# Disclosure Statement Zero Carbon Emissions

1 July 2022 to 30 June 2023





Zero Carbon Maribyrnong Program Public Disclosure Summary Maribyrnong City Council 2022/2023

# Organisation and Product Information

Table 1: Organisation and Product Information

| Organisation Name                                  | Maribyrnong City Council  |               |  |  |
|--|---|---------------|--|--|
| Reporting year period                              | From 1/07/2022 To 30/06/2023  |               |  |  |
| Actual emissions in this reporting year 2022/23    | *The council has established a final date of analysed data of 21 August 2023. Any emissions for this financial year not recorded by this date will be included in the 2023 -24 report. Offsets for these additional emissions will be purchased prior to the end of the financial year 2023-24. |               |  |  |
| Carbon Offsets in this reporting year 2022/23      | 3181 tonnes CO <sub>2</sub> -e  |               |  |  |
| Total Net Emissions in this reporting year 2022/23 | 0 tonnes CO <sub>2</sub> -e   |               |  |  |
| Base year period                                   | From 1/07/2008  | To 30/06/2009 |  |  |
| Actual emissions in the base year 2008/09.         | 12,416* tonnes CO <sub>2</sub> -e  *(13,302 tonnes estimate including items below.)  *Emissions in the 08/09 base year did not include fugitive emissions, internal waste, air travel, water or paper, which made up 886 tonnes CO <sub>2</sub> -e in 22/23.                                    |               |  |  |

#### 1. Introduction

Maribyrnong City Council reduced its corporate carbon dioxide equivalent ( $CO_2$ -e) emissions to zero in the 2022/23 financial year in line with Council's commitment to become a zero carbon Council. Council first set a target to reach zero emissions for its own operation by 2015 in 2008, with its Carbon Neutral Action Plan.

As Maribyrnong City Council is undertaking this initiative in an entirely voluntary capacity, Council has decided to undertake a voluntary Zero Carbon program rather than a more formal accreditation program due to the ongoing cost of accreditation which could be better spent in other ways.

Council has followed the same protocols as those required by the National Carbon Offset Standard (NCOS) and this disclosure statement allows interested parties to compare Maribyrnong City Council's emissions to those of similar councils.

As the "Carbon Neutral" name has, since 2008, been used by NCOS to accredit organisations – Council changed the name of its own program to Zero Carbon to avoid confusion with the formal program.

By making the decision to undertake an entirely voluntary program, Council is able to use the savings to further improve its underlying emissions through activities such as installing solar panels on community buildings and upgrading streetlights to energy efficient models

### 2. Description of Organisation Activities

The City of Maribyrnong is a place of diversity, historically vibrant, dynamic and colourful, the city celebrates its opportunities and grows through its challenges. Located five kilometres west of Melbourne, its 31square kilometre area is comprised of nine distinct suburbs, each varying significantly in its' demographics, population and geography. For over 60,000 years, Maribyrnong is home to the Traditional Custodians, the Wurundjeri Woi Wurrung and Boon wurrung peoples of the Kulin Nation. The city suburbs include Footscray, West Footscray, Yarraville, Seddon, Kingsville, Maribyrnong, Maidstone, Braybrook and Tottenham.

As an organisation, Maribyrnong Council had a total expenditure of \$145.3 million (for 22/23), which was used to deliver a wide range of community services, programs and support, and develop and maintain essential community infrastructure.

Council provides both universal services that are used by most community members (such as waste and recycling collection or footpath maintenance), and specialised services which respond to specific needs (such as meals on wheels and child care).

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### 2. Total Carbon Footprint - 22/23 Year

Table 1: Emission sources, scopes and quantities

| Scope    | Emission sources, scopes and quantities  Emission source | tonnes<br>CO <sub>2</sub> -e |
|----------|--|------------------------------|
| 1        | Transport Fuel   | 708                          |
| 1        | Fugitive Emissions                                       | 90                           |
| 1        | Natural Gas  | 1,287                        |
| 2        | Electricity  | 23                           |
| 2        | Electricity –Street Lighting                             | 1<                           |
| 3        | Transport Fuel   | 176                          |
| 3        | Natural Gas  | 99                           |
| 3        | Electricity  | 2                            |
| 3        | Waste from Internal Council Operations                   | 595                          |
| 3        | Paper Use within Council                                 | 1<                           |
| 3        | Business Travel of Employees - Flights                   | 4                            |
| 3        | Water  | 197                          |
| Total ca | arbon footprint in tonnes CO <sub>2</sub> -e             | 3,181*                       |

\*The council has established a final date of analysed data of 21 August 2023. Any emissions for this financial year not recorded by this date will be included in the 2023 - 24 report. Offsets for these additional emissions will be purchased prior to the end of the financial year 2023-24.

### 4. Annual Trend Data

Table 2: Annual Emissions Trend Data in tonnes CO2e

| Description               | 2008/09<br>Base<br>Year | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23<br>Reporting<br>Year* |
|---------------------------|-------------------------|---------|---------|---------|---------|---------|---------|-------------------------------|
| Total Actual<br>Emissions | 12,416                  | 9,743   | 9,704   | 9,573   | 9,112   | 8,270   | 4,524   | 3,181                         |
| Less<br>Greenpower        | 2,155                   | 0       | 0       | 0       | 0       | 0       | 0       | 0                             |
| Less Carbon<br>Offsets    |                         | 9,743   | 9,704   | 9,573   | 9,112   | 8,270   | 4,524   | 3,181                         |
| Total Net<br>Emissions    | 10,262                  | 0       | 0       | 0       | 0       | 0       | 0       | 0                             |

<sup>\*</sup>Includes 272 tCO2e emissions associated with water use which was not calculated in previous years. The major source of the reduction of emissions from the previous FY is the VECO power purchase agreement which has reduced 99.6% of our electricity emissions to zero through the purchase of zero emission electricity.

Table 3: Estimated Savings in tonnes CO2e - Compared to Business As Usual

| Description   | 2008/09<br>Base<br>Year | 2016/17  | 2017/18 | 2018/19 | 2019/20 | 2020/21   | 2021/22   | 2022/23<br>Reporting<br>Year |
|---|-------------------------|----------|---------|---------|---------|-----------|-----------|------------------------------|
| Business<br>as Usual *                                      | 12,895                  | 16,081   | 16,512  | 16,905  | 17,309  | 14,514*** | 14,844*** | 18,588#                      |
| Total<br>Actual<br>Emissions                                | 12,416                  | 9,743    | 9,704   | 9,573   | 9,112   | 8,270     | 4,524     | 3,181                        |
| Annual<br>Emissions<br>Savings<br>Efficiency<br>Initiatives | 479                     | 6,338    | 6,808   | 7,332   | 8,197   | 6,244     | 10,320    | 15,407                       |
| Cumulative<br>Emissions<br>Savings<br>since base<br>year    | 479                     | 23,911** | 30,719  | 38,051  | 46,248  | 52,492    | 62,812    | 78,107                       |

<sup>\*</sup>Estimate of emissions if no energy efficiency actions had been taken

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<sup>\*\*</sup>Includes 2009/10 to 2015/16 estimated emissions savings

<sup>\*\*\*</sup>Business as usual emissions estimates were reduced in the 2020/2021 and 2021/2022 years. This reflects energy consumption reductions due to the impact of Covid-19 restrictions. It is predicted that this would have also occurred in a business as usual scenario.

# The 2022/2023 financial year business as usual emissions estimates was recalculated using original methodology due to a return to a normal consumption pattern post COVID.

#### **Energy Efficiency Initiatives**

Since 2008, Maribyrnong City Council has undertaken various energy efficiency initiatives, including:

- Energy Performance Contract of four of the largest energy using buildings in 2010
- · Energy audits at Council's top eight energy use sites
- · Other energy efficiency projects
- Installed 619kW of solar on Council-owned corporate and community buildings
- Streetlight changeover to energy efficient globes 4,400 lights
- LED lighting changeover in Council buildings Operations Centre, Town Hall, Footscray Library, Maidstone Community Centre, Maribyrnong Community Centre, Phoenix Youth Centre, West Footscray Library, RecWest Braybrook and Footscray, Drill Hall, Cherry Crescent Kindergarten, Maribyrnong Aquatic Centre and Footscray Bowling Club.
- Power Purchase Agreement\* Green Energy for Buildings and Streetlights. This was implemented for small electricity sites from 1 July 2021 and large buildings and streetlight from 1 January 2022. We still have a small amount of emissions due to a number of small assets, security camera, light etc. are linked to account which cannot be linked to our power purchase agreement.

# 5. Carbon Offset Purchases and Retirement for this Reporting Period – 2022/23

When Council first adopted the Carbon Neutral Action Plan in 2008, the strategy to become carbon neutral was to purchase accredited Green Power incremented each year until Council achieved 100% green power for electricity usage and accredited offsets for all other emissions. However, in 2014 Council decided to move to purchase National Carbon Offset Standard (NCOS) approved offsets for all emissions and use the financial savings to invest in additional projects and actions to reduce energy consumption and also to increase Council's direct investment in renewable energy such as solar panels and solar hot water in Council facilities.

#### Offset Purchases:

In the 2020/21 financial year, Council purchased and retired 13,000 tonnes of accredited CO2e offsets in advance to cover two years 2020/21 and 2021/22. Only 8,270 tonnes were required to offset the total Carbon Footprint in 2020/21. 4,524 tonnes of offsets were required to cover the 2021/22 financial year offsets. Of the remaining offsets, 181 were used to cover the 2022/23 financial year. The reminding 25 tonnes have been retired. The offsets were VCU accredited offsets for:

Project Name: VCS VCU Hebei Yuxian Wind Power Project, China, Vintage 2018

Project Country: China

Project Verifier: Carbon Neutral (Pty) Ltd

The Verified Carbon Standard (VCS) Program is the world's most widely used voluntary Green House Gas program. Once projects have been certified against the VCS Program's rigorous set of rules and requirements, project developers can be issued tradable GHG credits called Verified Carbon Units (VCUs). Those VCUs can then be sold on the open market and retired by individuals and companies as a means to offset their own emissions. Maribyrnong City Council purchases these accredited offsets.

In the 2022/23 financial year, Council purchased and retired 3,000 tonnes of accredited CO<sub>2</sub>-e offsets. The offsets were VCU accredited offsets for:

Project Name: VCS VCU Hebei Yuxian Wind Power Project, China, Vintage 2018

Project Country: India

Project Verifier: Carbon Neutral (Pty) Ltd

Table 4 sets out the registry details of the VCS offsets that have been cancelled through Council's purchase.

Table 4: Offset Cancellations

|   |                        |  | Quantity               |  |  |  |
|---|------------------------|--|------------------------|--|--|--|
| Offset type   | Registry               | Serial number  | (t CO <sub>2</sub> -e) |  |  |  |
| VCU<br>Verified<br>Carbon<br>Standard                                       | APX<br>VCS<br>Registry | 8099-455434235-455447234-VCU-034-APX-CN-1814-<br>01012018-31102018-0.  | 13,000*                |  |  |  |
| Applied in 202  | 20/21 Repo             | rting Period   | 8,270                  |  |  |  |
| Applied in 202  | 21/22 Repo             | rting Period   | 4,524                  |  |  |  |
| Applied in 202  | 181                    |  |                        |  |  |  |
|   |                        |  |                        |  |  |  |
| VCU<br>Verified<br>Carbon<br>Standard                                       | APX<br>VCS<br>Registry | 6870-353267433-353270432-VCU-034-APX-IN-1-<br>1197-01012018-31052018-0 | 3,000                  |  |  |  |
| Applied in 202  | 3,000                  |  |                        |  |  |  |
|   |                        |  |                        |  |  |  |
|   |                        |  |                        |  |  |  |
| Total Emissions Offset tonnes CO2-e 3,181                                   |                        |  |                        |  |  |  |
| * The remaining 25t CO2e from the existing 12 000 effects have been retired |                        |  |                        |  |  |  |

 $<sup>^{\</sup>star}$  The remaining 25t CO2e from the original 13,000 offsets have been retired.

#### 6. Emissions Reduction Measures

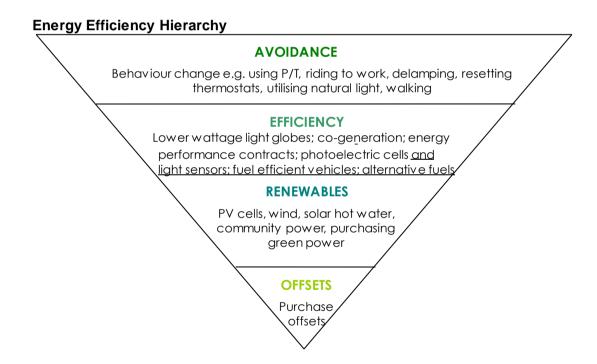
Since Council's first Carbon Neutral Action Plan was released in 2008 it has been recognised that Maribyrnong City Council's response to the impacts of climate change needs to include a commitment to greenhouse mitigation. The impacts of climate change have escalated to a climate emergency which is being felt now and is increasing in severity.

Council's commitment to climate mitigation has been made in the Climate Emergency Strategy 2020-2025, which is now the key climate document of Council. Undertaking mitigation actions will help prevent Council contributing further to the climate emergency and is the critical key direction of this Strategy.

The Maribyrnong City Council Carbon Strategies covering the periods 2008-15 (Carbon Neutral Action Plans) and 2015-20 (Zero Carbon Maribyrnong) previously set the following targets:

- 1. Zero Emissions for Corporate Activities of Council by 2015
- 2. Carbon Neutral Municipality by 2020

While the Carbon Neutral Action Plan identified a target to become a carbon neutral organisation in 2015 (which was achieved) as a key target, Council has a holistic approach to carbon management via the following 'energy hierarchy'. The hierarchy enables Council to prioritise its immediate and long-term actions and methods in reducing its emissions.



The Zero Carbon plans were based on the energy efficiency hierarchy shown above.

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Using the hierarchy as a model:

- Avoiding the creation of carbon emissions in the first place are the most valuable actions, as they minimise carbon emissions the most effectively and with the fewest resources.
- Energy efficiency initiatives are the next preference as they enable existing resources to be utilized to their capacity while operating efficiently.
- The purchase of renewables such as green power, solar hot water and solar panels are then considered to be the next most valuable in powering more efficient appliances without using finite energy sources.
- Offsets are the final step after undertaking all of the other actions. They enable those emissions that are more difficult to be reduced, to be offset by other carbon emission reducing activities

Table 5: Emissions Reductions Measures

| Emission source  | Reduction Measure   | Scope   | Status                            | Reduction t CO2e |
|--|---|---------|-----------------------------------|------------------|
| Electricity  | VECO Power Purchase<br>Agreement – Green Energy for<br>Buildings and Streetlights | 2 and 3 | Implemented this reporting period | 5,131            |
| Total emission reductions implemented in this reporting period (2022/23) |   |         |                                   |                  |

## 7. Organisational & Geographic Boundary/Scope & System Boundary

Maribyrnong City Council's emissions boundary for the entire organisation is based on national and international standards to ensure alignment with the National Carbon Offset Standard (NCOS) Program. This includes not only the National Greenhouse and Energy Reporting Act 2007 (NGER Act), but also the GHG Protocol's Corporate Accounting and Reporting Standard 2004 - that covers the accounting and reporting of the six greenhouse gases covered by the Kyoto Protocol. Council has included emission sources in its organisational boundary, based on two key determining factors:

- That the emissions would not have otherwise occurred if Maribyrnong City Council as an organisation did not exist (i.e. operational control); and
- That Council has confidence that the emissions are able to be measured completely and accurately

In summary, Council's emissions boundary has been established to include the following:

#### Scope 1 emissions (Direct Emissions)

- Natural Gas;
- Transport Fuel (including Unleaded Petrol, Liquefied Petroleum Gas (LPG) and Diesel use);
- Fugitive emissions from air conditioning units;

# Scope 2 emissions (Emissions released at a power plant as a result of activity at Council facilities)

· Grid electricity

Scope 3 emissions (Emissions released in the wider community from consumables as a result of Council Activities)

- Upstream emissions associated with Electricity, Gas and Fuel
- Business Air travel of employees
- Waste emissions were created from business operations and calculated using original methodology due to a return to a normal consumption pattern post COVID.
- Paper
- Water was added to the Scope 3 calculations for the first time in the 22/23 FY. For irrigation water Scope 3 emissions were calculated using the 22/23 emission factor supplied by Greater Western Water of 0.0865 tCO2e-/ML. For water that would ultimately reach sewage treatment, Scope 3 emissions were calculated using the Council's emissions reporting tool, which has a derived figure of 2.45 tCO2-e/ML which includes emission from delivered water and sewage treatment.

#### **Boundary Overview**

Council has calculated facility level CO2e emissions based on financial control. However, each facility was also assessed for operational control to help understand Council's broader responsibilities. This included:

- Council owned and operated facilities.
- Facilities that Council owns or where Council is the Committee of Management for buildings that are leased to other organisations.
- Facilities that Council does not own but leases from external organisations.

Financial Control is defined as whether Council pays the utility costs for the facility.

Operational control relates to whether Council has the ability to set operating policies, health and safety policies and environmental policies. (As defined in the Greenhouse Gas Protocol).

Council has analysed its building stock and applied the operational control test (as defined under NGER) and has confirmed that sites that are owned or leased and operated by Council are all under Council's operational control, as determined by the ability to set:

- Operating policies
- Health and safety policies &
- Environmental policies

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#### Council Owned or Managed Buildings That are Leased Out

Council has a number of buildings where the entire building is leased out to a third party.

Using the same operational control test and based on details contained in the lease agreements Council does not have operational control of these sites, and they have not been included. These include a number of sporting club facilities.

#### **Leased Spaces within Council Owned Buildings**

Council also has some sites (e.g. Maidstone Family Centre Hub, Braybrook Community Centre) where a significant portion of the building is leased out. In these circumstances Council is responsible for the utility bills in their entirety, although leaseholders are on charged. They are considered to be within Council operational and financial control and as such all emissions at these sites are included in Council's inventory.

#### Facilities Leased by Council.

Council previously leased only one large site, the Operations Centre at 95 Sunshine Rd on a long-term lease. This site was previously included in the greenhouse calculations. The site has now been purchased and continues to be included in the calculations.

#### Facilities where Council is the Committee of Management.

Council is the Committee of Management for some facilities on Crown Land, e.g. Pipe makers Park, Yarraville Community Centre. Only those facilities operated by Maribyrnong City Council are included in the inventory.

Only those owned or leased facilities where Maribyrnong City Council has Financial Control has been included in the scope of this greenhouse gas inventory.

#### **Other Inclusions**

Fugitive Emissions of synthetic gases from air conditioning units in facilities operated by Maribyrnong City Council is a direct Scope 1 emission. This has been estimated as a Maribyrnong City Council emission, as no other organisation will account for this Scope 1 emission. Checking each air conditioning unit and undertaking the calculations is a lengthy exercise. As the emissions in other Councils have been reported as being less than 1% of total emissions, Maribyrnong City Council has included an estimate of 90 tonnes of CO2e have been added to the inventory to account for this.

#### **Exclusions**

There are some exclusions from Council's emissions inventory. Some of these fall within Council's organisational boundary but have been excluded from quantification in line with Section 4.2.3 of the National Carbon Offset Standard (NCOS), due to one (or more) of the following:

- the emissions are likely to be negligible (relative to other scope 3 emissions);
- determining the emissions will be very costly relative to their likely significance or;
- there is insufficient data.
  - These exclusions are:
- purchased goods (including Capital goods) and services;
- employee commuting (except those commuting in a fleet vehicle);

- goods sold, including transportation, distribution, processing, their use and their end of life treatment;
- downstream leased assets where that party has operational and financial control, such as some community buildings and pavilions,
- investments.

# Other scope 3 emissions are outside Council's organisational boundary and are not included in this inventory.

- Municipal waste all waste generated by the broader Maribyrnong community, with the exception of the corporate waste that Council produces;
- Community emissions (emissions emitted within the City of Maribyrnong but outside of Council's operational control);
- Business travel of employees (including Public Transport and Taxis, Rental Cars and Buses);
- Contractor Fuel Use.
- The council has established a final date of analysed data of 21 August 2023. Any
  emissions for this financial year not recorded by this date will be included in the 2023 -24
  report. Offsets for these additional emissions will be purchased prior to the end of the
  financial year 2023-24





19th January 2024

To whom it may concern

Re Carbon Neutral Verification - Maribyrnong City Council

Ecodecisions was tasked with independently verifying and auditing the Zero Carbon Emissions project undertaken by Maribyrnong City Council for the period 1st July 2022 to 30th June 2023.

#### Scope of audit

The scope of the audit was to verify:

- That all scope 1,2, 3 emissions were accounted for based on the LGASA and NCOS guidelines (See note 2)
- The correct emission factors were used based on the National Greenhouse and Energy Reporting (Measurement) Determination 2008, August, 2021
- GHG factors for air travel based on the latest figures calculated by International Civil Aviation Organization (ICAO) Carbon Offset Calculator
- 4. The GHG factors for waste from 2023 National Greenhouse Account Factors
- 5. The correct factors for paper usage based on the latest figures from EPA Victoria.
- 6. The calculations for each category was checked
- The offsets purchased were verified by checking the Verra VCU registry and the creator of the offsets

#### Notes

- Fugitive emissions of refrigerants were estimated and physical verification was outside of the scope of audit.
- Emissions are based on a final date of analysed data of 21 August 2023. Any emissions for this financial year not recorded by this date will be included in the 2023 -24 report.

#### **Verification Statement**

I certify that the emissions statement and the offsets purchased are accurate within the scope of the audit and that the offsets purchased are legitimate and verified.

In our opinion, except for the effects of the matters referred to in the notes section of the scope of audit, the participant's Greenhouse Gas Inventory and Public Disclosure Summary are, in all material aspects, in accordance with the National Carbon Offset Standard and National Carbon Offset Standard Carbon Neutral Program Guidelines.

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