**Zero Waste Magnetic Island and Totally Renewable Magnetic Island Community Survey** 













Great Barrier Reef Foundation



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## **Summary of Findings**

## Background

MICDA, Totally Renewable Magnetic (TRM), and Zero Waste Magnetic Island (ZWMI), with funding from the Great Barrier Reef Foundation and as part of their Towards Net Zero Magnetic Island (Yunbenun) project worked with University of Queensland on a community survey to explore their actions and attitudes towards a range of waste and energy related behaviours. This Survey builds on a 2020 Waste Survey funded by Townsville City Council and delivered through Zero Waste Magnetic Island, a working group of the Magnetic Island Community Development Association.

From April to June 2024, 136 residents of Magnetic Island/ Yunbenun completed the survey about their actions and attitudes towards a range of waste and energy related behaviours. This represents approximately 5% of the population of Island or 1 in 20 residents. The survey was over-represented by older, female respondents. Where gender and age differences were identified in the responses, these have been outlined in the report.

## **Climate Beliefs**

The responses indicated that most respondents believe climate change is negatively impacting the island, with coral bleaching, hotter summers, and more frequent severe weather events being the most observed impacts.

## **Waste Actions**

Regarding waste related actions, most respondents put out their rubbish bins weekly and recycling bins fortnightly, with rubbish bins generally less than half full and recycling bins more frequently full or overflowing. Overall, there is higher engagement with routine recycling behaviors, such as using home and public recycling bins, while adoption of reusable shopping bags is more moderate, with over a third of respondents not consistently bringing bags to the shops, more so among apartment dwellers and non-two adult households. Use of keep-cups is also relatively low, with over half of respondents not using them regularly. Belief in the impact of climate change significantly influences behavior, with those who believe it is affecting the island being two to three times more likely to adopt these sustainable practices. Additionally, older women are particularly high adopters of positive waste behaviours.

While adoption of food waste reduction behaviours is generally high, over onethird (nearly all of which were under the age of 45 years) indicated that they waste at least a small amount per week. Food going bad before they can use it was the number one reason. Interestingly, the drivers for change were reasonably split between both environmental and financial considerations.

## **Support for Waste Management Initiatives**

There is strong support for communal waste management initiatives like tool libraries, a community garden as well as an island facility to process waste. There was less enthusiasm for initiatives requiring more individual management such as a third household bin for food and garden waste.

## **Energy Actions**

When considering energy related actions, just over half of the respondents have solar panels installed. Most respondents use electricity for hot water and cooking. Gas is commonly used for cooking on hotplates. Fans are the most preferred cooling method, despite air conditioning being widely available.

For those who have already installed solar panels, motivations were split between financial savings (about 40%) and environmental reasons (about 33%), with older respondents (over 65) showing a stronger preference for financial savings. Similarly, among those considering solar panels, financial savings remained the top motivation, followed closely by environmental concerns. Belief in the negative impacts of climate change didn't drive past solar installations, but those who do believe in these impacts show a greater interest in installing solar in the future.

Around one-quarter of respondents own electric vehicles, predominantly electric bikes and hybrid cars. Knowledge about using electric vehicles as backup power supplies was relatively high.

## Support for Energy Management Initiatives

When asking the respondents for their suggestions for managing energy consumption, the most suggested solution was advocating for localised micro grids that can operate independently or with the main grid. Increased use of solar energy for buildings and public amenities was also highly recommended.

This report highlights the community's proactive stance on waste reduction and renewable energy adoption, along with the need for continued education and infrastructure improvements to support future initiatives. While perceptions related to the negative impacts of climate change was related to waste-management behaviours, this was not the case for energy related behaviours where the drivers are largely financial. Across the board, single adult households are much less likely to engage in both positive waste and energy related behaviours.

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## Background

In February 2024, MICDA received a \$595,350 grant from the Great Barrier Reef Foundation (GBRF) to accelerate community climate action projects on Magnetic Island. The grant aims to engage residents and businesses in actively addressing two core areas: waste and energy.

To guide the development of the island's Climate Action Strategy, Zero Waste Magnetic Island and Totally Renewable Magnetic invited residents to complete an online survey to identify and understand the community's perspectives on waste generation and energy use.

## Who participated in the survey?

From April 30th to June 26th, 136 individuals completed the survey. The represents 5% of the population of the Island<sup>1</sup>. Participants were encouraged to complete the survey online, with promotions conducted through various social media platforms, at events, and on signage. Additionally, some surveys were completed in person with assistance from a MICDA representative. The survey sample was skewed towards older females (aged 66 and above), who comprised nearly one in every four respondents. This is not representative of the actual populaiton of Magnetic Island where by females are 50% of the population and only 25% of the population are over 65 years of age (compated to nearly 40% of the sample). Where variations in responses based on age and gender were identified, these have been reported on below.



<sup>&</sup>lt;sup>1</sup> With a sample size of 136 out of a population of 2,100, the margin of error is approximately 8% at a 95% confidence level. This means that you could say with 95% confidence that the true population proportion lies within 8.11% of your sample proportions estimated here. Further, because this sample is a convenience sample rather than a random sample, the calculations for the margin of error is less reliable.

#### Figure 1 Age and Gender (N = 136)

Most of the respondents live on the island full-time (82%). For those that live only part time on the Island, half live there more than six months of the year, and the other half less than six months. Only a small proportion of respondents either have a holiday home, or let their home.

#### Table 1 Full-time versus Part-time residents

	Yes	No
Do you reside on the island full time (i.e., 12 months per year)?	82%	18%
Do you have a holiday home on Magnetic Island?	15%	85%
Do you let your island home/holiday home?	12%	88%

Approx 2 in 5 respondents (42%) of respondents reside in Nelly Bay, followed by 29% in Horseshoe Bay. Less than 10% of respondents live in apartments located in either Nelly Bay or Alma Bay.



#### Figure 2 Location and House type (N = 125)

While most households consist of two adults, about one in five are single-adult households and one in five have 3 or more adults living in the household. Given the older age of most respondents, only a small percentage (around 10%) reported having children or teenagers at home.

# Do residents believe that climate change is impacting the island?

Residents were asked the extent to which they agree that climate change is negatively affecting the island. Only around 1 in 5 respondents disagreed with this statement, and the most common response was "Strongly agree".



Figure 3 "To what extent do you agree or disagree with the following statement: 'Climate change is negatively affecting Magnetic Island/Yunbenun.' (n = 133)

Interestingly, there was little variation in the responses when considering other sociodemographic factors such as age, gender, household size or type.

## What impacts have they observed?

Respondents were also given an opportunity to describe any impacts they have observed. The responses indicate several recurring themes related to the negative effects of climate change on Magnetic Island/Yunbenun. Below are the key themes, their prevalence, and supporting quotes. This is the most frequently mentioned impact was coral bleaching, with many respondents noting the increased frequency and severity of coral bleaching events due to rising sea temperatures.

"Coral bleaching and stress from higher water temperatures."

"Coral bleaching event which took place in February 2024 and before that: you can see the bleached and destroyed areas of the reef."

"Ocean is too warm. Mass bleaching events on the GBR."

Many other respondents noted that summers are becoming hotter and lasting longer, which affects daily life and increases the use of air conditioning.

"Hotter summers."

"The hot season is lasting longer each year increasing air con use."

Many respondents also mentioned that changes to weather patterns, specifically noting that cyclones are becoming more frequent and severe:

"Change in weather, climate conditions."

"Extreme tides more frequent. Wetter climate. Wind seems more often."

"Water is warmer for much longer which in turn has created more cyclones and more stingers present for a longer period of time."

"Bleaching, hotter summer, stronger cyclones, turtle survivorship decreasing."

While, it was less common, several respondents pointed out the rising sea levels and the resulting beach erosion as significant impacts on the island.

"Saltwater inundation due to rising sea levels."

"Beach erosion in Nelly and Horseshoe, possible problems with salt-water in the lagoon in Horseshoe."

## Household waste behaviours

### How often do residents put their bins out, and how full are they?

Respondents were asked several questions about household waste. As expected, by far most respondents put out their rubbish bins weekly, and their recycling bins fortnightly. This does not vary according to age, gender, household type, location nor whether you are full time resident or not.



Figure 4 "On average, how often does your household put out the ..... bin for collection?"

Figure 5 below indicates that nearly two-thirds of the respondent's rubbish bins (64%) tend to be less than half full at the time of collection. The opposite is true when considering the recycling bin, whereby two-thirds (65%) of the respondents recycling bins are half-full to overflowing.



#### Figure 5 "On average, how full are your bins when you put them out for collection?" (n = 136)

The presence of children in the home did not affect this trend, but the number of adults did. Households with more adults were more likely to have fuller bins for both rubbish and recycling. Whilst they represent only a small proportion of the overall sample, in households with three or more adults (n = 18, or just over 1 in 10 households), 75% of respondents reported that their rubbish bin overflows (compared to 0% in two-adult households), and 50% reported that their recycling bin overflows (compared to about 30% in two-adult households.

How full the household bins were was also dependent on age<sup>2</sup>. Younger respondents (less than 55 years old) also tended to have overflowing rubbish bins (75% compared to for the rest of the sample) and overflowing recycling bins (67% compared to 17%).

Respondents were also asked how often they undertake a range of waste-related behaviours, see Figure 5. From the responses, the most common actions are:

- Putting recyclables in the council wheelie bin with the yellow lid at home is done very frequently, with the highest percentage of "Always" responses.
- Putting recyclables in a recycling bin when away from home is also very common, with many doing it "Always" or "Most of the time".
- Bringing your own bags to shops shows high adoption, with many people doing it "Always" or "Most of the time"

Recycling containers through the 10c refund scheme (Envirobank) shows varied adoption, with a notable portion (one-third) either "Never" or only "Sometimes" using it. Bringing your own reusable cup was the least popular of the options listed in this graph – with over half of respondents selecting "Never" or only "Sometimes".

<sup>&</sup>lt;sup>2</sup> Age and number of adults in the household are related, and this could explain the similar results for these two variables. It is more likely that the younger respondents are living in share houses with more 3 or more adults.

### How often do residents engage in positive waste behaviours?

Overall, there's generally higher engagement with regular, day-to-day recycling behaviours (using home and public recycling bins). While using reusable shopping bag use has more moderate levels of adoption, there are still over one-third of the overall sample who don't *always* bring bags with them to the shops. This increases significantly for people that live in apartments -40% of apartment dwellers reported bringing their own bags 'most of the time' compared to just 22% of household owners. Similarly, the almost no two-person households selected "Never" or "Sometimes" but 16% of single adult households and 24% of 3 or more adult households did. Over half of all respondents indicated that they don't regularly use keep-cups.



Figure 6 "How often do you...." (n = 135)

The responses did not vary according to location, presence of children, whether you are full time resident. The most consistent and noticeable variation was between those respondents that agree that climate change is impacting the island compared to those that do not. They were between two and three times more likely to indicate that have adopted those behaviours. Other variations to note included:

- Frequency of use of the recycling bin (both at home and away) increases with age.
- Households with 2 adults are more likely to use the container refund scheme and to bring their own bags to the shops compared to both single adult households and households with three or more adults.
- People that live in apartments are much less likely to take their own bags to the shops.

• Respondents that agree that climate change is negatively affecting the island, are three times more likely to use the recycling bin (both home and away) compared to those that disagree.

The below graph (Figure 7) describes actions that require travel. Across all the different actions, "Never" and "Sometimes" are the most common responses, indicating that most people do not engage in these activities regularly. Purchasing garden waste from the transfer station is the least frequent activity, with the highest percentage of "Never" responses. Visiting the tip shop appears to be the activity done most frequently, with nearly 60% of respondents indicated that the at least visit the tip shop "Sometimes".





In terms of variation across different groups, women are less likely to take excess rubbish (both waste and recycling) to the transfer station but are more likely to have visited the tip shop. Full time residents are more also more likely to take excess rubbish to the transfer station. Younger respondents (less than 55) are much more likely to say they have "Never" visited the tip shop. Interestingly, unlike the actions in listed in Figure 6, the frequency of these actions did not vary depending on the respondent's climate beliefs.

For the final actions, the below figure shows that a significant number of respondents frequently choose products that generate less waste, with many doing this "Most of the time" or "Always." Similarly, donating used clothing for reuse is a high frequency activity, with many respondents donating clothing "Most of the time" or "Always." While less than making waste-related purchasing decisions or donating clothing, a good number of respondents report that they take excess garden waste to the transfer station.

There was a balanced distribution across all frequency categories when considering respondents that visit the op shop, with a significant number of respondents visiting the op shop "Sometimes".

The least frequent activities were taking either excess recycling or excess garden waste to the transfer station, whereby the most common response was 'Never'.





There were some notable differences with regards to some of the actions listed according to the socio-demographics tested:

- Women, particularly older women, are much more likely to have visited the op shop
- Women (of any age) are much more likely to have donated used clothes
- Full time residents are much more likely to take excess garden waste to the transfer station
- Residents of Horseshoe Bay and women are more likely to report that they have "Never" taken excess recycling to the transfer station

## How much waste do residents report generating, and what are the reasons given for food wastage?

Respondents were also asked to indicate what proportion of purchased food ends up in the rubbish bin as waste (see Figure 9). While many indicated that they hardly waste any food at all, over one-third indicated that they waste at least a small amount per week.



Figure 9 "On average, what proportion of the food that you purchase ends up in the rubbish bin as waste?" (n = 133)

There were some variations in the responses. Women, older women in particular, are more likely to say that they hardly waste any food at all. The few people that indicated that they waste either a large or moderate amount were mostly under the age of 45 years and were much more likely to have disagreed that climate change is negatively impacting the island (for example, two-thirds of the people that agree climate change is impacting the island indicated that they hardly waste any food at all, compared to just 18% of the people that disagreed and *all of the* respondents that indicated that they waste a lot of food were from the group that disagreed).

When asked to indicate the <u>main</u> reason for wasting food, the most popular response was "Food going bad before it can be used". Other responses included:

- Certain inedible parts of food such as meat bones, avocado seeds, and corn cobs are not composted and thus contribute to waste.
- Difficulty in managing leftovers, either due to cooking too much for a small number of people or unsafe leftovers that can no longer be eaten.
- Split living situations (e.g., between the island and the mainland) that can sometimes result in wasted food.



Figure 10 "What is the MAIN reason for wasting food in your household? (Select ONE option)" (n = 127)

When asked what they usually do with household food waste, the most popular response was "Compost", with Bokashi composting and burying it being the least popular. Approximately 1 in 3 respondents indicated that they put their food waste into the rubbish bin.



Figure 11 "What do you USUALLY do with your HOUSEHOLD food waste? (Select ALL that apply)" (n = 132)

## What motivates people to reduce food waste?

When asked what motivates them the most to reduce food waste, the responses were reasonably split between both environmental and financial considerations. Protecting the Great Barrier Reef was nominated as the primary driver for only a very small number of respondents.



Figure 12 "What motivates you MOST to reduce food waste in your household? (Select ONE option)" (n = 130)

Motivations were mostly stable across the various socio-demographics with two notable exceptions. As could be expected, respondents that agree that climate change is impacting the island are much more likely to indicate that their main motivation is the environment. For respondents that disagreed that climate change is impacting the island, the most common response was "other", for example:

• Ingrained habits and family values (e.g., ""Brought up to not waste food." and "Have always put food scraps in compost for past 30 years.")

• Practical and efficiency reasons (e.g., "I just hate waste. I am a good menu planner and buy what I need to cook." and "No need for waste if you can use it in other ways.")

Of note, full time residents were much more likely to select "Save money" when compared to part-time residents who are more motivated by environmental and ethical concerns.

## What do residents do with their garden waste?

Respondents were also asked to indicate what they do with their garden waste. The responses to this question were widely spread. While the most common response was to leave the waste in the garden to decay, this was followed very closely by using compost bins and taking garden waste to the transfer station. The "other" responses generally aligned with the response options already provided. For example, "Home mulcher" or "Use as cut and drop mulch". One respondents indicated that they use it to "Supply fuel for camp fire oven."



Figure 13 "What do you USUALLY do with GARDEN waste (Select ALL that apply) " (n = 131)

## Does the community support waste-related reduction initiatives?

Respondents were asked to the extent to which they would support a range of waste-related initiatives on the island.

- An island tool library and a community garden that can also host workshops on sustainable practices receive the highest levels of support, with significant portions of respondents indicating "A great deal" or "A lot" of support.
- Reusable cup libraries at local cafes, a reuse & repair café for the island, and a Men's Shed to reuse & repair household items have a moderate level of support, with a notable portion of respondents expressing support ranging from "A lot" to "A moderate amount."
- An island facility to collect and process food and garden waste and a bulk food cooperative where you bring your own containers show a mix of support levels, with a more even distribution across the support spectrum.

• A third household bin for food and garden waste (FOGO) received the least support, with a higher percentage of respondents indicating "A little" or "Not at all."

Overall, the data suggests strong community interest in initiatives that provide shared resources, such as tool libraries and community gardens. However, there is less enthusiasm for initiatives involving additional household management efforts, like the FOGO bin. This indicates a preference for communal, resource-sharing projects over those that require more individual participation and management.



#### Figure 14 "To what extent would you support each of the following initiatives for Magnetic Island?" (n = 133)

There were some notable variations in support levels. Those most significant was the difference in support levels between people that agree that climate change is impacting the island versus those that do not. People that agree that climate change is impacting the island tend to more supportive across all the listed initiatives. Other variations were:

- Older residents tended to be more supportive of a bulk food cooperative
- Younger residents tended to be more supportive of an island facility to collect and process waste
- Women are more likely to be supportive of:
  - o A Men's Shed
  - A community garden
- Two adult householders tended to be more supportive of a reuseable cup library
- Residents of Horseshoe Bay were less supportive of a tool library

## Solar panels

## How many residents have solar panels installed?

To evaluate the extent to which residents have adopted the target behaviours, respondents were asked if they currently have solar panels and, if so, their motivations for installing them. Those without solar panels were asked if they would be interested in installing them in the future.

Just over half of the respondents (53%) reported having solar panels installed on their

**homes.** Excluding apartment dwellers, this figure rises to 60%. The only notable variation in responses was related to household size: single-adult households were much less likely to have solar panels (33%) compared to two-adult households (62%). Solar panel installation was not associated with age, gender, household composition, or type of residency.

Interestingly, having solar panels was not related to whether respondents believed the island is being impacted by climate change.

Respondents with solar panels were asked to indicate whether they were interested in installing a battery to enhance their solar panels. As can be seen in the below figure, most people responded that they would be interested. Around 1 in 10 (six respondents) indicated that they already have a battery installed.



#### What motivates people to install solar panels?

When considering people that have already installed solar panels, as can be seen in the below graph, responses were split between those that installed solar panels primarily for financial reasons (around 2 in 5 respondents) versus those that primarily installed them for environmental reasons (around 1 in 3 respondents). The primary motivation was generally consistent among respondents, with the exception of age. Younger respondents were motivated by a variety of

factors, whereas for older respondents (those over 65), those indicating that their primary motivation was financial savings increased to over 60%.



Figure 16 "What factor contributed MOST to that decision? (Select ONE option)" (n = 68)

When considering people that are considering installed solar panels we see a similar pattern. Financial savings continues to be the most common driver for installing solar panels, followed closely by environmental concerns. This did not vary when considering sub-groups of the respondents.





The small number of people that already had solar panels installed when they moved into their home were asked whether the presence of solar panels influenced their decision to purchase or rent your home, and most (63%) indicated that it did not influence them at all.

## What stops people from installing solar panels?

Those that indicated that they were not interested were asked why not. The number one reason given was cost concerns. For example:

"Too expensive."

"Expense for a one-person household."

"Cost, quality, recyclability, carbon footprint of battery manufacture, amount of batteries required to run house."

This was followed by respondents who indicated that they are satisfied with their current arrangement:

"Very conservative with power and our age. Have a generator."

"Have a generous long-term feed-in tariff contract through to December 2028. I'll think about a battery then."

The remaining responses were varied. For example, safety concerns ("*Because they catch fire.*") or technical complexity ("*Too technical for me.*").

Respondents who currently do not have solar panels were asked about their interest in installing them. **Two-thirds expressed an interest in future installation of solar panels.** Unlike the responses regarding existing solar panels, interest in future installations was influenced by beliefs about climate change. Among those who believe climate change is negatively impacting the island, 86% showed interest in installing solar panels, whereas only 22% of climate change sceptics expressed interest. Notably, 100% of part-time island residents were interested, compared to 60% of full-time residents.

## How do residents use energy in the home?

Respondents were asked what they use for hot water and cooking in their home. Nearly threequarters of respondents use electricity for their hot water, and while nearly half use electricity for cooking on their hotplates and nearly everyone uses electricity to cook in their oven. It was much more common for people to use gas for cooking on hotplates.

Hot water	%	Cooking on	%	Cooking in	%
		hotplates		oven	

Electricity	73%	Eletricity	45%	Electricity	92%
Gas	21%	Gas	41%	Gas	8%
Solar	17%	Induction	13%		

Respondents were also asked about a range of hot water mechanisms. Nearly half of the respondents indicated that they have off peak hot water. Nearly a third of respondents selected "other". These responses have been summarised below the table.

Mechanism	%
Off peak hot water	45%
Roof top solar hot water	12%
Heat pump hot water	14%
Other	35%

From the "other" responses, many respondents indicated that the use gas for their hot water (i.e., "Instant hot water gas" and "Gas attached to tank water"). Another common response in the "other" category was related to different solar mechanisms, for example "Solar panel power goes into grid", "Electric HWS on timer with Solar panels" or "Solar catch relay".

While not as common, other responses included manual approaches (e.g., "switch on/off manually") or "Immersion heater" or "Heat as you go unit beneath the sink ".

Respondents were asked about what cooling methods they had available to them and which they preferred. As can be seen below fans and air conditioning are the most common cooling methods, but fans are the most preferred. While louvres and blinds have a notable availability, they are much less preferred. Essentially, there is a significant difference between the availability and preference of some cooling methods, indicating that while certain methods are common, they are not necessarily the preferred choice for cooling. Air conditioning is the most notable example of this. The presence nor preference of different cooling methods did not vary when considering sub-groups of the respondents.



"What cooling options and available to you" and "What is your PREFERRED method?" (n = 126)

Figure 18

## What proportion of residents have electric vehicles?

Respondents were asked to indicate if they owned any sort of electric vehicle. Around onequarter of respondents own some sort of electric vehicle. The most common of which was an electric bike, followed by a hybrid car. Ownership of an electric vehicle varied across the sample. Single adult households, younger respondents and/or households with children are much less likely to have an electric vehicle.

Vehicle Type	% of owners	% of sample
Car – wholly electric	16%	4%
Car – hybrid	25%	6%
Electric bike	66%	15%
Electric scooter	13%	3%

Most respondents also know (62%) that modern electric vehicles can be used as a back up power supply in the event of a power outage. As could be expected, people that own an electric vehicle were much more likely to have that knowledge (80%).

## What suggestions do residents have for the management of energy/electricity consumption?

Respondents were given an opportunity to put forward suggestions for how energy/electricity consumption could be better managed on the Island. The below themes highlight a diverse range of strategies suggested, focusing on both technological solutions and community-driven initiatives.

## Microgrids

Many respondents suggested the implementation of microgrids, which are localized energy grids that can operate independently or in conjunction with the area's main *electrical grid*. *This was the most put forward option*. *For example:* 

"Microgrids!"

"Community microgrids."

"A micro grid. Convert buses to EV. EV charging facilities."

### Solar Energy

The second most common responses advocated for increased use of solar energy, including solar panels on buildings, community solar projects, and solar-powered public amenities.

"More solar, community micro grids, solar street lights, underground power lines."

"All buildings to have solar energy."

"Solar panels on businesses and rental properties and school."

### **Community Batteries**

While not as prevalent as microgrids and solar energy, a notable proportion of respondents put forward community batteries to store energy generated from renewable sources for later use.

"Community batteries."

"Need decentralised community batteries/microgrids."

"Community battery from solar."

### **Design and Infrastructure**

Some suggestions included designing houses and public spaces to optimise natural cooling and reduce energy consumption.

"Increase tree shade around houses to reduce air con use."

"Design houses to suit the conditions, live outside more in the fresh air with nature."

"Design cooler houses, verandas facing the breezes."

#### **Education and Incentives**

A few respondents highlighted the importance of educating the community on energy conservation and providing tailored advice and incentives for energy-efficient practices.

"More education."

"Tailored advice for people interested. What rebates/loans etc are available."

#### Alternative Energy Sources

A few respondents suggested exploring alternative energy sources such as wind and nuclear power.

"Wind generator."

"Nuclear."

"A nuclear power plant."

#### **Behavioural Changes**

While not a very common response, some respondents suggested simple behavioural changes to reduce energy consumption, such as turning off appliances when not in use.

"Switch off appliances not being used."

"Remove the many unwanted and unnecessary streetlights!"

## Recommendations

Based on the survey findings, several key recommendations can be made to inform campaigns or initiatives aimed at improving the adoption of positive waste and food behaviours on Magnetic Island.

For food and waste related behaviours:

- Initiatives could focus on the adoption of reusable items, especially 'easy' behaviours such as bringing your own shopping bags and using keep-cups. Target audience could include apartment dwellers and households with 3 or more adults, where usage is lower.
- Campaigns should focus on the environmental impact of waste, and should emphasise the link between climate change beliefs and positive waste behaviours.
- Campaigns to younger residents and those in single-adult households could help address lower participation rates in recycling and other waste related practices, using tailored messaging or incentive programs that resonate with their specific motivations and circumstances.
- Given the strong community support for communal waste management initiatives, efforts should be directed towards establishing and promoting tool libraries, community gardens, and community created waste processing facilities and initiatives, which align with the preferences of residents.

For energy related behaviours:

- Campaigns should focus on promoting the financial benefits of installing solar panels, as this was the primary motivator for most residents, including those that are yet to have solar panels installed.
- Highlighting potential cost savings for single-adult households, who are less likely to have solar panels, could drive further adoption. Mechanisms to overcome the concerns related to the costs of installing solar panels would need to be identified.
- Emphasising the potential for solar energy and other renewable solutions to enhance energy independence and resilience, particularly in the face of climate change, will resonate with those who already express concern about the negative impacts of climate change on the island.
- Efforts should also target those without electric vehicles (largely younger residents), again focusing on the financial benefits of transitioning to electric transportation, as well as how these vehicles can be integrated into broader energy-saving strategies, such as serving as backup power sources.
- The use of community-based energy solutions, such as microgrids and community batteries, which received strong support, could be a key strategy moving forward.