

# PARTNERSHIP REPORT

# Taigum Child Edu-Care Centre

Prepared by Connor Morwood February 2024





# ecoBiz Partnership Report

# Participant profile

Contact Name	Janine Schokman
Site Address	400 Church Rd, Taigum QLD 4018
Number of staff	25
Previous ecoBiz involvement	Participant
Metrics monitoring	Energy; Water; Waste;

### Partnership Summary

Metrics partnered	Energy; Water; Waste;
Partnership Start Date	09/02/2024
Partnership Review Date	08/02/2025

## Partnership detail

Coach	Andrew Chamberlin
Industry	Education & Training
Premises leased / owned	Owned
Productivity Unit	Attendance/Occupancy-number
Productivity Unit description	Total Enrolments

Taigum Child Edu-Care Centre joined the ecoBiz program in 2022 and since joining they have participated in one coaching session. This assessment is their first and uses the total number of enrolments for the baseline and assessment periods as its' productivity unit.

The ecoBiz Star Partnership is calculated based on a demonstrated decrease in resource intensity (resource use in relation to organisation activity). To be eligible to become a Star Partner an organisation must show a 10% decrease in their resource intensity for at least one of the following three categories: Energy, Water or Waste. In the subsequent years following this, the organisation needs to continue a 10% drop in resource intensity from the baseline year to maintain their status. If this is not applicable for the organisation, then the ecoBiz Sustainability Coach can recommend Star Partner status on a qualitative basis.



# Star Partnership data

Energy	Period	PU	Energy (GJ)	Energy (\$)	GJ/PU	\$/PU
Baseline Period	2021 – 2022 Financial Year	164	146	\$9,070	0.89	\$55.30
Assessment Period	2022 – 2023 Financial Year	253	157	\$12,121	0.62	\$47.91
% Change		54.3 %	8.1 %	33.6 %	-29.9 %	-13.4 %

Table 1 – Taigum Child Edu-Care Centre energy intensity calculation table

As can be seen in Table 1 above, Taigum Child Edu-Care Centre has increased their total productivity by 54% when comparing the 2021/2022 financial year (FY) baseline period to the 2022/2023 FY assessment period. The business has seen an increase in energy consumption by 8%. When the increase in both productivity and energy consumption is considered, Taigum Child Edu-Care Centre has decreased their energy intensity by 30%. The business is awarded a star in energy.

Solar	Period	Solar Export (kWh)	Solar Export (GJ)	Solar Credit
Baseline Period	2021 – 2022 Financial Year	1225.38	4.41	\$773.74
Assessment Period	2022 – 2023 Financial Year	1157.39	4.17	\$569.60
% Change			-5.6 %	-26.4 %

#### Table 2 – Taigum Child Edu-Care Centre solar export calculation table

In the interest of continuous monitoring, and as can be observed in Table 2 above, Taigum Child Edu-Care Centre has exported a total of 4.2 GJ of energy during the 2022/2023 FY assessment period, this a decrease in solar export of 6% when considering the 2021/2022 FY baseline period export of 4.4 GJ. The business has earned a total of \$569.60 in solar credit for the assessment period; a decrease of 26% when compared the baseline period credit of \$773.74.



Water	Period	PU	Water (kL)	Water (\$)	kL/PU	\$/PU
Baseline Period	2021 – 2022 Financial Year	164	1,223	\$5,796	7.46	\$35.34
Assessment Period	2022 – 2023 Financial Year	253	1,236	\$13,137	4.89	\$51.92
% Change		54.3 %	1.1 %	126.6 %	-34.5 %	46.9 %

Table 3 – Taigum Child Edu-Care Centre water intensity calculation table

When comparing the 2021/2022 FY baseline period to the 2022/2023 FY assessment period, Taigum Child Edu-Care Centre has increased their total productivity by 54% as is shown in Table 3. The business has increased their water usage by 1%. With the increase in water consumption and productivity considered, the business has decreased their water intensity by 35%. Taigum Child Edu-Care Centre is awarded a star in water.

Waste	Period	PU	Waste (t)	Waste (\$)	t/PU	\$/PU
Baseline Period	2021 – 2022 Financial Year	164	24.75	\$5,880	0.15	\$35.85
Assessment Period	2022 – 2023 Financial Year	253	24.77	\$6,891	0.10	\$27.24
% Change		54.3 %	0.1 %	17.2 %	-35.1 %	-24.0 %

Table 4 – Taigum Child Edu-Care Centre waste intensity calculation table

It can be observed from Table 4 that Taigum Child Edu-Care Centre has increased their total productivity by 54% when comparing the 2021/2022 FY baseline period to the 2022/2023 FY assessment period. The business has increased their waste generation by 0.1%. The business has decreased their total waste intensity by 35% when considering the increase in productivity and in waste generation. Taigum Child Edu-Care Centre is awarded a star in waste.



# Carbon Snapshot<sup>1</sup>

					Compari base	son with eline
	tCO2e Baseline	tCO₂e Assessment	tCO₂e/PU Baseline	tCO₂e/PU Assessment	Avoided emissions tCO2e	Net reduction tCO2e
Energy	49.506	53.725	0.3019	0.2124	22.647	-4.219
Water	0.882	0.891	0.0054	0.0035	0.469	-0.009
Waste	39.600	37.620	0.2415	0.1487	23.470	1.980
Total Emissions	89.988	92.236	0.5487	0.3646	46.587	-2.248

Table 5 - Taigum Child Edu-Care Centre carbon snapshot calculation table

When comparing the 2021/2022 FY baseline period emissions to the 2022/2023 FY assessment period emissions, it is shown in Table 5 above, that Taigum Child Edu-Care Centre has avoided a total of 47 tCO<sub>2</sub>e in emissions. The business has made a net increase in emissions of 2 tCO<sub>2</sub>e. The above snapshot is calculated from data provided for electricity, water, and waste and if the business wishes for a more comprehensive snapshot, data should be provided for other energy sources.

Taigum Child Edu-Care Centre's Partnership assessment is due for renewal January 2025.

<sup>&</sup>lt;sup>1</sup>The results provided by the carbon snapshot is not a comprehensive carbon footprint. The results cannot be used to make any claims in relation to carbon or greenhouse gas emissions and cannot be used for carbon neutral claims or certification/verification/accreditation. The results cannot be used to purchase an equivalent amount of carbon offsets in order to claim carbon neutrality. See Glossary for further definitions.



## Glossary Avoided Emissions

Avoided emissions are a representation of the business's efforts in reducing their emissions, compared to a business-as-usual scenario. A positive avoided carbon emissions figure means a business emitted less GHG (greenhouse gases) per business output than either their baseline or their previous assessment (as part of the ecoBiz program). A negative avoided carbon emissions figure means they have emitted more GHG per business output than either their baseline or their previous assessment.

It takes into account how total business output (measured by productivity unit) changes in different years. This model is an approximation and actual avoided emissions may differ from the modelled avoided emissions for a range of reasons, e.g. changes in behaviour, and the proportion of emissions that would occur regardless of the business output variations (i.e. related to fixed costs) etc.

#### **Carbon Net Reduction**

Reduction in greenhouse gas emissions between baseline and assessment year calculated as part of the ecoBiz annual assessment is known as carbon net reduction. Positive net reduction corresponds to a reduction in emissions and a negative corresponds to an increase in emissions.

#### Carbon Snapshot

A carbon snapshot is an approximation of carbon emissions related to your energy, water and waste data you provided as part of your ecoBiz partnership assessment. This data is then calculated using the ecoBiz carbon tool to gather your carbon snapshot.

It is useful as a starting point to your carbon emissions measurement journey and can help you make better informed decisions in relation to your carbon emissions. It is, however, different from a comprehensive carbon footprint.

#### tCO<sub>2</sub>e

Gases that contribute to climate change by trapping heat in the atmosphere are known as greenhouse gases such as carbon dioxide, methane, nitrous oxide, and various other natural and synthetic gases. The amount of heat a greenhouse gas can trap in the atmosphere is measured by their global-warming potential (GWP). All greenhouse gases have different GWPs, and higher the GWP value, the more it contributes to climate change.



A carbon dioxide equivalent or  $CO_2$  equivalent ( $CO_2e$ ) is a way to measure emissions from all these greenhouse gases into a single measure by converting amounts of other gases to the equivalent amount of carbon dioxide. These are expressed in tonnes or kilograms of  $CO_2e$  ( $tCO_2e$  or kg $CO_2e$ ).

Further information and definitions available on FAQs » Business Chamber Queensland ecoBiz