounting for electricity consumption. | 14 |
| Definitions | | Clarify requirement for entities to report breakdowns of electricity consumption. | 14 |
| EL1 | | Clarify consumption to be reported against ‘purchased electricity’ and not ‘directly purchased electricity’. | 14 |
| EL1 | | Provide further definition and requirement to breakdown reporting of ‘sleeved’ and ‘unsleeved’ power purchase arrangements. | 14 |
| EL2 | | Clarify the treatment of on-site electricity generation where any LGCs created are not surrendered. | 14 |
| EL2 | | Clarify reporting of generation and fuel used in stand-by power systems. | 14 |
| EL3 | | Provide additional information on treatment of generation where LGCs are generated. | 15 |
| EL3 | | Note that the Renewable Power Percentage will be automatically accounted for when using the environmental data reporting tool. | 15 |
| Data collection | | Clarify requirements for electricity data collection for owned and tenanted buildings. | 17 |
| Stationary fuel use (F) | | | |
| Definitions | | Specify that that a whole of building perspective should apply when accounting for stationary fuel consumption. | 19 |
| Data collection | | Clarify requirements for breakdown of stationary fuel data collection for owned and leased buildings. | 20 |
| GRI indicators | | Provide footnote link to the Global Reporting Initiative. | 21 |
| Transportation (T) | | | |
| Definitions | | Headings for fuel types corrected. | 22 |
| T3 | | Reference for National Greenhouse Accounts factors updated. | 25 |
| Data analysis | | Application of National Greenhouse Accounts factors to indicator T3 clarified. | 25 |
| Water consumption (W) | |  |  |
| Definitions | | Specify that a whole of building perspective should apply when accounting for water consumption. | 34 |
| Data collection | | Clarify requirements for water consumption data collection for owned and tenanted buildings. | 35 |
| Waste and recycling (WR) | | | |
| Definitions | | Clarify that water consumption for the supply and treatment of bulk water and/or sewage should be excluded from WR1. | 36 |
| Data analysis | | Clarification of data analysis approach where waste data is measured by volume and not waste. | 38 |
| Greenhouse gas emissions (G) | | | |
| Definition | | Additional information on fugitive emissions from fire suppression systems. | 40 |
| G2 | | Additional information on sourcing emissions factors for gases which are not included in the NGA factors. | 41 |
| G2 | | Additional guidance provided on Residual Mix Factors. | 41 |
| G2 | | Clarification of when entities can claim exported electricity as zero emissions. | 41 |
| Data source and analysis | | Clarification that all G1 reporting data must be provided in units of tonnes CO2-e. | 42 |

# Introduction

The purpose of this *Guidance for* *FRD 24 Reporting* is toassist Victorian Government entities (departments and public entities) to collect, analyse and report their environmental data in a comprehensive, consistent, and accurate manner. It supports the transparent reporting of robust data to the Victorian Government and community.

Financial Reporting Direction 24 *Reporting of environmental data by government entities*[[1]](#footnote-2) (FRD 24) specifies the environmental performance indicators that must be measured and reported by relevant entities across the Victorian Government. This guidance provides instructions for entities to collect, analyse and report data against these indicators. FRD 24 applies to all entities subject to Standing Directions under the *Financial Management Act 1994* with the exception of universities (hereafter in this Guidance referred to as Entities).

FRD 24 indicators must be reported via the entity’s Report of Operations. The indicators include energy (including in transportation), waste, water, and greenhouse gas emissions, as well as sustainable buildings and infrastructure and sustainable procurement. Where Entities are unable to report on specific aspects, they should provide a reasonable estimate where possible, as well as information on actions that an entity is taking to improve data availability and quality in the future. FRD 24 establishes the minimum reporting requirements, and Entities may report against additional indicators if desired.

This guidance also maps FRD 24 indicators onto relevant indicators from the Global Reporting Initiative (GRI) and lists relevant targets for the Sustainable Development Goals (SDGs). Overall FRD 24 supports the achievement of SDG Target 12.6: *Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle*.

Measuring environmental performance is an evolving process within governments and business, and this manual will be reviewed and adapted over time to ensure it remains relevant to government requirements. This manual supersedes the previous *Guidance to Financial Reporting Direction FRD 24D*, and incorporates relevant details previously included in that document.

## Purpose, objectives and targets

The Victorian Government’s commitment to sustainability in its own operations is reflected in legislation, policies, and strategies, including the *Climate Change Act 2017,* Victoria’s Climate Change Strategy, Whole of Victorian Government Emissions Reduction Pledge, Victorian Renewable Energy Target, Recycling Victoria, the Sustainable Investment Guidelines, and the Greener Government Buildings program. The General Environmental Duty under the *Environment Protection Act 2017* applies to all Victorian Government entities to minimise risks of harm to human health or the environment from pollution or waste, so far as reasonably practicable.

In line with these, Entities are required to disclose their ongoing performance in managing and reducing the environmental impacts of their activities. FRD 24 reporting supports the Victorian Government to play its role in the state-wide transition to net-zero emissions and climate resilience by 2050, better manage exposure to climate-related risk, and meet responsibilities in reducing other environmental impacts. Environmental disclosures support a range of compliance and risk management obligations including under the Victorian Government Risk Management Frameworkand a variety of sector specific regulation.

Indicators detail the environmental impacts of an entity’s activities to measure the effectiveness of environmental management programs, and to identify trends. Indicators may also assist entities to develop action plans to manage resource consumption and achieve policy objectives in relation to climate change, waste and recycling, and environmental sustainability. The indicators are generally reported in total, and in a normalised format where appropriate, to enable the data to be readily understood and effectively communicated, including across portfolios and for the whole of Victorian Government.

# General FRD 24 reporting guidance

### Introduction

This section provides guidance for reporting on all FRD 24 indicators, including the organisational reporting boundary and how to interpret the materiality and data availability requirements of the FRD 24 Direction.

Different entities have different general disclosure requirements and different requirements for indicator disclosure. Financial Reporting Direction 24 sets out requirements for four ‘tiers’ of entities. The composition of these tiers is detailed in Appendix 1 of FRD 24. The guidance of this section is applicable to all tiers.

#### Tier 4 Entity alternative simple disclosure approach

FRD 24 disclosures have two purposes, to inform Whole of Victorian Government environmental reporting, and to support entities to reduce emissions and manage climate related risks. When very small entities are using central procurement arrangements, their ability to independently pursue emissions reductions is limited. In these circumstances, Whole of Victorian Government environmental reporting can also incorporate data directly from central sources while maintaining confidence that the data is a relatively complete and accurate reflection of an entity’s environmental impacts. Under these circumstances the benefit of independent disclosures in the annual reports of Tier 4 entities are small.

Tier 4 entities may therefore choose between two reporting options:

* EITHER disclose data for all Tier 4 indicators as detailed in Appendix 2.
* OR make a simple disclosure that **covers all operations**.
* Tier 4 entities CANNOT mix both these options. Making a simple disclosure for some indicators or sites and providing data for other indicators or sites is a non-compliant approach.

As such, where data on relevant Tier 4 indicators is available through central procurement, then Tier 4 entities can comply with FRD 24 with a simple disclosure and are not required to report on the Tier 4 indicators. A simple disclosure may be used if:

* Office accommodation and fleet are provided by the portfolio department through a service level agreement or similar arrangement.

OR

* Electricity and fleet are managed through central procurement, and office accommodation is either procured through DTF Strategic Sourcing or owned or leased directly by the entity but not subject to future fit-outs or new construction, as per the following table:

|  |  |  |
| --- | --- | --- |
|  | **Use simple disclosures** | **Report on all Tier 4 Indicators** |
| Electricity | Purchased through the State Purchase Contract or HealthShare Victoria Contract  Not purchased directly but included as part of a lease managed by the Shared Service Provider | Purchased from a separate retail contract.  Not purchased but included as part of a lease that is managed by the entity. |
| Fleet | Managed by VicFleet | Entity owns vehicles or leases them from a separate provider |
| Office accommodation | Managed by the Shared Service Provider.  Owned or leased directly by the entity, but no plans for new construction or substantial fit-outs. | If the entity builds new office accommodation or undertakes a substantial tenancy fit-out the entity must report on Indicator B3 in the following relevant year. Afterwards, the entity may again use the simple disclosure. |

All material consumption across each three areas must be sourced through central procurement arrangements for the Tier 4 entity to be eligible to use a simple disclosure to comply with FRD 24 requirements. The simple disclosure should describe the arrangements that are in place to capture resource consumption for the relevant Tier 4 indicators, such as outlined in the following examples:

* The Office of the Science and Technology regulator has a Service Level Agreement in place with the Department of Technology for the provision of office accommodation and fleet services. Data on environmental impacts is included in the Department of Technology’s annual report.
* Technology Promotion Victoria utilises central government contracts for provision of its services. Data will be reported on in Whole of Victorian Government reporting.

##### Operational context

The Victorian Government has a diverse range of Entities with a variety of environmental impacts and greenhouse gas emissions. For Entities with unique operations, it may be reasonable to vary the types of data reported to best reflect the entity’s operations. In some cases, this should include providing additional detail on these operations, for example using additional fuel or vehicle types. This should be further explained in the accompanying context in the entity’s annual report.

###### Reporting period

Data on each indicator is to be reported annually within their Annual Report of Operations for the reporting period coincident with their financial report. Where reporting to this period is not practicable, Entities may choose to report their environmental data to another 12-month period (such as the Fringe Benefits Tax year, 1 April through 30 March). When adopting an alternative reporting period, Entities should subsequently provide to DELWP financial year data, divided by quarter, for aggregation into whole of Victorian Government reporting.

###### Normalisation

Indicators E4, W2 and WR3 are to be normalised by FTE, headcount, floor area, passenger kilometres, or any other factor that is appropriate for an entity’s operations. For office-based entities, FTE will typically be the most appropriate normalisation factor. Entities using a normalisation other than one outlined in this section, or provided in specific guidance issued to portfolios, should offer a brief explanation of the normalisation used and ensure that it is consistently applied for reporting across all time periods.

**FTE**: For the purposes of FRD 24 reporting the definition of FTE is consistent with FRD 29 as reported elsewhere in the annual report i.e., an FTE is a person who received pay (i.e., is on the entity’s payroll) for the final pay period in the reporting period. One FTE is equivalent to employment for a period of 38 hours per week. Part time employees are counted based on their proportion of full-time hours worked (e.g., an employee working 50% of full-time hours is equivalent to a 0.5 FTE). This number of FTEs should be consistent with that reported in the Annual Report, and therefore may be sourced from the human resource divisions within each entity.

**Floor area**: If an entity chooses to use floor area as the normalisation factor, they may use either Net Lettable Area (NLA), Fully Enclosed Covered Area (FECA), Gross Floor Area (GFA) or other area measure as appropriate.[[2]](#footnote-3) Entities must disclose the measure used and ensure it is consistent across time for their facilities. Where area data is not available for all facilities, Entities should ensure that the amount being normalised is only that from facilities for which area data is available.

Net Lettable Area (NLA) is the sum of all lettable areas within a commercial type building, measured from the internal finished surfaces of permanent walls and from the internal finished surfaces of dominant portions of the permanent outer building walls, and including the area occupied by structural columns and engaged perimeter columns, as defined by the Property Council of Australia. NLA typically excludes external walls, building cores and standard service areas such as toilets, access passageways, storerooms, etc.

Fully Enclosed Covered Area (FECA) is the sum of all such areas at all building floor levels, including basements (except unexcavated portions), floored roof spaces and attics, garages, penthouses, enclosed porches and attached enclosed covered ways alongside buildings, equipment rooms, lift shafts, vertical ducts, staircases and any other fully enclosed spaces and usable areas of the building, computed by measuring from the normal inside face of exterior walls but ignoring any projections such as plinths, columns, piers, and the like which project from the normal inside face of exterior walls. It shall not include open courts, light wells, connecting or isolated covered ways and net open areas of upper portions of rooms, lobbies, halls, interstitial spaces, and the like, which extend through the storey being computed.

Gross Floor Area (GFA) is the sum of FECA and the Unenclosed Covered Area (UCA). The UCA is the sum of all such areas at all building floor levels, including roofed balconies, open verandahs, porches and porticos, attached open covered ways alongside buildings, undercrofts and usable space under buildings, unenclosed access galleries (including ground floor) and any other trafficable covered areas of the building which are not totally enclosed by full height walls, computed by measuring the area between the enclosing walls or balustrade (i.e. from the inside face of the U.C.A. excluding the wall or balustrade thickness). When the covering element (i.e., roof or upper floor) is supported by columns, is cantilevered or suspended, or any combination of these, the measurements shall be taken to the edge of the paving or to the edge of the cover, whichever is the lesser. U.C.A. shall not include eaves overhangs, sun shading, awnings and the like where these do not relate to clearly defined trafficable covered areas, nor shall it include connecting or isolated covered ways.

##### Organisational boundary

Entities should utilise the operational control approach, as defined by the GHG Protocol Corporate Standard, when determining the entity’s reporting boundary.[[3]](#footnote-4) However, recognising the unique organisational structures and governance of the Victorian Public Sector and ensuring that Government environmental reporting meets community expectations there are circumstances where the organisational boundary of Entities should be adjusted to expand beyond a strict interpretation of operational control. Guidance is provided below for adjustment of the organisational boundary to account for:

* Small statutory entities
* Public private partnerships
* Machinery of Government changes
* Government tenants located in non-government buildings

###### Small statutory entities

Where statutory entities are co-located within entity buildings, and do not report environment performance separately, these agencies should be included within each entity’s reports. This includes Tier 4 entities that use the simple disclosure approach. This is aimed at reducing duplication and administrative complexity. This includes circumstances where the entity provides services to a small statutory entity through a Service Level Agreement or provides secretariat services to a Victorian Government Board that does not otherwise have any staff. Where these small statutory entities produce their own annual reports, they should note that environmental impact data is reported in the entity’s annual report, per the Tier 4 entity simple disclosure approach. The entity annual report should also note the names of the small statutory entities that the data includes within its organisational boundary

If other entities associated with the operations are disclosing their environmental performance in their own annual reports, the entity should not also disclose this information.

###### Public private partnerships

Facilities, networks, or other assets that are owned by the Victorian Government, but are managed by a private entity under franchise, lease, or other public-private partnership (such as service concession arrangements per *AASB 1059 Service Concession Arrangements: Grantors*) are considered part of Victorian Government operations where the environmental impacts of those assets are within the operational control of the entity. The entity responsible for administering the relevant contract should include the environmental impacts of these facilities, including electricity used or produced by those facilities, in its reporting. Examples of circumstances where the impacts of those assets are within the entity’s operational control include:

* The facility operator is required to use State Purchase Contracts for the purchase of energy or otherwise has energy procurement arrangements contractually specified.
* The facility operator is required to procure offsets or renewable energy certificates for a portion or all of their energy use.
* Emissions reduction targets or other environmental policies are contractually specified.
* The operations of the facility are largely determined by the entity, for example the specification of timetables, routes, and other operational policies by the entity or other Victorian Government body.

Where these facilities are not included in an entity’s organisational boundary, an explanation for this should be provided.

For example, standard commercial leases will generally not fall within operational control of the entity, unless those leases contain special clauses that bring the operational or environmental policy of these sites under control of the lessor. Similarly, BOOT (Build, Operate, Own, Transfer) PPPs may or may not fall into operational control depending on the terms of the contract.

In cases where assets are leased and out of operational control, but where data is difficult to separate from reportable activities within the entity’s organisational boundary (for example, where a concession in a hospital, or in a national park isn't separately metered) the same data availability and materiality requirements can apply as detailed under the relevant headings below. In cases where the activity out of operational control does not have a material impact but has been included in the entity’s data because it cannot be separated, a footnote to this effect must be included in the entity’s report.

Where it might be possible to estimate the impact of activities outside operational control based on understanding the total number of, for example, leases, and the size of a typical lease (or other approach) an estimate can be deducted from the total of in-control activity.

Where the out of organisational control activity is likely material and it is not possible to estimate its impact, the entity will need to take steps over time to address the measurement of these activities and account for them in the entity’s report. Plans to address measurement and progress toward accounting should be disclosed in a footnote to the entity’s report. This can be as simple as noting the inclusion of these activities and that the entity will investigate options to account for them in future reporting.

###### Machinery of government changes

Where an entity loses or gains staff or facilities as a result of machinery of government changes, the entity that is responsible for the staff or facilities on June 30 of the reporting year is to report all data relating to these staff and facilities and make an appropriate note in the context section of the relevant indicators. The entity that has “lost” the staff or facilities is to make the relevant data available to the entity required to report on these staff.

###### Government tenants located in non-government buildings

Where a small number of entity staff are located in non-government buildings with other tenants, data can be estimated based on averaging known consumption in the building using the building's agreed shared tenancy arrangement.

##### Explaining the context of reported data

For each aspect, the following contextual clarifications should be disclosed:

* reason for any variation in data, where these are known
* changes from previous years’ reporting methods
* any other material or explanatory information about the data such as office/non-office usage, nature of tenancy, and base building components that are relevant to performance

More detailed and specific recommendations for the reporting of the data’s context are given in the appropriate sections for each group of indicators.

###### Materiality and completeness

Entities should report all emissions sources and activities that have been quantified, including emissions sources and activities that have been estimated. Activities and emissions sources do not need to be quantified where they contribute less than 1% of entity emissions and all unquantified sources contribute no more than 5% of entity emissions. Estimates conducted for the purposes of assessing materiality should be reported, even if they remain unchanged from year to year. In addition, where an indicator does not directly relate to an emission source, the same percentage thresholds apply.

The materiality clause of the FRD 24 Instruction is intended to enable qualitative assessment, such as by comparison, ‘back of the envelope’ calculations or ‘order of magnitude’ assessments. Examples of circumstances where materiality thresholds could be applied such that data collection is not required:

* Fugitive emissions from air conditioning are much less than 1% of similar organisations’ emissions.
* The organisation has a total fleet of 1000 vehicles. Part of this fleet are 12 motorbikes which have a separate fuelling arrangement for which data is not available. As motorbikes make up a small portion of the total fleet and have a much higher fuel efficiency, their emissions will be much less than 1% of the organisation’s total emissions.
* The organisation has 6 LPG BBQs which are used 10-20 times per year which produces much less than 1 tonne of CO2-e per year, which is much less than 1% of organisational emissions.
* Back-up generators which are only operated for 1-2 hours per year for testing and maintenance and use a similar amount of fuel to average daily operations of a single fleet vehicle, so the emissions will be much less than 1% of the organisation’s total emissions.
* The organisation has a small organic food waste bin in their kitchen that is emptied weekly and produces much less than 1% of the organisation’s total waste volume.

###### Data availability

On occasions, accurate activity data or information on investment and procurement may not be available. For example, data available through systems that support State Purchase Contracts, VicFleet and the Shared Service Provider may not capture the entirety of an entities’ activities and may not be readily available. Data that is readily available from these sources can be self-sourced through automated data extraction, and entities should make best endeavours to utilise these functions so as to manage resources required in the provision of data.

Data availability may also be limited when organisations’ environmental reporting maturity is low, when new activities with more complex resource use are started, or when organisations change reporting tiers or new statutory entities are created.

Where data is not readily available, an estimate is to be made if possible. This may use data from previous years, daily averages, or other appropriate methods. The indictor specific guidance below provides some suitable estimation methods. Where guidance on estimation is not provided in this manual or other associated material produced by DELWP, methods used in estimation should be described.

Where activity data is unavailable and estimates cannot be made, the report should provide a summary of actions being taken to improve data availability and quality including the development of sustainability or environmental plans, development or enhancement of EDMS, facility upgrades, audits, system improvements, negotiations with suppliers etc. This should be in the form of table footnotes or endnotes. Examples of disclosures could include:

* Data monitoring systems for some of the organisation’s older small-scale solar systems are not installed. These will be progressively retrofitted when these systems are upgraded.
* Provision of accurate waste stream data will be a contractual obligation when the organisation’s waste management contract is next renewed.
* The organisation is investigating the development of an environmental data management system which will collate relevant information for these indicators.

The provision of these type of disclosures enables organisations to phase in reporting on new activities and indicators and adopt a continuous improvement approach to environmental reporting.

Some indicators or components of indicators are accompanied with a ‘if data is available’ or similar condition. For these indicators, the provision of estimates or notes of future actions are not required. Data only needs to be reported if it is available. If data is not available, then reporting against that indicator or component of an indicator is not required.

###### Data falling across reporting year boundaries

Billing periods often do not correspond with the commencement and completion dates for reporting years, particularly for energy and water. In such situations, data should be normalised by averaging the consumption and costs per day and multiplying this by the relevant number of days each side of the reporting year boundary. Alternatively, where it would be more accurate than an average, data for the same period in the previous year may be used to allow for seasonal variations.

###### Shared occupancy

Where multiple entities occupy a location, resource usage (such as electricity, natural gas, or metered water) can be apportioned based on an indicator of entity size. This may be either the proportion of the building occupied (e.g., number of floors or Net Lettable Area) or headcount (e.g., number of FTE).

###### Performance trend reporting

For each aspect (energy, water, waste and recycling etc.), a performance trend for indicators should be reported. Trends must be reported for a minimum length of two years and can be represented in graphical or tabular form. Where data reported in previous annual reports has been affected by machinery of government or other significant changes the data may be made to reflect the entity’s actual performance, but notes must be added to explain the changes.

In the first year of application of any update to FRD 24, performance trends for new or altered indicators only need to be reported where data for past years is available and of a similar quality and completeness. The data availability requirements apply to previous years’ data as well as the current year’s data.

###### Actions undertaken

For each set of indicators, a list of actions undertaken during the reporting period to reduce environmental impacts should be included, where these are relevant.

More detailed and specific recommendations for the reporting of actions undertaken are given in the appropriate sections for each aspect.

# Guidance on Tier 1 entity disclosure requirements

This section provides guidance on additional disclosures for Tier 1 entities, as set out in Appendix 1 of FRD 24. Further guidance and an example of these disclosures can be found in the Model Report for Victorian Government Departments. Other public entities are encouraged to adopt these disclosures as their environmental and climate reporting matures.

##### Climate-related risk and opportunity disclosure

Tier 1 entities should produce a baseline disclosure statement outlining the entity's approach to understanding and managing climate-related risks and opportunities relating to the entity’s assets, operations and service delivery. The statement should consider risks related to the physical impacts of climate change and the transition to a net zero carbon economy. The statement may be modelled against the recommended pillars of the international G-20 Task force on Climate-related Financial Disclosures (TCFD): Governance, Strategy, Risk Management and Metrics and Targets[[4]](#footnote-5) and the [*International Financial Reporting Standards (IFRS) S1 General Requirements for Disclosure of Sustainability-related Financial*](https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s1-general-requirements/) *Information* and [*S2 Climate-related Disclosures*[[5]](#footnote-6)](https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures/) which have superseded them. These represent the global benchmark for consistent disclosure on climate-related risks and risk management practices, to enable informed decision-making. Entities should refer to resources made available by the Climate Change Risk Management Service of the Victorian Managed Insurance Authority.[[6]](#footnote-7)

##### Environmental Management System disclosure

Entities specified in FRD 24 (Tier 1 entities) are required to report on their Environmental Management System (EMS) for their activities, how it conforms with the *Standard AS/NZS 14001: Environmental Management Systems*, and when it was last audited. FRD 24 does not extend the requirement to either have or report on an EMS beyond Tier 1 entities.

The EMS is a key driver of entity environmental performance and should assist Entities to meet their reporting requirements under FRD 24. Tier 1 entities should consider the recommendations of the Commissioner for Environmental Sustainability’s Strategic Audits of environmental management systems in Victorian Government departments and agencies.

###### Target reporting

Key relevant targets for the entity must be disclosed. Where targets are set as part of an entity’s EMS, they should be consistent with the guidance for setting targets in ISO 14001. In addition, the entity should include intended actions to meet targets.

# Guidance on FRD reporting by indicator

The FRD 24 list of indicators as shown in Table 1 forms the core measures of entity environmental performance. The following sections provide reporting guidance for each indicator, including:

* The definition of each indicator
* Data sourcing methods
* Data collection methods
* Data analysis methods, calculations and conversion factors

The guidance provided in this section has been developed in collaboration with departments and portfolio entities to ensure its relevance for current FRD 24 reporting. This guidance aspires to achieve a best practice approach to environmental reporting.

**Table 1: FRD 24 indicators**

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator** |  | **Unit** | **Pages** |
| **Electricity production and consumption** | | | |
| EL1 | Total electricity consumption segmented by source | Megawatt hours | 14-18 |
| EL2 | On-site electricity generated segmented by usage and source | Megawatt hours | 14-18 |
| EL3 | On-site installed generation capacity segmented by source | Megawatts | 14-18 |
| EL4 | Total electricity offsets segmented by offset type | Megawatt hours | 14-18 |
| **Stationary fuel use** | | | |
| F1 | Total fuels used in buildings and machinery segmented by fuel type | Megajoules | 19-21 |
| F2 | Greenhouse gas emissions from stationary fuel consumption segmented by fuel type | Tonnes CO2-e | 19-21 |
| **Transportation** | | | |
| T1 | Total energy used in transportation within the entity segmented by fuel type and vehicle category | Megajoules or megawatt-hours | 22-26 |
| T2 | Number and proportion of vehicles in the organisational boundary segmented by engine/fuel type and vehicle category | Number and % | 22-26 |
| T3 | Greenhouse gas emissions from vehicle fleet segmented by fuel type and vehicle category | Tonnes CO2-e | 22-26 |
| T4 | Total distance travelled by commercial air travel | Kilometres | 22-26 |
| Optional\* | Percentage of employees using sustainable transport to get to and from work, by locality type. | % | 26 |
| Optional\* | Total vehicle travel associated with entity operations segmented by fuel type and vehicle category for land vehicles | Kilometres | 26 |
| Optional\* | Total vehicle travel associated with entity operations segmented by fuel type and vehicle category, for non-land vehicles | Hours of operation | 26 |
| Optional\* | Greenhouse gas emissions from vehicle fleet segmented by fuel type and vehicle category | Tonnes CO2-e per 1,000 km for land vehicles  Tonnes CO2-e per hour of operation for non-land vehicles | 26 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator** |  | **Unit** | **Pages** |
| **Total energy use** | | | |
| E1 | Total energy usage from fuels | Megajoules | 27-28 |
| E2 | Total energy usage from electricity | Megajoules | 27-28 |
| E3 | Total energy usage segmented into renewable and non-renewable sources | Megajoules | 27-28 |
| E4 | Units of energy used normalised by FTE, headcount, floor area, or other entity or sector specific quantity | Megajoules (normalised) | 27-28 |
| **Sustainable buildings and infrastructure** | | | |
| B1 | Discuss how environmentally sustainable design is incorporated into newly completed entity-owned buildings | Description | 29-31 |
| B2 | Discuss how new entity leases meet the requirement to preference higher-rated office buildings and those with a Green Lease Schedule | Description | 29-31 |
| B3 | NABERS Energy ratings of newly completed/occupied entity-owned office buildings and substantial tenancy fit-outs | Itemised list | 29-31 |
| B4 | Environmental performance ratings of newly completed entity-owned non-office building or infrastructure projects or upgrades with a value over $1 million, where these ratings have been conducted | Itemised list | 29-31 |
| B5 | Environmental performance ratings achieved for entity-owned assets portfolio segmented by rating scheme and building, facility, or infrastructure type, where these ratings have been conducted | Number, summarised | 29-31 |
| Optional\* | Mass and proportion of recycled and restorative material content in any new infrastructure construction project or upgrades with a value over $1 million, segmented into material type | Tonnes and % | 31 |
| Optional\* | Average percentage of office-based employees working remotely over the reporting period | % | 31 |
| **Sustainable procurement** | | | |
| Optional\* | Discuss how the entity’s procurement and investment activities are environmentally responsible and/or consistent with the *Environmental impact in procurement – Goods and services procurement guide* and the *Sustainable Investment Guidelines*. | Description | 32-33 |
| Optional\* | Percentage and description of goods contracts that use:   * recycled content * remanufactured/refurbished material content   repurposed or reused materials | Description and % of total service contracts | 32-33 |
| **Water consumption** | | | |
| W1 | Total units of metered water consumed by water source | Kilolitres | 34-35 |
| W2 | Units of metered water consumed normalised by FTE, headcount, floor area, or other entity or sector specific quantity | Kilolitres (normalised) | 34-35 |

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| **Indicator** |  | **Unit** | **Page** |
| **Waste and recycling** | | | |
| WR1 | Total units of waste disposed of by disposal method and material type / waste stream | Kilograms and % | 36-39 |
| WR2 | Dedicated collection services provided in offices for printer cartridges, batteries, and soft plastics | % of office locations | 36-39 |
| WR3 | Total units of waste disposed normalised by FTE, headcount, floor area, or other entity or sector specific quantity, by disposal method | Kilograms (normalised) | 36-39 |
| WR4 | Recycling rate | % of total waste by weight | 36-39 |
| WR5 | Greenhouse gas emissions associated with waste disposal | Tonnes CO2-e | 36-39 |
| Optional\* | Contamination of standard bin contents | % | 39 |
| **Greenhouse gas emissions** | | | |
| G1 | Total scope one (direct) greenhouse gas emissions | Tonnes CO2, CH4, N2O, other and CO2-e | 40-43 |
| G2 | Total scope two (indirect electricity) greenhouse gas emissions | Tonnes CO2-e | 40-43 |
| G3 | Total scope three (other indirect) greenhouse gas emissions associated with commercial air travel and waste disposal | Tonnes CO2-e | 40-43 |
| Optional\* | Total scope three (other indirect) greenhouse gas emissions | Tonnes CO2-e | 42-43 |
| Optional\* | Any other known greenhouse gas emissions associated with entity activities | Tonnes CO2-e | 42-43 |
| Optional\* | Total greenhouse gas emission offsets purchased and retired segmented into activity type | Tonnes CO2-e | 42-43 |
| Optional\* | Net greenhouse gas emissions segmented by scope | Tonnes CO2-e | 42-43 |
| Optional\* | Any Climate Active certifications for organisations, products, services, or events | | 43-44 |

\* Optional indicators (included within FRD 24)

Each FRD 24 theme has been colour coded throughout this Manual:

|  |  |
| --- | --- |
|  | Electricity production and consumption |
|  | Stationary fuel use |
|  | Transportation |
|  | Total energy use |
|  | Sustainable buildings and infrastructure |
|  | Sustainable procurement |
|  | Water consumption |
|  | Waste and recycling |
|  | Greenhouse gas emissions |

# Electricity production and consumption

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| Indicators  **EL1:** Total electricity consumption segmented by source (MWh)  **EL2:** On-site electricity generated segmented by usage and source (MWh)  **EL3:** On-site installed generation capacity segmented by source (MW)  **EL4:** Total electricity offsets segmented by offset type (MWh) |

###### Definitions

Entities should take a whole of building perspective when accounting for electricity consumption. This means accounting for all consumption across the categories of tenancy and base building. In cases where data falls across these categories or cannot otherwise be categorised, consumption should be apportioned as a percentage of net lettable area of the whole building that your entity occupies. For all relevant electricity measures entities should breakdown their electricity consumption to provide a better understanding of activities and impacts. If relevant, the entity should show office-based energy use and major non-office energy consumption areas separately. Further, entities should provide a breakdown of office energy use into tenancy and base building, where data is available.

Tenancy energy use includes tenancy light and power, any supplementary air-conditioning, and any other items running off the tenancy distribution board. Base Building energy use includes the HVAC system, lifts, security, core area lighting, and all other base building services.

**EL1:** Total electricity consumption across the entity’s facilities, including electricity that is not directly purchased through a retail or wholesale agreement. This should be segmented by source:

* Purchased electricity (e.g., State Purchasing Contract, HealthShare Victoria contract, other centralised purchasing contract, or any other retail contract)
* Not directly purchased but from outside the organisation (e.g., premises the organisation leases within a larger commercial office building that are not individually metered, see Data Collection for guidance on calculation, or where electricity is included in a premises’ lease)[[7]](#footnote-8)
* Self-generated (if known – see indicator EL2)

The electricity consumption reported against 'purchased electricity’ and ‘Not directly purchased but from outside the organisation’ must be the total consumption and cannot be net of any exports or bill credits from on-site generation.

Contracts with other parties for on-site generation, where the generation asset is not owned by the entity, should be reported as purchased electricity. Appropriate emissions factors should be applied and reported when calculating scope 2 emissions at indicator G2.

Unsleeved[[8]](#footnote-9) power purchase agreements (PPA) should not be reported under this indicator. Any Large-scale Generation Certificates that are acquired and retired through an unsleeved PPA should instead by reported at indicator EL4. Sleeved PPA contracts should be reported as purchased electricity and as a separate item.

**EL2:** On-site electricity generation segmented by usage and source. This item is mandatory for any systems that are accredited under the Large-scale Renewable Energy Target (LRET) and all other on-site generation where data is available. Data may not be available for systems that aren’t accredited under the LRET, especially on self-consumed generation. Where monitoring systems have been installed on systems for measuring self-consumed generation or total generation it should be reported. Where systems to monitor self-consumption have not been installed, the entity may wish to report that these will be retrofitted when these solar PV assets are replaced. For renewable generation, if no LGCs are generated, or any LGCs generated are surrendered, the electricity from the system can be treated as zero emission renewable energy. If LGCs are generated but not surrendered the electricity must be treated as non-renewable grid-sourced.

On-site generation should be segmented into the following sources:

* Wind
* Solar PV
* Bioenergy (including biogas from wastewater or landfill)
* Hydroelectric
* Other renewable (as defined by the *Renewable Energy (Jobs and Investment) Act 2017*)
* Cogeneration (report electricity produced by cogeneration - fuel used in cogeneration plant should also be reported at indicator F1)
* Other non-renewable

Electricity generated by on-site sources should also be segmented by the following uses:

* consumption behind-the-meter (only where data is available, this does not need to be reported if appropriate monitoring systems are not installed on on-site generation assets)
* exports (data on exports from on-site systems is generally available from retailers)
* for use outside the facility other than for supply to the grid (this will only be relevant if electricity is generated for use by an organisation different to the entity, but on the same site, such as from a cogeneration plant, or for supply through a microgrid)

To avoid double counting, electricity generated by stand-by power systems, such as back-up generators, does not need to be reported at this indicator, however fuel used in these systems should be reported at indicator F1. This indicator is for all generation assets that are owned by the entity. On-site generation under contract with other parties who own the generation assets should be reported at indicator EL1, however in these cases fuel use must not be counted.

**EL3**: Installed generation capacity in Megawatts (as at end of reporting period) at sites within the organisational boundary. For renewable generation, ~~I~~if no LGCs are generated, or any LGCs generated are surrendered, the electricity from the system can be treated as zero emission renewable energy. If LGCs are generated but not surrendered the electricity must be treated as non-renewable grid-sourced. On-site generation should be segmented into the following sources:

* Wind
* Solar PV
* Bioenergy (including biogas from wastewater or landfill)
* Hydroelectric
* Other renewable (as defined by the *Renewable Energy (Jobs and Investment) Act 2017*)
* Cogeneration
* Energy Storage Systems (report power capacity (MW) and total storage capacity in MWh). Only large, stand-alone systems should be included in reporting. Uninterruptable Power Supplies should not be included.
* Other non-renewable (including standby power systems if relevant)

Only fixed generation should be reported for this indicator. Mobile generation, such as portable petrol and diesel generators or batteries and generators installed on vehicles should not be reported.

**EL4:** Total electricity offsets segmented by offset type. These offset types include:

* LGC’s voluntarily retired by the entity (for example from self-generated behind-the-meter renewables)
* LGC’s voluntarily retired on the entity’s behalf (for example as part of the Renewable Certificate Purchasing Initiative or other central arrangements)
* GreenPower or certified carbon neutral electricity purchased (e.g., through a retailer’s contract option)
* LGC’s mandatorily retired as a RET liable entity or mandatorily retired on the entity’s behalf where LGCs are provided to the entity’s retailer for that express purpose. This type of offsetting is only relevant for those entity’s engaged in these arrangements. Entities engaged in mandatory surrender should not claim the Renewable Power Percentage.
* The Renewable Power Percentage (see Climate Active’s Electricity Accounting Rules). Note that if you are using the Environmental data reporting tool that you do not need to separately add the Renewable Power Percentage. The Renewable Power Percentage is automatically accounted for when the tool calculates Scope 2 emissions (G2) and Renewable energy (E3).

Where entities are offsetting scope 2 emissions with generic carbon offsets, such as Australian Carbon Credit Units (ACCUs), these should not be reported here and instead listed at the optional indicator under Greenhouse Gas Emissions.

Entities should follow the market-based method of Climate Active’s electricity emissions accounting rules[[9]](#footnote-10) when determining offsets and calculating scope 2 emissions at indicator G2. Per these rules, Entities may claim the Renewable Power Percentage as zero emissions but should apply the residual marginal factor to any grid sourced electricity that is not otherwise offset when calculating scope 2 emissions.

###### Purpose

**EL1-EL4:** These indicators provide crucial information for the acquittal of the Victorian Government’s 100% renewable electricity target for government operations.

**EL3**: This indicator is to improve knowledge of Victorian Government Distributed Energy Resources (DER).

###### Context

The context of the energy consumption data presented must be clarified, including where appropriate:

* % of total sites or % of total staff represented by data, if not near 100%
* whether data has been affected by machinery of government changes
* for on-site generation, whether it is occurring as part of a demand management or other scheme such as the Reliability and Emergency Reserve Trader (RERT) scheme managed by the Australian Energy Market Operator
* any other material information about the data such as office/non-office usage, nature of tenancy, and base building components that are relevant to consumption

###### Actions Undertaken

Entities are to disclose activities that reflect the efforts made in managing the impacts of energy use or that provide other organisations with a means of replicating success.

###### Data source

Electricity and other stationary energy consumption data can be sourced through:

* The energy supplier or retailer, including through secondary platforms such as Resource Advisor for electricity State Purchase Contract consumption.
* Property, facilities, building services or other relevant personnel who receive such invoices or data directly or have direct access to this data
* Shared Service Provider (DGS) - where the SSP manages the building
* Reading of energy meters and/or submeters
* Data provided directly from entity sites

To obtain the most reliable data in a timely manner, it is recommended that, where possible, data should be obtained electronically from the energy retailer or supplier or other similar source. All relevant energy consumption data is usually included on conventional energy invoices or electronic summaries and therefore should be able to be obtained from these. Under the Energy Retail Code, retailers are required to provide customers with billing data if requested.

Where self-consumed solar PV data is not available, this can be estimated as total solar electricity generated less total solar electricity exported for the reporting period. Total electricity generated can be estimated as 3.6kWh per day per 1 kW solar system. For example, a 3kW system that has been operational for 365 days would generate an estimated 3,942 kWh (3.6kWh multiplied by 3 multiplied by 365 days). Exported solar can be sourced through invoice data received from energy suppliers or retailers.

###### Data collection

EL1-EL2, and EL4 Electricity Consumption:

Collect energy consumption data including:

* Commencement and completion dates of period over which the consumption is measured.
* Electricity type and consumption in the following units of measurement (as relevant):
* Electricity (MWh) – including Green Power

Electricity data from all buildings and machinery should be collected as follows:

* Where the entity is the sole occupant of a building, either leased or Government-owned, collect the entire building’s electricity consumption including tenancy and all base building central services such as air conditioning, lifts, external lighting and all internal light and power, carparks, etc. Tenancy and base building should be reported separately where possible.[[10]](#footnote-11)
* Where the entity is a tenant or occupant in a multi-tenanted building, either leased or government owned, collect lighting and power usage for the entity’s tenancy or occupied floors only.
* Where multiple tenants occupy a single building with common electricity meter(s) for multiple tenants (including or excluding base building consumption), electricity consumption should be apportioned by tenancy floor area, where whole-of-building data is available from the building management. If submetering has been installed, this data should be used.

###### Data Analysis

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| **Other conversion factors:**  1 kWh =3.6 MJ  1 GJ = 1000 MJ = 1 000 000 J  1MWh= 1000 kWh  Tonnes = kg / 1000 (1 tonne = 1000 kg) |

###### Relevant GRI indicators[[11]](#footnote-12)

**302-1.** Energy consumption within the organization

**302-2.** Energy consumption outside of the organization

**302-4.** Reduction of energy consumption

###### Relevant SDG targets

**Target 7.2:** By 2030, increase substantially the share of renewable energy in the global energy mix

**Target 7.3:** By 2030, double the global rate of improvement in energy efficiency

# Stationary fuel use

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| Indicators  **F1:** Total fuels used in buildings and machinery segmented by asset type and fuel type (MJ)  **F2:** Greenhouse gas emissions from stationary fuel consumption segmented by fuel type (Tonnes CO2-e) |

###### Definitions

For all relevant energy measures entities should breakdown their energy use to provide a better understanding of the entities activities and impacts. If relevant, the entity should show office-based energy use and major non-office energy consumption areas separately. Further, entities should provide a breakdown of office energy use into tenancy and base building, where applicable.

Tenancy energy use includes tenancy power, any supplementary air-conditioning, and any other items running of the tenancy distribution board. Base Building energy use includes HVAC system and all other base building services.

Entities should take a whole of building perspective when accounting for stationary fuel consumption in buildings. This means accounting for all consumption across the categories of tenancy and base building. In cases where data falls across these categories or cannot otherwise be categorised, consumption should be apportioned as a percentage of the net lettable area that your entity occupies.

**F1:** Total fuels used segmented by asset type and fuel type (MJ). Asset types that must be included are:

Buildings – fuel used in heating, cooling, cooking, and the provision of other building services

Machinery – any item of plant or equipment that uses fuel for a defined process that is not already counted in buildings or vehicles (see Indicator T1, for vehicle fuel use).

Fuel types should include:

* Natural gas
* LPG
* Diesel
* Petrol
* Hydrogen
* Solid fuel
* Fuel oil

**F2:** Greenhouse gas emissions from stationary fuel consumption segmented into fuel type (Tonnes CO2-e). This should be calculated based on the fuel consumption for buildings and machinery reported in indicator F1, segmented by relevant fuel types, and greenhouse gas emissions factors from the National Greenhouse Accounts (NGA) Factors for the relevant emissions year.[[12]](#footnote-13)

###### Purpose

**F2:** Associated GHG Emissions provides information on the scale of greenhouse gas emissions associated with an entity’s business operations and assists in assessing the scope for reducing them.

Other measures provide critical activity input data for the calculation of greenhouse gas emissions.

###### Context

The context of the energy consumption data presented must be clarified, including:

* % of total sites or % of total staff represented by data, if not near 100%
* whether data has been affected by machinery of government changes
* any other material information about the data such as office/non-office usage, nature of tenancy, and base building components that are relevant to consumption

###### Actions Undertaken

Entities are to disclose activities that reflect the efforts made in managing the impacts of energy use or that provide other organisations with a means of replicating success.

###### Data Source

Stationary energy consumption data can be sourced through:

* The energy supplier or retailer including through secondary platforms such as Resource Advisor for gas State Purchase Contract consumption.
* Property, facilities, building services or other relevant personnel who receive such invoices or data directly or have direct access to this data
* Shared Service Provider (DGS) - where the SSP manages the building
* Reading of energy meters and/or submeters
* Data provided directly from entity sites

To obtain the most reliable data in a timely manner, it is recommended that, where possible, data should be obtained electronically from the energy retailer or supplier. All relevant energy consumption data is usually included on conventional energy invoices or electronic summaries and therefore should be able to be obtained from these. Under the Energy Retail Code, retailers are required to provide customers with billing data if requested.

Stationary fuel consumption data can also be estimated using the following approaches:

* Total LPG fuel consumption used in BBQs and total petroleum-based oils and grease consumption can be estimated through a process of stock consumed throughout the year based on an asset register or stock take register. As per the stock take register or asset register, the number and volume of the LPG tanks or petroleum-based oils and grease containers checked out and consumed across the year or number of assets in the register that are in use multiplied by the associated tank/container volume. Summing the volume of the different tank/container types.
* Alternatively for BBQ LPG, where the tank volumes are unknown consumption can be calculated on the basis that an average gas BBQ LPG is approximately 16.66L. Where the number of tanks is unknown. An estimation can be made based on how frequently bottles are switched out across the year (i.e., total number of tanks used = 365 days / days between tanks being switched out. For example, a bottle on average for a specific BBQ lasts 90 days as such 365 days/90days equates to 4 tanks a year for a specific BBQ.
* Where the entity uses stationary fuel consumption, for example diesel for electricity generation purposes and fuel meter readings are not available one of the following methods, dependant on metering points and data availability should be used, in order of preference:
  + Conduct tank fuel dips (kL) at the start and end of the reporting period, accounting for any fuel purchased as per invoices or delivery dockets. The formulae applied to determine fuel consumption is opening balance fuel balance (kL) + purchases (kL) - closing fuel balance (kL)
  + An estimation can be made using the specific fuel consumption on a L/hour or L/kWh basis specific to the relevant generator's design specification the entity has in operation. Multiplying specific fuel consumption by total number of run hours, or where metering is available total power consumption (kWh) multiplied by specific fuel consumption, or where metering provides power in kilowatts (kW) multiplied by the specific fuel rate and run hours will provide total litres consumed.

###### Data Collection

F1 Energy Consumption:

Collect energy consumption data including

* Commencement and completion dates of period over which the consumption is measured
* Energy type and consumption in the following units of measurement (as relevant):
  + - Natural gas (MJ)
    - LPG (litres or kilograms)
    - Heating oil (litres or MJ)
    - Diesel (litres or MJ)
    - Solid fuel (type and kilograms)
    - Petroleum based oils and greases (litres)

Energy data from all buildings and machinery should be collected as follows:

* Where the entity is the sole occupant of a building, either leased or Government-owned, collect the entire building’s stationary fuel consumption including tenancy and all base building services. Tenancy and base building should be reported separately where possible. [[13]](#footnote-14)
* Where the entity is a tenant or occupant in a multi-tenanted building, either leased or government owned, collect stationary fuel consumption for the entity’s tenancy or occupied floors only.
* Where multiple tenants occupy a single building with common fuel meter(s) for multiple tenants (including or excluding base building consumption), fuel consumption should be apportioned by tenancy floor area, where whole-of-building data is available from the building management. If submetering has been installed, this data should be used.

###### Data analysis

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| **F2:** GHG emissions (tonnes CO2-e) = (units of energy type x GHG emissions factor) The National Greenhouse Accounts Factors and methods workbook conversion factors are to be used to calculate F2: [Australian National Greenhouse Accounts Factors (dcceew.gov.au)](https://www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-account-factors-2023.pdf). Use Scope 1 emissions factor combined gases only, not combined scope 1 and 3 factors. Use the individual gases’ scope 1 emissions factors for combining into indicator G1. |

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| **Other conversion factors:**  1 kWh =3.6 MJ  1 GJ = 1000 MJ = 1 000 000 J  1MWh= 1000 kWh  Tonnes = kg / 1000 (1 tonne = 1000 kg) |

###### Relevant GRI indicators[[14]](#footnote-15)

**302-1.** Energy consumption within the organization

**302-4.** Reduction of energy consumption

**305-1**. Direct (Scope 1) GHG emissions

**305-7.** Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions.

###### Relevant SDG targets

**Target 7.2:** By 2030, increase substantially the share of renewable energy in the global energy mix

**Target 7.3:** By 2030, double the global rate of improvement in energy efficiency

# Transportation

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| Indicators  **T1:** Total energy used in transportation within the entity segmented by fuel type and vehicle category (MJ or MWh)  **T2:** Number and proportion of vehicles in the organisational boundary segmented by vehicle category and engine/fuel type (Number and %)  **T3:** Greenhouse gas emissions from vehicle fleet segmented by fuel type and vehicle category (Tonnes CO2-e)  **T4:** Total distance travelled by commercial air travel (km) |

###### Definitions

**T1:** Total energy used in transportation within the entity segmented by fuel type and vehicle category (MJ or MWh for fuel use).

Fuel types should include:

* Petrol (where data is available this should be further subdivided into Unleaded, E10 etc.)
* Diesel
* Biodiesel (where biodiesel is used as a vehicle fuel either in whole or as a fraction, further information on its source should be provided including the appropriate emissions factor for use in calculating any associated greenhouse gas emissions)

**Aviation fuel**

Contextual information should specify if fuels are avgas, or aviation turbine fuel (ATF) – where both fuels are in use in an organisation these should be reported separately.

**Hydrogen**

Where hydrogen is used as a vehicle fuel, the entity should gather information on the production process and emissions intensity of the hydrogen and report any associated greenhouse gas emissions as a component of its scope 3 emissions at indicator G3.

**Electricity**

Entities should report both the MWh and MJ energy used to charge plug-in hybrid and battery electric vehicles. This should be segmented into electricity used at Victorian Government facilities, and electricity used from other public or private chargers. To avoid double counting Entities should apply the following rules when summing energy use in electric vehicles with energy use from other transport fuels:

Where these vehicles are charged at Victorian Government facilities, energy used for charging should not be added to the total at T1. This ensures that electricity use reported at EL1 is inclusive of all electricity used by the entity.

If vehicles are charged at external facilities and the amount of electricity consumed is measured, this should be added to the total at T1 and not reported at EL1. This ensures that total organisational energy use is accurate. When subsequently calculating transport related greenhouse gas emissions the emissions associated with this electricity use should be included at T3, noting that this amount can be offset by LGCs or other electricity offsets reported at EL4.

Electricity used to power wired public transportation such as the metropolitan train and tram network should not be reported under this indicator, but instead reported at EL1.

Entities should express the total energy used in transportation according to the vehicle categories set out in the below table. Entities should report to the highest level for which data is available, recognising that fuel consumption data is often not available segmented by vehicle category or type. Where fuel usage data is not reported by vehicle category or type this should be reported using the ‘level 1’ categories. Terms have the same meaning as in the *Vehicle Standard (Australian Design Rule - Definitions and Vehicle Categories) 2005*[[15]](#footnote-16)*.*

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| Level 1 (report for T1) | Level 2 (report for T2, and T1 if segmented fuel data is available) | Level 3 (optional) |
| Road vehicles | Two-wheeled and three-wheeled vehicles | Moped (2 wheel) |
| Moped (3 wheel) |
| Motorcycle |
| Motor tricycle |
| Passenger vehicles (other than omnibuses) | Entities may further categorise by using the Categories of the VicFleet Approved Vehicles List[[16]](#footnote-17) which are based on the VFACTS Categories[[17]](#footnote-18) |
| Buses (Omnibuses) | Light bus |
| Heavy bus |
| Goods vehicles | Entities may further categorise goods vehicles by operational designation/purpose or by light medium and heavy categories in the ADR. |
| Non-road vehicles | Heavy rail locomotives | Entities may further categorise non-road vehicles by operational designation/purpose |
| Light rail vehicles |
| Marine vessels |
| Rotary wing aircraft |
| Fixed wing aircraft |
| Other non-road vehicles that fall outside the *Vehicle Standard (Australian Design Rule - Definitions and Vehicle Categories) 2005* |

Accompanying contextual information should provide further detail on the purpose, usage, and organisational classification of vehicles, especially specialist operational vehicles.

Vehicles include all those under the operational control of the entity, regardless of ownership, and all vehicles owned by the entity even if their ‘operation’ and maintenance is contracted to another party.

Items that are not required to be reported but can be optionally included as separate line items for this indicator include executive vehicles including salary packaged and chauffer driven vehicles (but not novated lease vehicles), taxis, rideshare and short-term rentals. Unpowered vehicles (bicycles, rowboats etc.) should not be included in reporting.

**T2:** Number and proportion of vehicles in the organisational boundary segmented by vehicle category and engine/fuel type (Number and %). Vehicle categories should be the same as for indicator T1. Engine/fuel types used should be:

Internal combustion engines (where combusting fuel is used to drive pistons, turbines, rotors etc.)

* Petrol
* Diesel/biodiesel
* LPG
* Aviation fuels
* Solid fuel
* Fuel oil
* Hybrid (a vehicle which uses multiple primary fuel sources)
* Plug-in Hybrid Electric Vehicle (PHEV)
* Range-extended electric vehicle
* Electric propulsion
* Battery Electric Vehicle (BEV)
* Fuel Cell Electric Vehicle (FCEV)
* Externally powered (such as rail locomotives and trams)

**T3:** Greenhouse gas emissions from vehicle fleet segmented by fuel type and vehicle category (Tonnes CO2-e and tonnes CO2-e). Vehicle categories and fuel types should be the same as for indicator T1. Greenhouse gas emissions factors from the National Greenhouse Accounts (NGA) Factors for the relevant emissions year should be used.[[18]](#footnote-19)

**T4:** Total distance travelled by commercial air travel (passenger km). This indicator should measure the total passenger kilometres travelled for business purposes by entity staff on commercial or charter aircraft. It should not include travel on aircraft operated by the entity and reported on at indicators T1-T4.

##### Purpose

**T2:** This indicator provides crucial information for the acquittal of the Victorian Government and entity zero emissions fleet vehicle targets.

**T3:** Associated GHG Emissions provides information on the scale of greenhouse gas emissions associated with an entity’s business operations and assists in assessing the scope for reducing them.

Other measures provide critical activity input data for the calculation of greenhouse gas emissions.

###### Context

The context of the transport data presented must be clarified, including:

* method of obtaining and calculating data
* whether data has been affected by machinery of government changes
* any other material information about the data relevant to consumption

###### Actions Undertaken

Entities are to disclose activities that reflect the efforts made in managing the impacts of transport use or that provide other organisations with a means of replicating success.

##### Data Source

Transport data can be sourced through:

* VicFleet/FuelTrac provides data on the fuel consumption of vehicles leased from it by individual Entities.
* The lease invoice data for the vehicles
* Each entity’s Internal Fleet Manager may provide data related to:
* Fuel consumed by all other vehicles (from fuel purchase records / contact records from fuel suppliers, e.g. fuel card records)
* Kilometres travelled by all other passenger vehicles (from logbooks)

**T4**: Data may be collected and collated from the travel service provider/s.

###### Data Collection Relevant GRI indicators

**T1**: The data on fuel consumption is to be collected monthly or quarterly from the sources above and can be compiled annually for the purpose of FRD 24 reporting.

###### Data analysis

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| **T1:** Three methods of analysis can be used for these indicators:  Method 1 - where comprehensive fuel usage data is available, the calculation of indicators must be from the available data.  Method 2 - where fuel usage data is unavailable, distance travelled can be derived from annualised km travelled from vehicle logbooks, fleet telematics, or odometer readings taken either annually or at the end of a vehicles lease or life and converted to fuel usage using the Australian Design Rule (ADR) 80/01 fuel economy figures for each vehicle based on make, model.  Method 3 - Where data is unavailable for electricity consumed by electric vehicles, this can be estimated based on kWh consumed per km travelled multiplied by distance travelled. Distance travelled can be derived from annualised km travelled from electric vehicle logbooks, fleet telematics, or odometer readings taken either annually or at the end of a vehicles lease of life. The average kWh consumed per km should be estimated based on manufacturers vehicle manual.  **Method 1**  **T1**: Total consumption for each fuel source, should be calculated by simple addition.  **Method 2**  Kilometres derived from odometer readings taken at the end of each vehicle lease or as available on lease invoice:   * annualised km/day = [(final odometer reading – initial odometer reading)/total days of lease] OR [(end of year odometer reading – start of year odometer reading)/365] * kilometres travelled in year of annual reporting period = annualised km/day x days vehicle in service during the annual reporting period OR as otherwise provided through fleet telematics, fleet management or vehicle logbooks   **T1**: litres of fuel used is to be derived from the kilometres travelled by each vehicle based on the Australian Design Rule (ADR) 80/01 fuel economy figures for each vehicle’s make and mode. The litres of fuel can then be converted to megajoules using the energy content conversion factors in the latest version of the National Greenhouse Accounts emissions factors for the relevant emissions year (https://www.industry.gov.au/data-and-publications/national-greenhouse-accounts-factors)  **T3**: Use the National Greenhouse Accounts Factors and methods workbook conversion factors: [Australian National Greenhouse Accounts Factors (dcceew.gov.au)](https://www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-account-factors-2023.pdf). Use Scope 1 emissions factor combined gases only, not combined scope 1 and 3 factors. Use the individual gases’ scope 1 emissions factors for combining into indicator G1. |

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| Other conversion factors:  1 kWh =3.6 MJ  1 GJ = 1000 MJ = 1 000 000 J  1MWh= 1000 kWh  Tonnes = kg / 1000 (1 tonne = 1000 kg) |

##### Optional indicators

FRD 24 identifies the following optional indicators:

* percentage of employees using sustainable transport (including public transport, cycling, walking and other active modes) to get to and from their main office location, by locality type (CBD, metro, regional). This can be identified through regular employee survey.
* total vehicle travel associated with entity operations segmented by fuel type and vehicle category, for land vehicles (kilometres)
* total vehicle travel associated with entity operations segmented by fuel type and vehicle category, for non-land vehicles (hours of operation)
* greenhouse gas emissions from vehicle fleet segmented by fuel type and vehicle category (tonnes CO2-e) – per 1,000 km for land vehicles and per hour of operation for non-land vehicles

###### Relevant GRI indicators

**302-1.** Energy consumption within the organization

**302-3.** Energy intensity

**302-4.** Reduction of energy consumption

**305-1**. Direct (Scope 1) GHG emissions

**305-7.** Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions.

###### Relevant SDG indicators

**Target 11.2:** 11.2 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

**Target 7.3:** By 2030, double the global rate of improvement in energy efficiency.

# Total energy use

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| Indicators  **E1:** Total energy usage from fuels (MJ)  **E2:** Total energy usage from electricity (MJ)  **E3:** Total energy usage segmented into renewable and non-renewable sources (MJ)  **E4:** Units of energy used normalised by FTE, headcount, floor area, or other entity or sector specific quantity (MJ – normalised) |

###### Definitions

**E1:** Total energy used from fuels by an entity to perform its activities within the Annual Reporting period. This should include stationary fuels (from indicator F1) and transport fuels (from indicator T1)

**E2**: Total energy used from electricity by an entity to perform its activities within the Annual Reporting period. This is the same as the total at EL1 converted into megajoules.

**E3**: Total energy used from fuels (indicator E1) and electricity (indicator E2) by an entity to perform its activities within the Annual Reporting period.

**E4:** This indicator provides the total energy used normalised against an indicator of the size of an entity’s operation. Typically, this should be FTE, but an entity may also choose headcount, floor area etc.

##### Purpose

**E1-E3:** These indicators provide underlying activity data for estimation of the sources of greenhouse gas emissions from government operations.

**E4:** These indicators provide important context for measuring the energy intensity of an entity over time. They can also assist in comparing similar entities, for example comparing across entities whose primary use of energy is office-based.

##### Context

The context of the energy consumption data presented must be clarified, including:

* % of total sites or % of total staff represented by data, if not near 100%
* whether data has been affected by machinery of government changes
* any other material information about the data such as office/non-office usage, nature of tenancy, and base building components that are relevant to consumption

##### Actions Undertaken

Entities are to disclose activities that reflect the efforts made in managing the impacts of energy use or that provide other organisations with a means of replicating success.

##### Data Source

Office floor area data (net lettable area) can be sourced from:

* Shared Service Provider (SSP)
* Tenancy agreement
* Floor plans of buildings

##### Data Collection

##### Data analysis

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| **E1:** Total energy used from fuels (MJ) = F1 + T1  **E2**: Total energy used from electricity (MJ) = EL1\*3600  **E3**: Total energy used (MJ) = E1 + E2  **E4:** Energy used (normalised) = E3 / normalisation factor |

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| Other conversion factors:  1 kWh =3.6 MJ  1 GJ = 1000 MJ = 1 000 000 J  1MWh= 1000 kWh  Tonnes = kg / 1000 (1 tonne = 1000 kg) |

##### Relevant GRI indicators

**302-1.** Energy consumption within the organization

**302-2.** Energy consumption outside of the organization

**302-3.** Energy intensity

**302-4.** Reduction of energy consumption

##### Relevant SDG targets

**Target 7.2:** By 2030, increase substantially the share of renewable energy in the global energy mix

**Target 7.3:** By 2030, double the global rate of improvement in energy efficiency

# Sustainable buildings and infrastructure

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| Indicators  **B1**: Discuss how environmentally sustainable design is incorporated into newly completed entity-owned buildings (description)  **B2:** Discuss how new entity leases meet the requirement to preference higher-rated office buildings and those with a Green Lease Schedule (description)  **B3:** NABERS Energy ratings of newly completed/occupied entity-owned office buildings and substantial tenancy fit-outs (itemised list)  **B4**: Environmental performance ratings of newly completed entity-owned non-office building or infrastructure projects or upgrades with a value over $1 million, where these ratings have been conducted (itemised list)  **B5:** Environmental performance ratings achieved for entity-owned assets portfolio segmented by rating scheme and building, facility, or infrastructure type, where these ratings have been conducted (number, summarised) |

##### Definitions

Reporting requirements for B1-B5 are summarised by whether the building is owned or leased and new or existing in the table below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicator | New building | | Existing building | |
| Owned | Leased | Owned | Leased |
| B1 | Report procurement and construction policy | N/A | N/A | N/A |
| B2 | N/A | Report leasing policy and practice for office accommodation | N/A | Report leasing policy and practice for office accommodation |
| B3 | Report NABERS Energy Rating of office accommodation | N/A | N/A | Report Tenancy NABERS Energy Rating if a substantial fit-out is done by the entity |
| B4 | Report sustainability ratings for any new building or infrastructure if a sustainability rating has been conducted | N/A | N/A | N/A |
| B5 | N/A | N/A | Report sustainability ratings for any building or infrastructure if a sustainability rating has been conducted | N/A |

**B1:** This is qualitative indicator that should provide detail on how all new buildings constructed by the entity meet the requirement to embed environmentally sustainable design. The entity may refer to procurement or construction policy within the organisation, any certification schemes they utilise, how the Sustainable Investment Guidelines are implemented in the organisation, and any relevant quantitative indicators elsewhere in this section.

Where the entity constructs buildings for another organisation, they should report relevant ESD policy at this indicator.

Where the entity’s owned buildings have their construction managed by another organisation (such as a government building authority) they should include boilerplate text noting this arrangement and outlining the other organisation’s ESD policies.

**B2:** This is a qualitative indicator that should provide detail on how Green Lease Schedules and high-rated buildings are preferenced when the organisation leases office accommodation.

**B3:** This indicator relates to newly constructed buildings that are owned by the entity or substantial tenancy fit-outs. A fit-out is considered substantial if the nature of the fit-out would lead to a large change in the National Australian Built Environment Rating System (NABERS) Energy rating or otherwise makes significant changes to the building’s interior configuration or energy consumption. NABERS ratings should be conducted for all relevant office accommodation completed after 1 July 2022 and then reported in the first annual report after the necessary data for the NABERS rating is available. This should take the form of a list.

Where the Victorian Government is the sole owner/occupier of the building the Whole Building NABERS Energy rating should be reported.

Where the entity is a tenant the Tenancy NABERS Energy rating should be used.

In both cases the rating without GreenPower should be reported. Where the rating does not meet Victorian Government commitments (5-Star NABERS from 2021 and 6-Star NABERS from 2025) an explanation should be provided.

**B4:** The entity should report on any entity-owned non-office construction project or upgrade that was completed during the reporting period with a capital expenditure of over $1 million. Only projects where an environmental performance rating (such as NABERS, Green Star, ISCA IS Rating, etc.) has been obtained, or is expected to be obtained, for the project, should be reported. Where an entity has a large portfolio of similar construction projects the entity may substitute a list of projects against this indicator for a summary table. NABERS Energy ratings for office buildings or tenancy fit-outs should not be included in this indicator and instead reported at indicator B3. If no environmental performance rating is expected to be obtained, then reporting is not required.

**B5**: Building and infrastructure environmental performance ratings achieved segmented by rating scheme and building, facility, or infrastructure type (Number) for all existing entity-owned facilities. Where an entity’s office and non-office facilities have achieved a NABERS rating (including Energy, Water, Indoor Environment and Waste), Infrastructure Sustainability Council of Australia (ISCA) Infrastructure Sustainability rating scheme, Green Star, Climate Active (Buildings or Precincts) certification, or other sustainability rating, these should be reported. Where these ratings have not been conducted, there is no obligation on the entity to obtain them, especially as suitable rating schemes are often not available or expensive to participate in. An entity can report these for individual facilities or report the number of facilities that have achieved a particular rating under each relevant scheme. As part of the contextual information for this indicator an entity may report the total number of entity owned facilities in its organisational boundary that are not rated by any scheme and include a brief note of the reason for not being rated (e.g., no suitable rating scheme is available). The entity may also report the percentage of owned facilities that have a rating.

##### Purpose

**B1-B5:** Provides key data for the measurement and acquittal of Whole of Victorian Government emissions reduction pledge Environmentally Sustainable Design commitments.

**B6:** Provides data for the Victorian Government and Entities to assess the possible materiality of remote work on environmental impacts and greenhouse gas emissions.

##### Context

The context of the data presented must be clarified, including:

* whether data has been affected by machinery of government changes
* any other material information about the data

##### Data Source

Information on procurement practices can be sourced through an entity’s procurement and building policies and manuals. Information on upgrades may also be sourced through asset management plans and systems.

Data on new construction and upgrades can be sourced through Environmental Effects Statements, Construction Environmental Management Plans, or other construction project management documents.

Building rating data can be sourced through:

* Property, facilities, building services or other relevant personnel
* Shared Service Provider (DGS) - where the SSP manages the building
* Data provided directly from entity sites

##### Optional Indicators

FRD 24 identifies the following optional indicators:

Mass and proportion of recycled or restorative (for instance material made with biochar or mineralised carbon dioxide) material content in any new infrastructure construction project or upgrades with a value over $1 million, segmented into material type (tonnes and %)

Average percentage of office-based employees working remotely over the reporting period. Office-based staff include those whose regular duties are primarily desk-based in an office environment. Remote work includes all regular work performed at home, or otherwise not at a Victorian Government workplace (including an employee’s regular place of work or Suburban Hub etc.), where that work would normally be performed at a Victorian Government workplace. The percentage should be expressed as the number of hours worked remotely divided by the total number of hours worked by office-based employees. Data can be sourced from analysis of entity flexible working agreements or from a survey completed by entity employees. Where a survey is used it should be completed once per annum by each entity. The survey must identify for a normal working week (preferably in Spring or Autumn) what percentage of staff are working remotely. Surveys could be extended to ensure coverage across periods where increased remote working may be expected, such as near or during public or school holiday periods. It is noted that these surveys might be used for collecting other useful data such as travel to and from work, barriers to selected modes or attitudes on other environmental matters. This is encouraged. Data on this indicator may also be collected through agency human resource or other systems that are being used to record flexible work arrangements, or through conducting a headcount of representative offices on representative days.

##### Relevant GRI indicators

**302-1.** Energy consumption within the organization

**302-2.** Energy consumption outside of the organization

**302-3.** Energy intensity

**302-4.** Reduction of energy consumption

##### Relevant SDG targets

**Target 9.1:** Develop quality, reliable, sustainable, and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

**Target 9.4:** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

**Target 12.7**: Promote public procurement practices that are sustainable, in accordance with national policies and priorities

# Sustainable procurement

##### Optional Indicators

FRD 24 identifies the following optional indicators:

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| --- | --- |
| Optional\* | Discuss how the entity’s procurement and investment activities are environmentally responsible and/or consistent with the *Environmental impact in procurement – Goods and services procurement guide* and the *Sustainable Investment Guidelines*. |
| Optional\* | Percentage and description of goods contracts that use:   * recycled content * remanufactured/refurbished material content * repurposed or reused materials |

Entities that need to provide annual reporting as part of the Social Procurement Framework should do so under the relevant section of their annual report.[[19]](#footnote-20) Entities may wish to provide additional detail on sustainable procurement in the FRD 24 section of their annual report, that goes beyond the data and narrative reported on under the social procurement framework. Two optional indicators are suggested for the provision of further data on sustainable procurement.

Information on how the entity’s procurement and investment activities are environmentally responsible and/ or consistent with the *Environmental impact in procurement – Goods and services procurement guide* and the *Sustainable Investment Guidelines*.

Information may include (but is not limited to):

how the entity is implementing various guidance and policy including:

* Sustainable Investment Guidelines
* Environmental impact in procurement – Goods and services procurement guide
* ISO:20400 Sustainable procurement guidance
* examples of how the entity has incorporated environmental considerations into procurement and other supply chain decisions
* examples of how the entity has avoided the use of disposable products or implemented reusable or circular economy systems within the entity’s operations
* progress in achieving any procurement related entity or whole of government targets

##### Percentage and description of goods contracts that use recycled content, remanufactured/refurbished material content, repurposed or reused materials

This optional indicator is aligned to the Social Procurement Framework outcome: *Project-specific requirements to use sustainable resources and to manage waste and pollution*. However, it is much more specific and targeted than the reporting metrics for the Social Procurement Framework outcome and may require Entities to undertake additional screening of contracts to ensure that they meet the contain the relevant specific clauses. While contracts that address this indicator will very likely meet the above Social Procurement Framework outcome, the reverse may not be the case.

The entity should provide a summary of any goods contracts that contain any of the following attributes. The entity may wish to focus on its highest value contracts in reporting against this indicator or develop its own amount threshold in reporting on this optional Indicator. If any threshold is used, the entity should report that threshold and indicate the proportion of total goods contracts, by value, it represents. These definitions of the content types are:

* **Recycled content**: Recycled content is waste material that has been recovered, reprocessed, and recycled in the creation of a new product. Waste materials include those diverted from the waste stream during a manufacturing process, or after use by households, businesses, or industrial facilities. An example includes purchasing uniforms that contain 15% of recycled fibre content. A product counts as ‘recycled content’ if it includes at least some recycled waste material, there is no minimum percentage above 0%.
* **Remanufactured/Refurbished material content**: purchased goods have been (or through the contract will be) restored or rebuilt to original (or better) working order and appearance. This can use a combination of reused, repaired, and new parts provided specifications of the original manufactured product are met. An example includes purchasing refurbished office chairs with new cushions.
* **Repurposed materials**: goods provided through the contract have been deliberately reused for a new, different purpose. An example includes purchasing shipping containers for storage of equipment at government sites.
* **Reused materials**: goods provided through the contract are second-hand and are being used again for the same purpose. An example includes purchasing second-hand office desks for a new office fit out.
* The entity should provide the percentage of goods contracts that meet one or more of these listed attributes. Where multiple attributes have been met, the entity may provide a break-down for the type of goods contracts that meet each of the different attributes.

The context of the data presented must be clarified, including:

* method of obtaining and calculating data
* whether data has been affected by machinery of government changes
* any other material information about the data such as office/non-office production that are relevant to procurement

##### Relevant GRI indicators

**301-1.** Materials used by weight or volume

**301-2.** Recycled input materials used

**301-3.** Reclaimed products and their packaging materials

**302-5.** Reductions in energy requirements of products and services

**308-1.** New suppliers that were screened using environmental criteria

**308-2.** Negative environmental impacts in the supply chain and actions taken

##### Relevant SDG targets

**Target 9.4:** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

**Target 12.2:** By 2030, achieve the sustainable management and efficient use of natural resources

**Target 12.7**: Promote public procurement practices that are sustainable, in accordance with national policies and priorities

# Water consumption

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| Indicators:  **W1**: Total units of metered water consumed by water source (Kilolitres)  **W2**: Units of metered water consumed normalised by FTE, headcount, floor area, or other entity or sector specific quantity (Kilolitres normalised) |

##### Definitions

**W1**: Water consumed refers to the amount of water (in kilolitres) consumed by an entity associated with its activities during the Annual Reporting period. Entities should breakdown their water use into different water sources to provide readers of the report with a better understanding of the entities’ activities and impacts. Entities should show office-based water use and major non-office water consumption areas separately. Further, entities should provide a breakdown of office water use into domestic water and cooling tower water.

For the purposes of the FRD 24, water sources include the following which are to be reported separately:

* Potable water consumption (from town water supply)
* Metered rainwater collection consumption (where available)
* Metered alternate supply consumption (e.g., river, stream, aquifer, bore, fire supply, third pipe etc.)[[20]](#footnote-21)
* Metered reused water consumption (e.g., grey or black water)[[21]](#footnote-22)

Entities should take a whole of building perspective when accounting for water consumption in buildings. This means accounting for all consumption across the categories of tenancy and base building. In cases where data falls across these categories or cannot otherwise be categorised, consumption should be apportioned as a percentage of the net lettable area that the entity occupies.

If the entity is engaged in the supply and treatment of bulk water and/or sewage, water consumption unique to the provision of water supply and sewerage services (e.g., mains flushing) should be excluded from W1.

**W2** This indicator provides the total water used normalised against an indicator of the size of an entity’s operation. Typically, this should be FTE, but an entity may also choose headcount, floor area etc.

##### Context

The context of the data presented must be clarified, including:

* % of total sites or % of total staff represented by data, if not near 100%
* whether data has been affected by machinery of government changes
* any other material information about the data such as office/non-office production that are relevant to procurement

##### Actions Undertaken

Entities are to disclose activities that reflect the efforts made in managing the impacts of water use or that provide other organisations with a means of replicating success.

##### Data Source

Water consumption data can be sourced through:

* The water supplier or retailer
* Property, facilities, building services or other relevant personnel who receive water invoices or data directly or have access to it
* Shared Service Provider
* Reading of water meters and/or submeters
* Data provided directly from entity sites

To obtain the most reliable data in a timely manner, it is recommended that, where possible, data should be obtained electronically from the water retailer or supplier.

All relevant information is usually included on conventional water invoices or electronic summaries and therefore should be able to be obtained from these. Suppliers must be contacted if any is missing and be asked to provide it.

##### Data Collection

Water data should be collected from all buildings as follows:

* Where the entity is the sole occupant of a building, either leased or Government-owned, collect the entire building’s water consumption including tenancy and all base building central services. Tenancy and base building should be reported separately where possible.[[22]](#footnote-23)
* Where the entity is a tenant or occupant in a multi-tenanted building, either leased or government owned, collect water usage for the entity’s tenancy or occupied floors only.
* Where multiple tenants occupy a single building with common meter(s) for multiple tenants (including or excluding base building consumption), water consumption should be apportioned by tenancy floor area, where whole-of-building data is available from the building management. If submetering has been installed, this data should be used.

##### Data Analysis

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| **W2:** Water used (normalised) = W1 / normalisation factor |

##### Relevant GRI indicators

**303-1.** Interactions with water as a shared resource

**303-2.** Management of water discharge-related impacts

**303-3.** Water withdrawal

**303-4.** Water discharge

**303-5.** Water consumption

##### Relevant SDG targets

**Target 6.4:** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

# Waste and recycling

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| Indicators  WR1: Total units of waste disposed of by disposal method and waste stream (kg and %)  **WR2**: Dedicated collection services provided in offices for printer cartridges, batteries, and soft plastics (%)  **WR3**: Total units of waste disposed of normalised by FTE, headcount, floor area, or other entity or sector specific quantity, by disposal method (kg normalised)  **WR4**: Recycling Rate (%)  **WR5**: Greenhouse gas emissions associated with waste disposal (Tonnes CO2-e) |

##### Definitions

**WR1**: Total units of waste disposed of is the amount of total waste generated from activities within the entity within the Annual Reporting period, including recycling, compost and landfill streams and routine disposal of office equipment. It excludes ‘one off’ clean outs, office relocations etc. and waste disposed at facilities outside of the entity’s control (e.g., Ambulances disposing of clinical waste at a hospital). If the entity is engaged in the supply and treatment of bulk water and/or sewage, water consumption unique to the provision of water supply and sewerage services (e.g., mains flushing) should also be excluded from WR1.

The following waste streams should be used, where they are utilised by an entity:

* Food and garden organics (compostable materials including food materials, flowers, etc.).
* Recyclable materials separated into streams where collection services are present and data is available, for example where different collection arrangements for different materials are present (including paper and paper products, cardboard, glass, metal, recyclable plastics, toner cartridges, fluorescent tubes, CD’s, etc.) including co-mingled recyclable products and paper disposed of in “secure” bins.
* Landfill (waste materials which cannot be reused, recycled, or composted)
* Disposal should include landfill, recycling/recovery, and other (including incineration). This should enable Entities to report a recovery rate for each waste stream.

Entities are encouraged to breakdown their waste disposal to provide readers of the report with a better understanding of the Entities activities and impacts. For example, an entity may wish to show office-based waste and major non-office waste disposal areas separately. Note that measures sought are by weight not volume, most service providers should be able to deal with either metric, otherwise weight will have to be estimated from volumes.

**WR2:** Entities should report the percentage of office sites which are covered by dedicated collection services for each of these waste streams:

* Printer cartridges
* Batteries
* e-waste
* Soft plastics

Entities may also report the presence of other dedicated waste collection services, in both office and non-office locations, for items such as:

* Polystyrene
* Cigarette waste
* Coffee cups
* Printer/copier toner
* Paint
* Trade waste

Entities are not required to report the volume or mass of waste collected in these streams, however if data is available, they may optionally include data for these streams in WR1.

**WR3:** This indicator provides the waste disposed of normalised against an indicator of the size of an entity’s operation. Typically, this should be FTE, but an entity may also choose headcount, floor area etc.

**WR4:** The recycling rate is the total weight of waste diverted from landfill in kilograms (including organic and recyclable materials) divided by the total units of waste produced (organic, recyclables and waste to landfill).

**WR5:** Greenhouse gas emissions refer to the emissions generated when waste is disposed to landfill.

##### Context

The context of the data presented must be clarified, including:

* % of total sites or % of total staff represented by data, if not near 100%
* whether data has been affected by machinery of government changes
* any other material information about the data such as office/non-office production and nature of tenancy that are relevant to the production of waste

##### Actions Undertaken

Entities should disclose a full list of types of destinations utilised for waste disposal (e.g., landfill, recycling, composting facilities) and the extent that they are utilised by different locations or staff. Entities are also to report on activities that reflect the efforts in managing the impacts of waste or that provide other organisations with a means of replicating success.

Where entities manage a portion of their waste within the organisational boundary (for example through composting or mulching for entity managed gardens or green space) these actions should be noted. These waste volumes do not need to be reported.

##### Data Source

Data may be sourced through:

* For most Shared Service Provider managed sites, data collated by the Shared Service Provider from waste collection providers
* Invoices or reports from waste and/or recycling collection providers
* Internal and external waste audits/assessments and associated reports
* Estimated, based on number of collected bins

##### Data Collection

Entities should aim to collect data from all sites but may use estimates based on kg/FTE where data is not available, provided actual data for sites representing at least 30% of entity staff is available. Entities may use either, data sourced from waste collection providers or the Shared Service Provider, waste audits, or a combination of both.

###### *Guidance for Waste audits*

Data provided by waste collection providers is generally preferable to the use of waste audits due to its higher accuracy and lower cost. Waste audits should only be considered where an entity wishes to report a contamination rate or to inform waste reduction and recycling initiatives.

Where an entity decides to conduct a waste audit for the purposes of informing its environmental reporting, audits should be conducted at least annually at sites covering at least 30% of total entity staff.

The assessor will need to:

* Measure the weight of total waste produced by waste stream for at least one twenty-four-hour period; and
* Include the assessment of both landfill and recycling streams, including compost, by weight.
* An entity must audit waste in all bins, or at least those used by 30% of total entity staff.
* There is no need to do a contamination level audit of every waste stream, however a visual inspection of each waste stream can be very useful in developing communication materials to reduce contamination.

***Where all waste at all locations can be measured:*** Entities with a small number of FTEs in shared premises don’t require a separate audit. Entities in multi-tenanted buildings should still be able to undertake a waste assessment, provided their own bins are identified.

Where resources are limited or a large number of entity locations exist, locations with higher numbers of FTEs should be audited. If one audit can be undertaken to account for 30% of entity staff, then one audit will be sufficient. Otherwise, multiple audits should be undertaken to ensure that audits represent waste disposed of by at least 30% of an entity’s FTEs.

***Where waste data is not available and waste audits are not feasible:*** Waste data can be estimated by the number of full standard wheelie bins (240L) collected in a reporting period. The number of bins at site should be confirmed against the asset register or through a stocktake. On each collection date, how full the bins are as a percentage can be estimated.

##### Data Analysis

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| **WR1**: formula for determining kg waste disposed of from waste audits = (kg waste disposed of over 24 hours x 250 (making a total of 250 workdays in one year – the number of workdays may be varied for sites which operate continuously or otherwise have a non-standard work year))  **WR3**: kg waste produced normalised = WR1 / normalisation factor  **WR4**: recycling rate = [(kg of recyclable materials + kg organic material)/ (kg of total waste)] %  **WR5**: The National Greenhouse Accounts Factors note that where methane from waste biomass is recovered and flared or combusted for energy, the CO2 emitted is not counted as an emission but regarded as part of the natural carbon cycle. The total amount of CH4 (methane) recovered is therefore regarded as saved (not emitted) so long as it does not enter the atmosphere as CH4.  The conversion factors for Municipal Solid Waste are to be allocated to the waste going to landfill (or use the relevant conversion factors for different components of landfill waste if measured). Municipal waste conversion factors are to be sourced from the latest version of The National Greenhouse Accounts: [Australian National Greenhouse Accounts Factors (dcceew.gov.au)](https://www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-account-factors-2023.pdf). Where waste data is measured by volume and not by weight, use the volume to mass conversion factors from the latest version of The National Greenhouse Accounts. Where individual waste stream data is not known, use the Municipal Solid Waste volume to weight conversion factor.  No GHG emissions are to be reported for the recycling streams. |

##### Optional indicators

FRD 24 identifies the following optional indicators:

* Contamination of standard bin contents

##### Relevant GRI indicators

**306-1.** Waste generation and significant waste-related impacts

**306-2.** Management of significant waste-related impacts

**306-3.** Waste generated

**306-4.** Waste diverted from disposal

**306-5.** Waste directed to disposal

##### Relevant SDG targets

**Target 11.6:** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

**Target 12.3:** By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

**Target 12.4:** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

**Target 12.5:** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

# Greenhouse gas emissions

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| Indicators:  **G1:** Total scope one (direct) greenhouse gas emissions (tonnes CO2, CH4, N2O, other and CO2-e)  **G2:** Total scope two (indirect electricity) greenhouse gas emissions (tonnes CO2-e)  **G3:** Total scope three (other indirect) greenhouse gas emissions associated with commercial air travel and waste disposal (tonnes CO2-e) |

##### Definition

**G1:** Entities should report all direct material sources of greenhouse gas emissions segmented by gas and totalled as tonnes of carbon dioxide equivalent. Sources must include stationary fuel consumption (indicator F2), transportation (indicator T3), and the following where material (i.e., greater than 1% of entity emissions):

* fugitive emissions from wastewater treatment (this only applies to Entities, such as water corporations, whose functions include wastewater treatment)
* use of medical gases (this only applies to Entities, such as health services, whose functions include use of medical gases in patient care)
* fugitive emissions from refrigeration and air conditioning
* fugitive emissions from electrical equipment (e.g., transformers and circuit breakers that use sulphur hexafluoride as an insulating gas)
* fugitive emissions from fire suppression equipment. Fire suppression systems that are likely to be material are generally the fixed, waterless, gaseous suppression systems used for server rooms, data centres and electrical equipment.
* other uses or releases of greenhouse gases through laboratory or workshop use (including CO2, CH4, N2O, PFCs, HFCs, SF6, and NF3)
* any other material source of direct emissions within the entity’s organisational boundary with the following exceptions (which are incurred by the State of Victoria and are captured in annual Victorian Greenhouse Gas Emissions Reports):
  + - emissions associated with non-mechanical land management activities, such as planned burning or forestry (where these are known they may be optionally reported as other emissions associated with the entity)
    - emissions associated with agriculture (including agricultural research and extension, and prison agriculture) other than the operation of machinery, including emissions from enteric fermentation, agricultural soils, and manure management (where these are known they may be optionally reported as other emissions associated with the entity)
    - fugitive emissions from decommissioned landfills, coal mines or other similar assets where management responsibility has reverted to the State Government (where these are known they may be optionally reported as other emissions associated with the entity)

Emissions from each source should include the following gases, where relevant:

* Carbon Dioxide
* Methane
* Nitrous Oxide
* Other – including medical gases (e.g., desflurane, isoflurane, and sevoflurane), refrigerants (e.g., hydrofluorocarbons) and sulphur hexafluoride (used in some types of transformers and circuit breakers as an insulating gas). Where these represent significant sources of entity emissions they should be itemised, otherwise they can be aggregated into a single measure.

The quantities of these gases should be expressed in terms of tonnes CO2-e using the Global Warming Potentials in line with the latest version of the National Greenhouse Accounts Factors: [Australian National Greenhouse Accounts Factors (dcceew.gov.au)](https://www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-account-factors-2023.pdf). When reporting trend data for previous years, only the total CO2-e amount is required to be reported.

Where emissions factors for gases are not contained within the National Greenhouse Accounts factors ~~GA~~ workbook, entities should refer to the Intergovernmental Panel on Climate Change’s Fifth Assessment Report Working Group 1 Report. Note that the gases listed typically don’t use their common names, so technical designations or formulas may need to be referenced. A useful GHG Protocol guide can be found here: [Global-Warming-Potential-Values (ghgprotocol.org)](https://ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf).

**G2:** Entities should calculate their Scope 2 emissions using the market-based method of Climate Active’s Electricity Accounting rules.[[23]](#footnote-24) Entities may also report emissions using the location-based method. Relevant activity data should be sourced at indicators EL1-EL4. When calculating Scope 2 emissions, Entities should have regard for the following details:

* Under the market-based method Entities count the Renewable Power Percentage[[24]](#footnote-25) as zero emissions. (Entities that have an arrangement to convey LGCs to their electricity retailer for mandatory surrender should count either these LGCs or the RPP, but not both). Any non-offset grid-sourced electricity then has a Residual Mix Factor used to calculate associated emissions. Consult the current Climate Active Electricity Accounting guidelines for the treatment of the Residual Mix Factor for the accounting year.
* For LRET accredited systems, self-generated LGCs (associated with self-consumption of behind-the-meter generation) must be surrendered for this source of electricity to be counted as zero emissions. If self-generated offsets are sold, associated electricity consumption should be treated the same as grid-sourced electricity.
* Climate Active requires that entities exporting electricity to the grid cannot claim this electricity to reduce emissions in their carbon account except where LGCs have been created and voluntarily surrendered. This applies to both the market-based and location-based methods. Therefore entities should not include renewable electricity exports in Scope 2 emissions calculations where LGCs have not been created and surrendered.
* Electricity produced from organisation-owned behind-the-meter cogeneration or other fossil fuel-based generation reported at EL1 and EL2 should not be included in the calculation of Scope 2 emissions. Emissions associated with these type of assets are Scope 1 and should be reported at G1.
* Where an entity purchases steam or heat from a plant outside of the organisational boundary (e.g., an externally owned and operated co- or tri-generation facility), the associated Scope 2 emissions must be included in this indicator.

**G3:** Entities are only required to report on prescribed scope three sources of emissions. These are waste disposal, and commercial air travel. Greenhouse gas emissions associated with waste disposal are reported at indicator WR5. Air travel emissions should be calculated per the instructions under Data Source and analysis.

##### Context

The context of the data presented must be clarified, including:

* % of total sites or % of total staff represented by data, if not near 100%
* a description of any sources that have been assessed for materiality and not included in the entity’s inventory
* whether data has been affected by machinery of government changes
* any other material information about the data such as office/non-office consumption that are relevant to the emissions

##### Actions Undertaken

Entities are to disclose activities that reflect the efforts made in managing greenhouse gas emissions or that provide other organisations with a means of replicating success.

##### Data Source and analysis

It is recommended that all data analysis be performed in line with the latest version of the National Greenhouse Accounts Factors: [Australian National Greenhouse Accounts Factors (dcceew.gov.au)](https://www.dcceew.gov.au/sites/default/files/documents/national-greenhouse-account-factors-2023.pdf). All G1 reporting data must be provided in units of tonnes CO2-e to aid the comparison of the relative impact of each gas and simplify the calculation of totals. Where appropriate entities should apply guidance contained within Climate Active’s Technical Guidance Manual.

**G1:** Partially sourced from previous sections (F2, T3) and entity records of other material emissions sources.

As described in the definition above the underlying activity data to determine fugitive emissions associated with refrigerants, air conditioning and fire suppression, SF6 and industrial gases can be determined through the following approach[[25]](#footnote-26):

**Method 1**: Entities should leverage an existing asset or equipment register to identify the relevant refrigeration, fire suppression and air condition equipment that exists utilising the name plate capacity of the equipment to determine the total capacity or charge (kg) and gas type being utilised. Where an asset register is not in existence or does not detail the charge an asset survey across all assets or a sample of assets may need to be conducted to determine the number of assets as well as a gas type(s) and charge. SF6 capacity can be determined based on equipment design specifications.

**Method 2:** Alternatively, instead of charge capacity where top ups have been made to equipment, the volume used to refill equipment can be used as the volume that would have leaked out. This assumes that for equipment to be operating effectively it needs to remain at a constant gas level.

**Method 3:** For gases consumed in industrial purposes such as laboratories, where purchases of gases are made and an invoice is available, emissions can be determined, based on the assumption that all gas is consumed throughout the reporting period by applying the total capacity purchased and the relevant GWP. Where gas purchased is consumed over multiple reporting periods an estimation of how many reporting periods it will be used for can be applied to determine the average gas consumption over each period.

**G2:** Activity data sourced from previous sections (EL1-EL4).

**G3:** Partially sourced from previous sections (WR5). Entities should attempt to use the most accurate data source available for air travel emissions. These sources may be available in decreasing order of preference:

* Individual flight greenhouse gas emissions data supplied by the relevant airline or Travel Services Provider.
* Use of the International Civil Aviation Organisation’s Carbon Emissions Calculator[[26]](#footnote-27) and entity or travel service provider data on routes travelled.
* Use total passenger kilometres (T4) and the average emissions factor of 1.43198 x 10-4 tonnes/passenger km[[27]](#footnote-28) for domestic aviation.

Entities should specify the method used to source and analyse the data.

##### Optional indicators

FRD 24 identifies the following optional indicator:

* Total scope three (other indirect) greenhouse gas emissions associated with activities outside the organisational boundary of the entity.

Entities may report other sources of scope 3 emissions, where these have been quantified, in line with the 15 categories of scope 3 sources outlined in the Climate Active Technical Guidance Manual (page 63). Entities should focus on emissions associated with, in decreasing order of priority, their procurement and investment activities, use of their products and services, non-air business travel, employee commuting and remote work, and scope 3 energy-related emissions.

* Any other known greenhouse gas emissions associated with other activities (tonnes CO2-e). Entities may report other emissions against this indicator including:
  + - Those that are not traditionally classified as scope 3 emissions in the corporate sense (such as private use of public assets within the entity’s portfolio, or emissions associated with the take-up of government grants or other programs, or other emissions associated with implementation of Government policy).
* Those associated with activities that have been excluded from scope 1 emissions (such as emissions associated with land management activities and agriculture).
* Total greenhouse gas emission offsets purchased and retired segmented by activity type (e.g., natural gas, vehicle fleet, air travel) (tonnes CO2-e)
* Entities should report on the use of carbon offsets, where used, in accordance with the practices outlined in the Climate Active Technical Guidance Manual and the Climate Active Carbon Neutral Standard for Organisations. Where possible entities should report on their acquisition and retirement of offsets, any balances held, and specify offset types and project details including the jurisdiction from which the offsets are sourced. Where an entity maintains Climate Active Carbon Neutral certification, they may reference their public disclosure statements, rather than duplicating this information in their annual report.
* Net greenhouse gas emissions segmented into scope one (direct), scope two (indirect electricity) and scope three (indirect other) [calculated by total greenhouse gas emissions minus retired offsets] (tonnes CO2-e)
* Where entities have engaged in the use of carbon offsets, net emissions must be reported.
* Any Climate Active certifications for organisations, products, services, or events held by the organisation

##### Relevant GRI indicators[[28]](#footnote-29)

**305-1.** Direct (Scope 1) GHG emissions

**305-2.** Energy indirect (Scope 2) GHG emissions

**305-3.** Other indirect (Scope 3) GHG emissions

**305-4.** GHG emissions intensity.

**305-5.** Reduction of GHG emissions

**305-6.** Emissions of ozone-depleting substances (ODS).

**305-7.** Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions.

##### Relevant SDG targets

**Target 13.2:** Integrate climate change measures into national policies, strategies and planning

**Target 13.3:** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

# Appendix 1 – GRI supplement environmental performance indicators[[29]](#footnote-30)

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| Materials | |
| **301-1**. Materials used by weight or volume | The reporting organization shall report the following information:   * Total weight or volume of materials that are used to produce and package the organization’s primary products and services during the reporting period, by:   + - * non-renewable materials used;       * renewable materials used. |
| **301-2**. Recycled input materials used | The reporting organization shall report the following information:   * Percentage of recycled input materials used to manufacture the organization’s primary products and services. |
| **301-3.** Reclaimed products and their packaging materials | The reporting organization shall report the following information:   * Percentage of reclaimed products and their packaging materials for each product category. * How the data for this disclosure have been collected. |
| Energy | |
| * **302-1**. Energy consumption within the organization | * The reporting organization shall report the following information: * Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used. * Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used. * In joules, watt-hours or multiples, the total:   + - electricity consumption     - heating consumption     - cooling consumption     - steam consumption * In joules, watt-hours or multiples, the total:   + - electricity sold     - heating sold     - cooling sold     - steam sold * Total energy consumption within the organization, in joules or multiples. * Standards, methodologies, assumptions, and/or calculation tools used. * Source of the conversion factors used. |
| **302-2**. Energy consumption outside of the organization | The reporting organization shall report the following information:   * Energy consumption outside of the organization, in joules or multiples. * Standards, methodologies, assumptions, and/or calculation tools used. * Source of the conversion factors used. |
| **302-3.** Energy intensity | The reporting organization shall report the following information:   * Energy intensity ratio for the organization. * Organization-specific metric (the denominator) chosen to calculate the ratio. * Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all. * Whether the ratio uses energy consumption within the organization, outside of it, or both. |
| **302-4.** Reduction of energy consumption | The reporting organization shall report the following information:   * Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples. * Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all. * Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. * Standards, methodologies, assumptions, and/or calculation tools used. |
| **302-5.** Reductions in energy requirements of products and services | The reporting organization shall report the following information:   * Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples. * Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it. * Standards, methodologies, assumptions, and/or calculation tools used. |

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| Water | |
| **303-1.** Interactions with water as a shared resource | The reporting organization shall report the following information:   * A description of how the organization interacts with water, including how and where water is withdrawn, consumed, and discharged, and the water-related impacts caused or contributed to, or directly linked to the organization’s activities, products or services by a business relationship (e.g., impacts caused by runoff). * A description of the approach used to identify water-related impacts, including the scope of assessments, their timeframe, and any tools or methodologies used. * A description of how water-related impacts are addressed, including how the organization works with stakeholders to steward water as a shared resource, and how it engages with suppliers or customers with significant water-related impacts. * An explanation of the process for setting any water-related goals and targets that are part of the organization’s management approach, and how they relate to public policy and the local context of each area with water stress. |
| **303-2.** Management of water discharge-related impacts | The reporting organization shall report the following information:   * A description of any minimum standards set for the quality of effluent discharge, and how these minimum standards were determined, including:   + - how standards for facilities operating in locations with no local discharge requirements were determined;     - any internally developed water quality standards or guidelines;     - any sector-specific standards considered;     - whether the profile of the receiving waterbody was considered. |
| **303-3.** Water withdrawal | The reporting organization shall report the following information:   * Total water withdrawal from all areas in megalitres, and a breakdown of this total by the following sources, if applicable:   + - Surface water;     - Groundwater;     - Seawater;     - Produced water;     - Third-party water. * Total water withdrawal from all areas with water stress in megalitres, and a breakdown of this total by the following sources, if applicable:   + - Surface water;     - Groundwater;     - Seawater;     - Produced water;     - Third-party water, and a breakdown of this total by the withdrawal sources listed in i-iv. * A breakdown of total water withdrawal from each of the sources listed in Disclosures 303-3-a and 303-3-b in megalitres by the following categories:   + - Freshwater (≤1,000 mg/L Total Dissolved Solids);     - Other water (>1,000 mg/L Total Dissolved Solids).     - Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used. |
| **303-4.** Water discharge | * The reporting organization shall report the following information: * Total water discharge to all areas in megalitres, and a breakdown of this total by the following types of destination, if applicable:   + - Surface water;     - Groundwater;     - Seawater;     - Third-party water, and the volume of this total sent for use to other organizations, if applicable. * A breakdown of total water discharge to all areas in megalitres by the following categories:   + - Freshwater (≤1,000 mg/L Total Dissolved Solids);     - Other water (>1,000 mg/L Total Dissolved Solids).     - Total water discharge to all areas with water stress in megalitres, and a breakdown of this total by the following categories:     - Freshwater (≤1,000 mg/L Total Dissolved Solids);     - Other water (>1,000 mg/L Total Dissolved Solids). * Priority substances of concern for which discharges are treated, including:   + - how priority substances of concern were defined, and any international standard, authoritative list, or criteria used;     - the approach for setting discharge limits for priority substances of concern;     - number of incidents of non-compliance with discharge limits.     - Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used. |
| **303-5.** Water consumption | The reporting organization shall report the following information:   * Total water consumption from all areas in megalitres. * Total water consumption from all areas with water stress in megalitres. * Change in water storage in megalitres, if water storage has been identified as having a significant water-related impact. * Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used, including whether the information is calculated, estimated, modelled, or sourced from direct measurements, and the approach taken for this, such as the use of any sector-specific factors. |

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| Emissions | |
| **305-1**. Direct (Scope 1) GHG emissions | The reporting organization shall report the following information:   * Gross direct (Scope 1) GHG emissions in metric tons of CO2 equivalent. * Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. * Biogenic CO2 emissions in metric tons of CO2 equivalent. * Base year for the calculation, if applicable, including:   + - the rationale for choosing it;     - emissions in the base year;     - the context for any significant changes in emissions that triggered recalculations of base year emissions. * Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. * Consolidation approach for emissions; whether equity share, financial control, or operational control. * Standards, methodologies, assumptions, and/or calculation tools used |
| **305-2.** Energy indirect (Scope 2) GHG emissions | The reporting organization shall report the following information:   * Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent. * If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO2 equivalent. * If available, the gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. * Base year for the calculation, if applicable, including:   + - the rationale for choosing it;     - emissions in the base year;     - the context for any significant changes in emissions that triggered recalculations of base year emissions. * Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. * Consolidation approach for emissions; whether equity share, financial control, or operational control. * Standards, methodologies, assumptions, and/or calculation tools used. |
| **305-3**. Other indirect (Scope 3) GHG emissions | The reporting organization shall report the following information:   * Gross other indirect (Scope 3) GHG emissions in metric tons of CO2 equivalent. * If available, the gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. * Biogenic CO2 emissions in metric tons of CO2 equivalent. * Other indirect (Scope 3) GHG emissions categories and activities included in the calculation. * Base year for the calculation, if applicable, including:   + - the rationale for choosing it;     - emissions in the base year;     - the context for any significant changes in emissions that triggered recalculations of base year emissions. * Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source. * Standards, methodologies, assumptions, and/or calculation tools used. |
| **305-4.** GHG emissions intensity. | The reporting organization shall report the following information:   * GHG emissions intensity ratio for the organization. * Organization-specific metric (the denominator) chosen to calculate the ratio. * Types of GHG emissions included in the intensity ratio; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). * Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. |
| **305-5.** Reduction of GHG emissions | The reporting organization shall report the following information:   * GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO2 equivalent. * Gases included in the calculation; whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all. * Base year or baseline, including the rationale for choosing it. * Scopes in which reductions took place; whether direct (Scope 1), energy indirect (Scope 2), and/or other indirect (Scope 3). * Standards, methodologies, assumptions, and/or calculation tools used. |
| **305-6.** Emissions of ozone-depleting substances (ODS). | The reporting organization shall report the following information:   * Production, imports, and exports of ODS in metric tons of CFC-11 (trichlorofluoromethane) equivalent. * Substances included in the calculation. * Source of the emission factors used. * Standards, methodologies, assumptions, and/or calculation tools used. |
| **305-7.** Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions. | * The reporting organization shall report the following information: * Significant air emissions, in kilograms or multiples, for each of the following:   + - NOX     - SOX     - Persistent organic pollutants (POP)     - Volatile organic compounds (VOC)     - Hazardous air pollutants (HAP)     - Particulate matter (PM)     - Other standard categories of air emissions identified in relevant regulations * Source of the emission factors used. * Standards, methodologies, assumptions, and/or calculation tools used. |
| Waste | |
| **306-1.** Waste generation and significant waste-related impacts | The reporting organization shall report the following information:   * For the organization’s significant actual and potential waste-related impacts, a description of:   + - the inputs, activities, and outputs that lead or could lead to these impacts;     - whether these impacts relate to waste generated in the organization’s own activities or to waste generated upstream or downstream in its value chain. |
| **306-2.** Management of significant waste-related impacts | The reporting organization shall report the following information:   * Actions, including circularity measures, taken to prevent waste generation in the organization’s own activities and upstream and downstream in its value chain, and to manage significant impacts from waste generated. * If the waste generated by the organization in its own activities is managed by a third party, a description of the processes used to determine whether the third party manages the waste in line with contractual or legislative obligations. * The processes used to collect and monitor waste-related data. |
| **306-3.** Waste generated | The reporting organization shall report the following information:   * Total weight of waste generated in metric tons, and a breakdown of this total by composition of the waste. * Contextual information necessary to understand the data and how the data has been compiled. |
| **306-4.** Waste diverted from disposal | The reporting organization shall report the following information:   * Total weight of waste diverted from disposal in metric tons, and a breakdown of this total by composition of the waste. * Total weight of hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:   + - Preparation for reuse;     - Recycling;     - Other recovery operations. * Total weight of non-hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:   + - Preparation for reuse;     - Recycling;     - Other recovery operations. * For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal:   + - onsite;     - offsite.     - Contextual information necessary to understand the data and how the data has been compiled. |
| **306-5.** Waste directed to disposal | The reporting organization shall report the following information:   * Total weight of waste directed to disposal in metric tons, and a breakdown of this total by composition of the waste. * Total weight of hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:   + - Incineration (with energy recovery);     - Incineration (without energy recovery);     - Landfilling;     - Other disposal operations. * Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:   + - Incineration (with energy recovery);     - Incineration (without energy recovery);     - Landfilling;     - Other disposal operations. * For each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal:   + - * onsite;       * offsite.       * Contextual information necessary to understand the data and how the data has been compiled. |
| Supplier Environmental Assessment | |
| **308-1.** New suppliers that were screened using environmental criteria | The reporting organization shall report the following information:   * Percentage of new suppliers that were screened using environmental criteria. |
| **308-2.** Negative environmental impacts in the supply chain and actions taken | The reporting organization shall report the following information:   * Number of suppliers assessed for environmental impacts. * Number of suppliers identified as having significant actual and potential negative environmental impacts. * Significant actual and potential negative environmental impacts identified in the supply chain. * Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment. * Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why. |

1. Department of Treasury and Finance (2022) ‘FRD 24 – Reporting of Environmental Data by Government Entities’ (Department of Treasury and Finance: Melbourne Victoria), June 2022. [↑](#footnote-ref-2)
2. These definitions taken from: Commonwealth of Australia (Department of Climate Change and Energy Efficiency), 2012, Baseline Energy Consumption and Greenhouse Gas Emissions in Commercial Buildings in Australia – Part 1 – Report, <https://www.environment.gov.au/system/files/energy/files/cbbs-part-1.docx> [↑](#footnote-ref-3)
3. Refer to the GHG Protocol—Corporate Standard, Chapter 3 and Chapter 4 for guidance on the operational control approach, <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf> [↑](#footnote-ref-4)
4. [FINAL-2017-TCFD-Report.pdf (bbhub.io)](https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf) [↑](#footnote-ref-5)
5. [IFRS - IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information](https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s1-general-requirements.html/content/dam/ifrs/publications/html-standards-issb/english/2023/issued/issbs1/); [IFRS - IFRS S2 Climate-related Disclosures](https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/ifrs-s2-climate-related-disclosures.html/content/dam/ifrs/publications/html-standards-issb/english/2023/issued/issbs2/). Registration required to view the standards. [↑](#footnote-ref-6)
6. [Climate Change Risk Management service | Victorian Managed Insurance Authority (vmia.vic.gov.au)](https://www.vmia.vic.gov.au/tools-and-insights/climate-change) [↑](#footnote-ref-7)
7. Where third parties lease space within the organisation’s facility their resource use, including electricity, should be assessed for inclusion according to the organisational boundary requirements for public private partnerships. If the third party maintains complete control over its electricity use and purchasing, it should not be reported. [↑](#footnote-ref-8)
8. Sleeved power purchase arrangements are those involving a retail entity, sometimes referred to as ‘retail-sleeved’. The arrangement includes the generator, retailer and customer. Unsleeved power purchase arrangements are those between the generator and the customer. Typically, the customer is making a large purchase of renewable energy for their operations and manages the contractual arrangements directly with the supplier. [↑](#footnote-ref-9)
9. Climate Active, Climate Active Electricity Accounting - <https://www.climateactive.org.au/be-climate-active/tools-and-resources> [↑](#footnote-ref-10)
10. The Shared Service Provider may supply and/or report on central services’ consumption – this is to be arranged between the entity and the SSP. [↑](#footnote-ref-11)
11. Global Reporting Initiative, GRI - Home (globalreporting.org) [↑](#footnote-ref-12)
12. National Greenhouse Account Factors - [National Greenhouse Accounts Factors: 2023 - DCCEEW](https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-accounts-factors-2023) [↑](#footnote-ref-13)
13. The Shared Service Provider may supply and/or report on central services’ consumption – this is to be arranged between the entity and the Shared Service Provider. [↑](#footnote-ref-14)
14. Global Reporting Initiative, [GRI - Home (globalreporting.org)](https://www.globalreporting.org/) [↑](#footnote-ref-15)
15. [Federal Register of Legislation - Vehicle Standard (Australian Design Rule – Definitions and Vehicle Categories) 2005](https://www.legislation.gov.au/F2005L03850/2012-05-31/text). [↑](#footnote-ref-16)
16. [Approved Vehicle List | Buying for Victoria](https://www.buyingfor.vic.gov.au/approved-vehicle-list) [↑](#footnote-ref-17)
17. [Segmentation Criteria | Federal Chamber of Automotive Industries (fcai.com.au)](https://www.fcai.com.au/sales/segmentation-criteria) [↑](#footnote-ref-18)
18. https://www.industry.gov.au/data-and-publications/national-greenhouse-accounts-factors [↑](#footnote-ref-19)
19. [Implementing and reporting social procurement | Buying for Victoria](https://www.buyingfor.vic.gov.au/implementing-and-reporting-social-procurement) [↑](#footnote-ref-20)
20. Likely only to be useful for facilities where external use occurs, and only if metering is available [↑](#footnote-ref-21)
21. Likely only to be useful for facilities where external use occurs, and only if metering is available [↑](#footnote-ref-22)
22. The Shared Service Provider may supply and/or report on central services’ consumption – this is to be arranged between the entity and the SSP. [↑](#footnote-ref-23)
23. [Tools and resources | Climate Active](https://www.climateactive.org.au/be-climate-active/tools-and-resources) [↑](#footnote-ref-24)
24. [The renewable power percentage (cleanenergyregulator.gov.au)](https://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/the-renewable-power-percentage) [↑](#footnote-ref-25)
25. Global Warming Potential factors and if necessary, gas leakage rates are available in the reporting tool. [↑](#footnote-ref-26)
26. [ICAO Carbon Emissions Calculator (ICEC)](https://www.icao.int/environmental-protection/Carbonoffset/Pages/default.aspx) [↑](#footnote-ref-27)
27. Calculated from data contained within the [Australian Infrastructure Statistics—Yearbook 2020 | Bureau of Infrastructure and Transport Research Economics (bitre.gov.au)](https://www.bitre.gov.au/publications/2020/australian-infrastructure-statistics-yearbook-2020) [↑](#footnote-ref-28)
28. Global Reporting Initiative, [GRI - Home (globalreporting.org)](https://www.globalreporting.org/) [↑](#footnote-ref-29)
29. Based on the Consolidated Global Reporting Initiative Standards (Global Reporting Initiative, [GRI - Home (globalreporting.org)](https://www.globalreporting.org/) [↑](#footnote-ref-30)