Totally Renewable Yackandandah

# Community Attitudes: Yackandandah Microgrid Feasibility Study

Prepared for Totally Renewable Yackandandah Inc. as part of the *Yackandandah Micro-Grid: Feasibility Study*, funded by the Regional and Remote Communities Reliability Fund Microgrids from the Commonwealth Department of Industry, Science, Energy and Resources.

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# Contents

# 1. Introduction

In 2021 TRY funded the *Yackandandah Micro-Grid Feasibility Study* to consider options for establishing a Yackandandah Micro-Grid to support the community's long-term vision to be '100% renewable'. The feasibility study aimed to understand current and future electricity use, renewable mix and options to get to 100% for Yackandandah. While Yackandandah has already reached 58% renewables (and generates 37% of its usage from rooftop solar), it was considered unlikely to reach the 100% target in the short term, without the addition of a large renewable energy asset project.

The feasibility study was predominantly focused on considering front-of-meter or grid-facing solutions at six locations and identified potential sites within the Yackandandah footprint and developed options for renewable energy installations. After detailed technical studies, the feasibility study found that none of the six sites are currently commercially viable without significant grant or philanthropic inputs and recommended that TRY continue its focus on the Behind the Meter (BTM) approach it is renowned for.

This report, *Community attitudes: Yackandandah Microgrid Feasibility Study* is a review that follows on from one of the feasibility study's key recommendations, that:

'Yackandandah pursue a strategic direction involving a package of bespoke, multi-dimensional behind-the-meter initiatives.'

More specifically, this refers to:

- Energy consumption, demand efficiency and reduction programs
- Addition of larger solar and battery projects on community facilities
- A 'top-up' community subsidy scheme to encourage Behind the Meter generation and storage.

The engagement process and the report, *Community attitudes: Yackandandah Microgrid Feasibility Study* has captured the broader views of the Yackandandah community to help shape TRY's next important steps.

The methodologies used in this review included:

- Interviews with 12 key community organisations based in Yackandandah, through a combination of one-on-one conversations and attendance at committee meetings,
- Online survey distributed between 3 March and 28 March 2022, with 203 responses received,
- A community focus group held 23 March 2022 with ten participants ranging in age from 14 to 80+ years, and
- A community celebration held 27 April 2022 to share the feasibility study results, report back on the engagement conducted from late 2021 to early 2022 and create an opportunity to celebrate TRY's achievements.

# 2. Executive Summary

In 2021 TRY received $346,000 from the Federal Department of Infrastructure to complete a microgrid feasibility study to analyse technical and financial barriers and opportunities to achieve a 100% renewable energy supply.

The study was predominantly focused on considering front-of-meter or grid-facing solutions at six locations and identified potential sites within the Yackandandah footprint and developed options for renewable energy installations. The generation and energy storage technology options considered focused on what was practical and affordable for Yackandandah.

The financial analysis concluded that none of the six sites are currently commercially viable without significant grant or philanthropy inputs, and due to land constraints have limited capacity and economies of scale. The feasibility technical report recommended that TRY continue its focus on developing a bespoke, multi-dimensional, Behind the Meter (BTM) approach based on solar and battery installations on residential, business and community buildings, along with community batteries, backup diesel/hydrogen generators and an energy efficiency program.

To test these recommendations, in late 2021 the TRY committee conducted a preliminary community engagement activity, '*TRY' Community Conversations Stall'* to understand community sentiment towards TRY's role in the community and renewable energy in general, while Covid restrictions were limiting community engagement activities. This involved a weekly stall for five consecutive weeks outside the supermarket where locals were asked questions and shared reflections. The report on this engagement is in Appendix 8.3.

The *Community Attitudes: Yackandandah Microgrid Feasibility Study* is a review that follows on from the feasibility study's recommendations and the early consultation, designed to share the learnings from the feasibility study with the wider community, understand the community's interest and support for larger asset projects and help TRY to shape its future direction through direct feedback.

From this engagement it is evident that:

- While investment in renewables is concerned with personal choice and priorities, there are many members of the local community who would like to participate in the renewables transition but are unable to; this includes renters, retirees, and those on low incomes. Community sentiment supports prioritising equity, offering opportunities to all members of the community to be part of the energy transition.

- Support for TRY's inclusive approach focused on the importance of renewable energy is coupled with concern that greater uptake may simply result in people paying less attention to reducing energy use, because they perceive energy to be free. Feedback indicates that the local community support energy increasing efforts with efficiency measures and messages about reducing impact as a critical focus area for TRY.

- While the uptake of renewable energy is high in Yackandandah, there are gaps in the support that TRY has been able to offer individuals and organisations, with a widely recognised need for resourcing TRY to better support local organisations and

community members on their renewables journey.  There is a need for trusted advice on energy audits, installations, battery technology, building design, transitioning from gas, renewables for leased buildings and negotiating heritage regulations.

- There is significant interest across organisations in Yackandandah in being part of a community wide approach to energy resilience and reliability. Climate change is bringing increasing risks of flood, fire and other impacts and there is an acknowledgment that the community could be taking steps to be emergency ready. Local emergency services are leading the call for an effective community-wide response and TRY is seen to have a critical part to play in facilitating these conversations and being part of the solution.

# 3. Interviews with Community Organisations

The first phase of the engagement was to conduct interviews with members of community organisations in Yackandandah.

Individuals representing the following groups were interviewed either individually, in a group or through attendance at a scheduled committee meeting.

Conversations were held with more than fifty individuals in total, representing the following community groups:

- Yackandandah CFA,
- Yackandandah SES,
- Yackandandah Chamber of Commerce,
- Yackandandah Community Development Company (YCDCo),
- Yackandandah Community Centre (YCC),
- Yackandandah Health,
- Arts Yackandandah,
- Yackandandah Men's Shed,
- Yackandandah Women's Shed,
- Yackandandah Museum & Historical Society,
- Yackandandah Football Netball Club (YFNC),

## 3.1 Summary of Interview Responses

Questions below were provided by TRY as a guide for the interviews, with participants asked to respond both as representatives of the community organisation and as an individual community member.

1. **Have you personally and organisationally been active with renewable energy? In what form?**

Interestingly, more than 95% of individuals interviewed from Yackandandah's community groups reported solar PV on their home, or a smaller proportion with solar hot water. A small number had plans to install solar PV in the future, with fewer than 2% overall reporting no foreseeable plans with renewables. This indicates that around 98% of interviewees have some experience with renewables, either within their organisation or more so in their personal life. All were familiar with TRY and the majority articulated benefits from TRY's support for their own renewables journey, both as an individual and member of a community group.

Engagement with renewables, and with TRY, has varied widely within organisations. One of the most productive collaborations has been with the CFA, with 6kW solar PV and two 13kWh batteries installed with considerable support from TRY. Previously, Yackandandah Community Centre, YCDCo and Yack Health have collaborated with TRY for PV installations.

Yackandandah Community Centre was an early critical partner in TRY's launch, with the building being the first focus of energy efficiency measures when TRY was starting out, and a willing partner in outreach focused on efficiency measures to the community.

Many other community organisations have benefited from TRY's efforts, with many interested in exploring future opportunities for collaboration.

2. **Has your experience of renewable energy been positive, indifferent, or negative?**

Local views of renewable energy were overwhelmingly positive, with very few negative views expressed.

Where negative views were raised, it was largely in relation to frustration with low feed in tariffs, perceived limitations of batteries, restrictions posed by Council heritage regulations and commonly, the challenge of accessing trustworthy advice and support for renewables actions.

Where individuals were not involved directly in their organisation's installation of PV, there continues to be misunderstandings about the technology and the potential for further projects. For example, the Yackandandah Museum has a solar PV array that generates power that is excess to their needs, but there is little understanding of whether they can capture this excess power by the addition of a battery, and whether this would add value or lead to economic savings for their business.

**3. What gaps do you think there are in the efforts of Yackandandah with renewable energy?**

A wide range of views were discussed in relation to this question and responses included the following:

- **Greater support and information** to support individuals or organisations to adopt renewable technologies. There was a recognition that there is an opportunity for TRY to offer advice and support locally to support people on their renewable journey. This was also recognised as a gap for organisations to plan for future development. For example, in the scenario of YCDCO expanding operations to a new site for their agricultural business and the Yackandandah Women's Shed exploring a new site in the next few years; both will benefit from advice and support for solar and other tailored technologies.

- **Indigo Shire Council heritage regulations** are commonly highlighted by local community organisations and businesses as a major obstacle to renewables, particularly with reference to solar PV but also with energy efficiency upgrades to community buildings. While many individuals are frustrated but resigned to this situation, there is an opportunity to take the lead in addressing this situation.

[TRY Committee note: TRY reports a strong working relationship with Council heritage staff and whilst certain buildings have been problematic, overall there have been few practical limitations. The problem is perhaps less heritage and more about the limited flexibility of Council staff general – likely a symptom of resource constraints.]

- **Subsidised bulk buy** offerings for solar PV, battery and heat pump installations that continue to be rolled out or offered periodically.

- **A broader focus on community energy resilience**. The adoption of renewable energy technologies will ensure the CFA and SES will have energy security for their operations during an emergency but there is a question about how other critical organisations and services continue to function. For example, with a community wide approach to energy resilience the Yackandandah Community Centre could offer a space to gather and share information, the supermarket could continue to operate and food premises like the pubs and cafes could ensure food is available for community members and emergency workers during an emergency. Members of the CFA are starting to consider energy resilience during emergencies and there is an important role for TRY to play in this conversation.

- I**ncentivization for solar installations on leased community buildings**. Many local business owners who are operating in leased buildings would like to see their building install solar but the decision rests with the landlord. Several premises have lease arrangements, including Yackandandah Museum, Sluga Gallery, Scoop 21, Vivienne Cate and Yackandandah Newsagent.

- **Greater subsidies or support strategies** for low- and fixed-income families (including pensioners) to install solar and adopt new renewable technologies. There is broad acknowledgment that some parts of the community are being left behind in the energy transition, often due to socioeconomic pressures and other factors beyond their control.

[TRY Committee note: Victorian support for residential installations for low-income households is the best in Australia. While priorities may differ, it may be worth considering what an acceptable cost is for low-income homes e.g. a full interest free loan as per the first Mondo offer.]

- **Support for solar installations on rental properties**. There is a recognition that many renters are missing out on the benefits of solar PV in reducing energy costs and that there is little incentive for those that own rental properties to install solar on a property they do not reside in.

4. **Does your committee regard the activities as a positive, indifferent, or negative impact on the community of Yackandandah?**

Views expressed by community groups towards TRY were overwhelmingly positive, with many people interviewed expressing great pride in the leaderships shown by TRY in renewables. Many people are aware of the coverage of solar PV on rooftops in Yackandandah and aware of the reputation that TRY has nationally and share a sense of pride in their achievements.

However, for most committee members, renewable energy is a side focus to the role of their organisation and little time is spent considering any further measures. A key message from many organisations was a common refrain that TRY 'tell us what we need to do, and we will do it.'

5. **Is your committee contemplating any energy related projects in the coming two years? Why not? What are the impediments to doing so? What is the main thing stopping someone from investigating or investing more in renewable energy projects?**

While several local organisations have achieved projects with TRY's support in the past, many are still looking forward to the next phase of projects. Every organisation had at least one renewable energy goal, even if it was an idea that had not yet been fully articulated. Several organisations had clear goals, including:

-Yack Health is proposing to undertake an energy audit of their organisation and consider how they may transition from a reliance on gas to electricity.

- Yack Community Centre (YCC) expressed an interest in understanding the value of a battery installation to their overall set up. They are also very interested in exploring the value of colocation of TRY in their building to support a further focus on renewables in the community. According to the centre manager, many new residents approach YCC seeking information on renewables and residential PV. The current TRY noticeboard outside YCC provides little guidance or contact information.

- Yack Museum expressed an interest in investigating a battery installation to help manage the excess energy they currently generate and whether this could add value to their operations.

- Arts Yackandandah expressed an interest in solar installation on the Yack Courthouse and transitioning from gas heating to electricity.

- Chamber of Commerce would like to be engage with TRY in a future discussion on how to support solar installations on main street buildings, including leased buildings

The greatest impediments to renewable energy planning were identified to be:
- Time/energy constraints (‘non-core business’)
- Indigo Shire Council heritage regulations
- Budget constraints
- Lack of knowledge

Overwhelmingly, in the community organisations that had not engaged TRY, members expressed the view that they would take advice from TRY regarding where their focus should be.

**6. What do you see as the future of renewable energy in Yackandandah? Nationally?**

Many people interviewed recognise that there are more opportunities for renewables in Yackandandah, even if they don’t quite understand what this looks like. Most organisations are focused on their own organisational goals and continue to see renewables as something important, but often quite separate to the daily work of being a committee member.

Although there was the occasional committee member who was dubious about the value of renewables, the majority of those consulted felt a deep sense of pride in the work that TRY has achieved, and the value this has contributed to the national discussion.

Commonly, discussions about future planning in renewables indicate that many people have limited knowledge but are open to guidance.

## 3.2 Summary of Key Themes from Interviews

Overall, the key themes captured from conversations with community organisations included:

- Over 90% of the committee/organisation members interviewed reported residential renewables installations, including solar PV, solar hot water, solar hot water heat pump or battery, indicating a familiarity and understanding of the value of renewables technologies.

- Every community organisation identified renewable energy goals, even if they were aspirational. Goals were specific to each organisation and were often a reflection of the skills and commitment of one or two individual members. Most committee members did not feel equipped to make informed decisions about achieving their renewable energy goals without external advice.

- Many community members are deeply engaged in the business of the community organisation they volunteer with. A sentiment commonly reflected during this engagement when talking about the role of TRY was, 'tell us what else we *could* implement and then help us get there'. There was an interest in tailored advice to help guide their organisation towards adoption of renewables technologies. While some community organisations are at the beginning of their renewables journey, many others are well along the path, having adopted a range of different strategies; solar PV, solar hot water heat pump and/or battery. For the innovators, adopting 'known' technologies leads them to the limit of their knowledge, unaware of what the next step could be.

- Many community organisations either lease or utilise community buildings, which makes installation of renewables or energy efficiency measures more challenging due to different ownership structures and heritage regulations.

- There is an awareness that many in the local community have not been able to participate in the transition to renewables, such as low-income earners, renters and those facing other types of disadvantage. Improving opportunities for all members of the community to access renewables was identified as an important priority worth addressing.

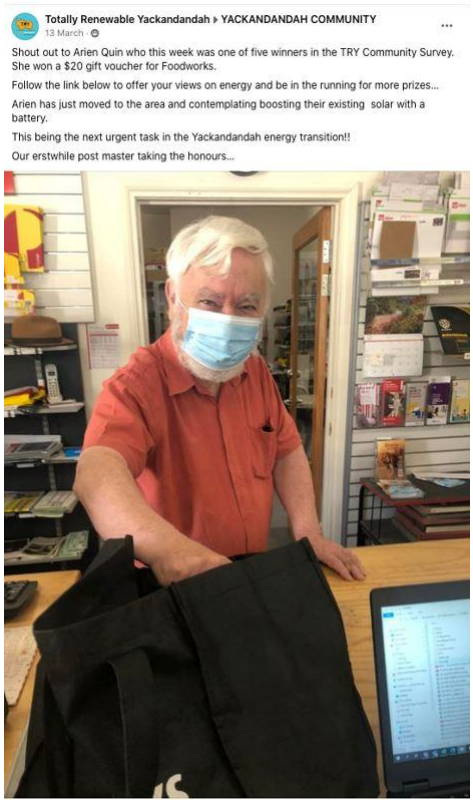
- Overall, there is an enormous sense of pride across all community organisations in TRY's achievements in leading Yackandandah's transition to renewables, and a desire to see this work continue and expand.

# 4. Online Community Survey

As part of this engagement exercise, an online survey was distributed via local online networks including the TRY Facebook site, Yackandandah Community Facebook site, TRY member email list and personal contacts of TRY members and supporters.

A summary of the survey results and an analysis of results is included in this section, with complete survey responses, including comments, in the Appendix.

203 responses were received to the online survey between during March 2022, which was considered a solid response rate. Regular spot prizes were drawn weekly by local identities and winners announced on the TRY and local community Facebook sites, including $20 local retail vouchers and TRY T-shirts.




## 4.1 TRY Community Check-In Survey Questions

**1. Please indicate where you live in relation to Yackandandah**

- In Yackandandah township
- Up to 10km from Yackandandah
- 10 to 20km from Yackandandah
- More than 20km from Yackandandah

**2. Select your age below.**

- Under 18
- 19-25
- 26-40
- 41-60
- 60+

**3. TRY was established in 2014. Please select the best description of your engagement with TRY at that time.**

- I was not a resident of Yackandandah in 2014
- I was supportive of TRY's aims but was not involved
- I volunteered or actively supported TRY
- I was unaware of TRY at this time
- I was not interested
- Other (please specify)

**4. Have you installed any of the following on your home in the past 7 years?**

- Solar photovoltaics (PV)
- Battery
- Heat Pump Hot Water
- Solar Hot Water
- None of the above
- (Other) Please specify

**5. Did you participate in one of TRY's bulk buys or seek support from TRY to achieve this installation?**

- Yes
- No

**6. If you have installed solar, battery or a heat pump in the past 7 years but did not participate in one of TRY's bulk buys or seek TRY advice, please indicate why?**

- NA - I did participate
- I wasn't aware of TRY support, subsidies or bulk buy programs
- I was offered a good deal somewhere else
- I prefer to do my own research
- I haven't installed solar, battery or a heat pump
- Other (please explain)

**7. Do you have any personal renewable energy goals over the next 3 years? Please indicate those that are relevant.**

- Install solar photovoltaics (PV) on my home
- Add more solar PV to an existing array
- Install a battery
- Install a heat pump
- Purchase an electric vehicle
- Improve energy efficiency – if so, please outline any specific measures in the comments box.
- No, I have no energy goals
- Other (please specify)

**8. Number from 1 to 5 what you see as the top 5 achievements of TRY, with 1 being the most important.**

- Facilitating an increase in installations on residential properties
- Installing solar and batteries on community buildings
- Offering bulk buy opportunities for solar hot water
- Offering bulk buy for solar PV
- Raising profile of renewables locally and nationally
- Implementing local microgrids
- Commissioning of the community battery
- Formation of Indigo Power
- Unsure

**9. What is your main motivation for supporting renewables? Please rank from 1 - most important to 6 - least important.**

- Local economy
- Reduce bills
- Address climate change
- Reduce carbon emissions
- Increase community reliability and resilience
- Emergency energy resilience

**10. What do you see as the priorities for TRY over the next 3 years?**

- Provide guidance to home owners for solar and battery installations
- Seek funding to offer subsidies to support home solar and battery installations
- Establish more microgrids that have the potential to operate independently
- Support further installations on community buildings
- Support uptake of new technologies like Electric Vehicles
- Support community members who can’t afford the cost of renewable technologies
- Provide information to help people understand their own energy use
- Other (please specify)

**11. What do you think the future energy supply to the community should look like?**

- 100% renewable
- Primarily reliant on fossil fuels
- A mix of renewable (solar, wind etc.) and non-renewable sources (coal, gas etc.)
- Other (please specify)

**12. Are there barriers that stop you making personal energy changes in your own life? Please tick those that apply.**

- No barriers experienced
- Cost of making changes
- Limited government support or incentives
- My own lack of knowledge
- Its not really a big focus in my life
- I don't own my own house
- Other (please specify)

**13. Do you have any other feedback or comments you would like to share with the TRY committee?**

## 4.2 Summary of TRY Community Check-In Survey Results

Roughly half of the survey respondents reside in the township of Yackandandah, around 47% within 20km of Yackandandah. This means that around 97% of respondents live within 20km of Yackandandah.

42% of survey respondents were over 60 years, 42% between 41 and 60 years and 14% between 26 and 40 years. The survey received no responses from those under 25 years.

25% of survey respondents indicated they were not a resident of Yackandandah when TRY was established in 2014. 50% suggested they were supportive of TRY with 13% indicating they actively supported TRY. Less than 10% were unaware or not interested in TRY.

The most common renewables installation in Yackandandah since TRY was established was overwhelmingly nominated as solar PV at 61%, with 25% of respondents reporting installation of a battery, solar hot water or heat pump. Around 27% of respondents had not installed any renewables technologies, with a significant proportion of these respondents commenting that they had existing renewables installed pre-2014 (this included solar PV, solar hot water, heat pump and off-grid systems).

Around 47% of respondents that had installed solar, battery or a heat pump in the past 7 years participated in one of TRY's bulk buys or sought advice from TRY. Of those that didn't seek TRY advice, 19% were unaware of TRY support, subsidies, or bulk buys, 8% received a good deal elsewhere and a very small 1% preferred to do their own research. 22% of respondents had not installed solar PV, battery or a heat pump in the past seven years. Some of the reasons for this included timing not being favourable (e.g., missed out on bulk buy, technology available didn't match need), some had purchased a property with existing solar and battery while others were only interested in off-grid systems.

When asked about personal renewable energy goals over the next 3 years, 43% indicated an intention to purchase an electric vehicle and 42% to install a battery. A much smaller 11% intend to install a heat pump. Improving energy efficiency was nominated by 26% of respondents, with measures identified including energy audit, installing double-glazed windows, increasing insulation in walls and roof and filling gaps, changing lighting, planting shade trees, reviewing or upgrading appliance use and changing behaviour like walking more often than driving. 23% of respondents indicated an intention to add more solar PV to an existing array, with a smaller 14% to install solar PV. 8% of respondents reported having no energy goals.

When asked about the top five achievements of TRY, the most popular achievements were rated as:

1. Facilitating an increase in installations on residential properties.
2. Installing solar and batteries on community buildings.
3. Raising profile of renewables locally and nationally.
4. Implementing local microgrids.
5. Offering bulk buy opportunities for solar hot water.

All options were close in popularity, with the commissioning of the community battery and initiating the formation of Indigo Power seen as only nominally less important.

When asked about main motivation for supporting renewables, respondents nominated addressing climate change as the most important motivation, followed closely by reducing carbon emissions, increasing community reliability and resilience, followed by reducing bills, emergency energy resilience and finally, local economy.

In response to being asked about priorities for TRY over the next 3 years, the top three were rated:

- Establish more microgrids that have the potential to operate independently.
- Support community members who can't afford the cost of renewable technologies.
- Seek funding to offer subsidies to support home solar and battery installations.

Slightly less popular were:

- Provide guidance to home owners for solar and battery installations.
- Support uptake of new technologies like Electric Vehicles.
- Provide information to help people understand their own energy use.
- Support further installations on community buildings.

Over 80% of respondents suggest the future energy supply to the community should be 100% renewable, with 16% suggesting that it should be a mix of renewable (solar, wind etc.) and non-renewable sources (coal, gas etc.)

When asked about barriers that stop people making personal energy changes in their own life, 59% nominated cost as the greatest barrier with a further 20% nominating no barriers. Around 25% identified barriers as both their own lack of knowledge and limited government support/subsidies, with around 7% noting that they do not own their own home. Comments highlighted that their living situation is difficult for some (living alone, retired), while some are waiting for technologies to develop (availability of EV's or advances in battery life). While there are significant barriers to adopting renewables, it is interesting to reflect on how much disinterest plays a part in limiting change – particularly when you consider that 20% indicated they see no barriers? It would be interesting to understand whether this is a highly motivated 20% who have implemented all the changes they intended, or what proportion simply have no interest in renewables, or don't see it as a personal priority.

Finally, the last question requesting feedback provided extensive and overwhelmingly positive commentary (of the 203 response, 127 respondents provided feedback). While there was much positive recognition of TRY's efforts, there were reminders about the need to focus on reducing energy consumption, facilitating adoption of energy efficiency measures, highlighting the need for approaches that bring renewables to everyone rather than those who can afford it, introducing TRY to new residents, promoting new technologies like EV's and Vehicle to Grid technology and resisting the temptation to see renewable energy as a silver bullet.

## 4.3 Analysis of TRY Community Check-In Survey Results

It would be reasonable to assume that if people respond to a survey about TRY and community energy, they already possess an existing level of motivation when it comes to energy, and perhaps have adopted renewables already. Interestingly, a significant 27% reported no renewables but took the time to complete the survey (although some of the respondents may have purchased houses with existing renewables installations).

The aim of this survey was to gauge local sentiment to TRY and renewables; the fact that 97% of respondents live within 20km of Yackandandah indicated this this aim was achieved. A return of 203 surveys in a town the size of Yackandandah represents a little less than 10% of the population, a solid response rate that indicates a level of interest in community energy and TRY, or at minimum a good community spirit.

Over 80% of respondents identified as 41+ years, matching the demographic profile of those TRY has traditionally worked with, and is likely to be a reflection of lifestyle factors for younger people, including lower home ownership in the younger age groups and greater reliance on renting. 14% of respondents reported between 26 and 40 years, which is likely to be an accurate reflection of home ownership for younger people in this demographic. However, while the lower response rates of engagement with younger people is not surprising, it does indicate a section of the community that is not engaged with TRY that could still benefit from a focus on energy efficiency as a way of minimising energy costs.

61% of respondents reported installing solar PV since TRY was established, which is by far the most popular technology installed. This high early uptake of solar PV could explain why the intention to add more solar PV to an existing array (23%) was much higher than an intention to install solar for the first time (14%). There were also comments that indicated a reasonable number of respondents had installed solar some years ago, before TRY was established. This is likely to indicate that some respondents may have much smaller solar PV systems and may be looking for opportunities to increase their system size and capacity.

Interestingly, responses suggest the two most popular personal renewable energy goals were purchasing an electric vehicle and installing a battery. A smaller percentage highlighted a priority of implementing energy efficiency measures. There is an opportunity here for TRY to both support community education around new technologies as well as helping people build their understanding of the role of energy efficiency in managing energy use.

While all the priorities suggested for TRY over the next three years have had good support, the three that were the most popular were adding more microgrids, supporting all community members to afford renewables and offering subsidies. The importance of supporting all community members to access renewables was highlighted across all consultation processes, with wide acknowledgement from across the community that the renewables transition has brought great benefits to those that can afford to be part of it, often leaving the most vulnerable with few opportunities. Two particularly vulnerable groups that were identified were renters and those on fixed or lower incomes, who are often left to pay the high costs of poor house design – in particular, heating and cooling.

While most respondents nominated cost as the greatest barrier to making changes, the main motivation for supporting renewables was to address climate change and reduce carbon emissions, which was nominated as a much greater priority than reducing costs. Further,

over 80% of survey respondents believed the future energy supply to the community should be 100% renewable. While TRY has deliberately avoided pushing climate change media through its online presence, this suggests that most respondents see renewables as a critical step in responding to climate change.

# 5. Community Focus Group

As part of this engagement exercise, TRY hosted a community focus group to conduct a close investigation into some of the responses and themes that came through in the interviews and online survey.

The focus groups consisted of 10 participants; 6 female and 4 male aged between 14 and 82 years old.

The themes that emerged are identified below, with the actions that had support from most participants.

The invitation to the focus group was promoted as follows:

**TRY Community Focus Group Invitation**

**Totally Renewable Yackandandah - community views sought!**

We are currently inviting our community to reflect on TRY's work over the past few years and contribute ideas to what the next few years may look like.

Michelle Croker will be assisting TRY to facilitate a Community Energy Focus Group from **6 – 7.30 pm on Wednesday 23 March** at the Star Hotel. We are looking for a small group of locals that is representative of a cross section of residents – young people, home owners, renters, full-time workers/retired/unemployed and particularly those who may not have been involved with TRY in recent years, to participate in an informal guided conversation about future energy supply and what the challenges and opportunities are for our community. Further info @https://totallyrenewableyack.org.au/event/community-energy-focus-groups/

We would love to hear from you if you have an interest in participating in this facilitated conversation.

If you are unable to commit to a focus group, we would be grateful if you can complete the survey to help TRY understand what Yack area locals (postcodes 3691 & 3749) think about energy!
It takes less than *10 minutes* and you could win one of more than 20 vouchers to spend at local businesses, such as the supermarket, Beechworth Bakery, Gumtree Pies, Scoop21, OR a TRY t-shirt!

https://www.surveymonkey.com/r/HSJS3PH

## 5.1. Key Themes - Community Focus Group

### 1. Education (Energy Efficiency and Energy Literacy)

Raising awareness and educating community members were identified as critical themes and revisited throughout the conversation.

Discussion focused on how to provide accessible information about energy and how to incentivise and encourage people to make good decisions about energy use, even when it is not a personal priority. Ubi's are seen to provide this data in some homes but there was interest in knowledge building around energy, recommending measures that improve energy efficiency at home and explore the role of feedback loops to demonstrate the effectiveness of changing behaviour. There was support for TRY to implement energy assessment programs that help people improve home energy efficiency.

There was little knowledge of the work that TRY has already implemented and the minimal interest that was expressed in the home energy assessment program trialled in 2020 (which could have been partly due to Covid19 timing). There was also an acknowledgement that while people often talk about wanting advice to improve the function of their home, the actual uptake of recommended changes is generally very low.

Discussion also focused on the need for council to focus on greater education around good design and energy efficiency in new house construction and renewed attention to more stringent council requirements.

There was agreement that TRY could promote its achievements more widely within the local community, including making transparent its work supporting other communities on their community renewables journey, $ invested in Yack, highlighting successful grant applications etc.

While investing in infrastructure and home modifications was considered important, there was a bigger question expressed about how to reach the ultimate goal of reducing carbon footprint and helping people to use less energy rather than seeing renewables as a universal fix.

Although there was one dissenting view, the overwhelming majority favoured not being critical of other people's efforts or lack thereof. Avoiding polarisation and promoting inclusivity were considered more important.

**Actions**

- Further trial of energy efficiency assessment programs for residents.
- Look at ways to work with council to provide information around energy efficient design for new home construction.
- Provide workshops and focus groups for local tradespeople to help them understand the technologies and opportunities.
- Lobby Vic government to address poor quality of planning regulations.
- Fund a position that can support new residents and work with community members on building energy literacy, energy assessments and other community projects.
- Keep sharing the story of TRY to generate enthusiasm in other communities and help them achieve similar things in their own community.

- Share the positive Yack stories to the community to show the benefits and normalise the transition, but also to show the work that TRY is doing.
- Look at examples where there have been good housing outcomes despite the planning framework – a great local example in Wodonga is Elmwood Living.
- "Keep on with the 'outrageous' goal setting, because you kind of do have to have wild hopes!" (Quote from focus group participant)
- Consider running a community challenge with the aim to support many households to reduce energy use, promoting strategies and capturing changes, incentivized with a prize for the most significant change.

**2. Equity**

There is a growing awareness in Yackandandah that some people are missing out on opportunities to install renewables (the odd 40%), and therefore missing out on lower electricity bills/long term savings that those with renewables have access to.

Discussion acknowledged that while there is personal choice and priorities, those who miss out include community members who can least afford high power bills (e.g., renters and lower income households).

The notion of bringing everyone along on the renewables journey was identified as a key priority.

**Actions**

- TRY to continue to seek grants to support low-income installations.
- Consider some left of field ideas like the 'matchmaking' concept – community members provide an interest free loan to a fellow community member who would like to install solar/battery etc. but cannot do it alone. (Similar concept to 'farm link' programs that link younger people who wish to enter farming with farmers transitioning out of farming.)
- Consider alternate models for how to offer interest free loans e.g. partner with financial institution like WAW, Hume or Bendigo Bank.
- Consider if there is any value in TRY re-establishing as a co-op, like YCDCo. (Originally, TRY helped initiate Indigo Power as a commercial entity to manage these potential new assets, while TRY made a decision to remain as an advocacy group).
- Offer the ability to purchase/rent single solar panels in a community installation (solar garden or community building).

### 3. Emergency Resilience

There is general agreement that reliability and resilience are important aims for TRY, but also an acknowledgement that the regulatory environment makes achieving some of these aims challenging.

There is general support for the idea of Yack being able to maintain power supply during an emergency, to secure emergency services, food provision etc.

**Actions**

- Rolling out further microgrids in Yackandandah area.
- Rather than focusing on a large asset project (like pumped hydro/solar outlined in the feasibility study) is it worth considering what this same investment could achieve if it was used to support smaller more localised projects, or individual community members?
- Continue the promotion of solar and battery installations, and energy efficiency measures (efficient hot water services and behaviour change).
- Continue to support and promote Project EDGE and other programs that use smart energy control to smooth out fluctuations in electricity flow in the network, thus minimising brown outs and outages.
- Bring a greater focus to assisting critical facilities like the supermarket, pubs and food premises to install batteries (and solar) and backup generators where appropriate.

### 4. Climate change

There was recognition that TRY have avoided promoting media around climate change and as an entity have engaged little in the sense of urgency around the need for climate change action (irrespective of group members personal views). This approach had broad support as it was perceived to avoid value judgments, instead focusing on the wider benefits of renewables.

While many people have personal views about the urgency of climate change, TRY were encouraged to maintain their focus on renewables.

Discussion compared this approach to current debates around vaccination, with consensus expressed that valuing everyone's position is far more powerful than excluding views that don't align neatly.

**Actions**

- Engage and support other organisations that are focused on climate change. An example of this is Charlie Pinard's work with Grade 5-6 students but keep TRY's focus on renewables.
- Continue with the current strategy of promoting/undertaking projects that bring significant benefits to the community but ultimately reduce emissions to help demystify the energy transition and make it less scary.

## 5. Resourcing

Discussion circled back many times to the voluntary nature of TRY and the increasing pressures on a small volunteer base to be everything to everyone. TRY receives multiple invitations each week to support communities around Australia on their renewables journey, highlighting the need for a funded position.

There is also a need to align with other groups with similar aims, such as Plastic Wise, the Regeneration movement and local youth engaged in climate change activities.

**Actions**

- Secure funding for an executive officer for TRY.
- Develop a ‘how to begin a renewable energy group’ document to help guide other communities on the community renewables journey.
- The one teenage participant (14 years) asked if TRY could discuss forming a youth group to offer advice and involve young people in the development of a regeneration approach.
- Suggestion that TRY visits local schools to chat about what they are doing in the community (renewables, etc.) to offer young people the opportunity to feel more involved and grow recognition for TRY.

# 6. Community Celebration

The aim of the community celebration was to present an overview and recommendations from the feasibility study and a summary of the engagement process. The TRY committee felt that reporting back was important to acknowledge that TRY's success is a reflection of its community support.

Initially scheduled for 23 March, the session was rescheduled to 27 April 2022 at the last minute due to several of the project team/ presenters testing positive to Covid.

The event was attended by approximately 55 community members, plus presenters from Mondo, consultants and the TRY committee. Mondo was represented by:

- Rob Finney (Product Manager)
- Thomas Gay (Business Development)
- Olivia Harrington (Communications)
- Paul Hoffman (Community Engagement).

After a welcome by TRY Co-Chairs Juliette Milbank and Matthew Charles-Jones, the principal authors of the Yackandandah Micro-Grid Feasibility, Mark McKenzie McHarg and Cameron McKern, presented their findings, followed by Michelle Croker speaking on the main themes of the Community Attitudes: Yackandandah Microgrid Feasibility Study.

The Q&A session highlighted interest in a diversity of the technical aspects of the project, and this included:

1. Timeframe for the 100% renewable energy goal,
2. The geographic footprint for the TRY area,
3. Questions around islandability and emergency capability,
4. Rate at which technology goes out of date,
5. How can we help people more mindful in energy use – both in terms of reducing energy consumption (efficiency) and having flexibility to change when energy is used (time shifting).

Most attendees stayed for the EDGE presentation by Rob Finney from Mondo, with the Q&A session reflecting an interest in the cost of participation, concerns about longevity and quality of batteries and components, why existing inverters needed to be retired, what technical support will be available during the project when there are problems. There was also a range of questions related to what was going to be done with the batteries during the trial phase. At the same time there was strong support for the theme of helping people on lower incomes access distributed energy systems and how people can be supported to reduce their consumption.

Overall, comments throughout the evening reflected satisfaction with TRY and the work they have achieved. One of the retired engineers expressed delight that TRY has been exploring feasibility of larger asset projects. At the end of the evening a long-term community members and supporter of TRY made an impromptu speech thanking TRY for their leadership on renewables in the Yackandandah community.


The poster promoting the TRY Celebration was mailed out to all mail boxes in Yack, shared on social media and pinned to noticeboards around Yackandandah.


TRY committee members Matthew Charles-Jones and Juliette Milbank with consultants Mark McKenzie McHarg, Michelle Croker and Cameron McKern. (TRY Committee member Kim McConchie absent).

# 7. Key Recommendations from Engagement

The clear message from all stages of this engagement process, including the supermarket conversations conducted in late 2021 by TRY, is that the activities of TRY are seen to have contributed positively to the local community and to wider national conversation and actions.

While many people do not understand the complexities of renewables, the overwhelming majority see the importance of a future energy system that is based on renewables.

Below are the broad priorities identified for TRY through the multiple avenues of this engagement process.

1. **Equity**

   This engagement has highlighted that many community members with the capacity to adopt renewable technologies have already done so or plan to do so in the future. With 58% residential PV coverage in Yackandandah, there is a question of how to engage the remaining 42%.

   While reasons to adopt renewables are varied and concerned with personal choice and priorities, the engagement revealed there are many members of our community who would like to be part of the renewables transition but are currently unable to participate; this includes renters, retirees, and those on low income.

   Community sentiment supports prioritising finding solutions to help unlock opportunities for all members of the community to be part of the energy transition.

2. **Carbon Footprint/ Energy Efficiency**

   In the more considered conversations in the community focus groups, participants discussed the concern that while investing in renewables is important, there is a bigger question of how to stay focused on reducing our carbon footprint and encouraging the use of less resources.

   There was concern expressed that in the rapid and critical transition to renewables, the message about using less has not been given the priority it deserves.

   While there is support for TRY's inclusive approach that is focused on the importance of renewables, and not the politics of climate change, a critical question for TRY is how to counter the risk that greater uptake of renewables simply means that people pay less attention to reducing their energy use because they perceive their energy to be free.

   Feedback indicates that the local community see support for energy efficiency measures as a critical focus area for TRY to consider.

## 3. Resourcing

While there is great value placed on TRY and a wide recognition of its role in putting Yackandandah on the map nationally with renewables, there is acknowledgement that the work of TRY has long relied on dedicated volunteers with limited resourcing.

There are significant gaps in the support that TRY has been able to offer the local community, and a recognised need for an executive officer position that could support local organisations and community members on their renewables journey.

Every community organisation interviewed for this engagement exercise was able to articulate a renewable energy goal, even if aspirational. Few organisations had a practical plan for achieving goals and every single organisation requested support from TRY to help them get there. There is a need for trusted advice on energy audits, new installations, battery technology, new building design, transitioning from gas, exploring renewables for leased buildings and negotiating heritage regulations.

There was also agreement that further resourcing could help TRY promote its achievements more widely within the local community. Points of interest include demonstrating value for money in investing in renewables by outlining payback times, stories of local installations, promoting a tally of investment in Yackandandah, case studies of other communities supported by TRY and promoting new technologies like EV's, V2G charging and batteries.

## 4. Emergency Resilience

There is significant interest across organisations in Yackandandah in being part of a community wide approach to energy resilience and reliability. Climate change is bringing increasing risks of flood, fire and other impacts and there is an acknowledgment that the community could be taking steps to be emergency ready.

While local emergency services like CFA and SES have been supported by TRY to install renewables, there are questions about how to secure other essential services during emergencies, including food services, communications, and water supply.

Local emergency services leaders are beginning to consider effective community-wide response and TRY is seen to have a critical part to play in facilitating these conversations and being part of the solution.

# 8. Appendix

## 8.1 Table - Renewable Energy Priorities for Community Organisations

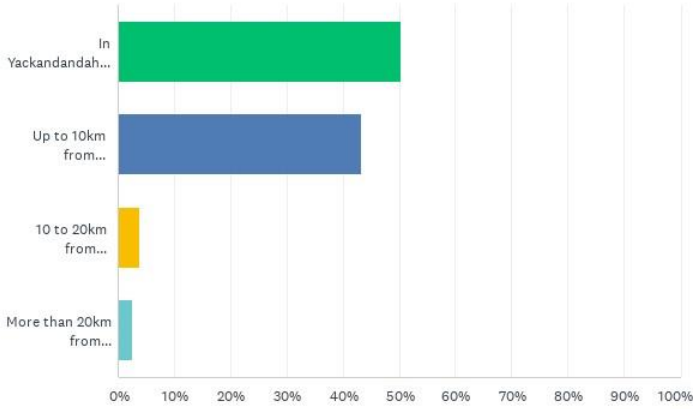
This table captures the current renewable energy technologies, future energy plans and barriers for each of the community organisations consulted.

| Organisation | Energy Audit | Future Energy Plan | What are the barriers? |
|---|---|---|---|
| CFA | 26kWh Battery x 2<br>Solar installation 6kW, 10kVA Generator | • A broader focus on community energy resilience, particularly during emergencies - securing local emergency services, water supply and food services. | Belief that there is limited roof space for further PV. |
| SES | Grant received for 2022 – generator 6kW Solar, 16kWh Battery, 10kVA Generator | • Complete the current PV/battery installation in 2022. | Renewables is a secondary focus to the functions of the SES. |
| Yack Health | 130 kW solar PV<br>No battery | • Energy Audit of Yack Health facilities.<br>• Longer term process for energy transition from gas to electricity. | Time /cost. Higher priorities. |
| Yackandandah Chamber of Commerce | N/A | • How can they support local businesses to install solar PV or improve energy efficiency. | Lack of knowledge/ dedicated resourcing. |
| Yackandandah Museum & Historical Society | 4.0 kWh solar PV, retrofitted LED lighting | • Investigation of the value of a battery to their system.<br>• Discussion of other energy related ideas, such as the value of a split system in the rear of the building and a transition from petrol to electric mower. | Council heritage regulations.<br><br>Lack of knowledge of actual value of battery. |
| Arts Yackandandah | Courthouse – NIL<br><br>Yack Town Hall –<br>11 kW solar PV<br>13 kW/h Battery | • Utilise community buildings for events, primarily Court House and Town Hall.<br>• Investigation of the viability of solar PV for the courthouse.<br>• Transition from gas to electric heating for the courthouse. | Council heritage regulations are seen as the main barrier. |
| Yackandandah Women's Shed | NA | • When their new site is secured, they would appreciate advice to | Lack of knowledge about |

| | | | |
|---|---|---|---|
| | | make an energy plan for the new location pre-construction. | technical aspects of solar. |
| Yackandandah Men's Shed | Removed solar as they are part of Yack Health envelope | • Content to be part of Yack Health's renewables plan.<br>• Would appreciate someone from TRY attending a Tuesday 10.30am morning tea to talk about technical aspects of TRY and the feasibility study results in greater detail.<br>• Potentially interested in installation of a solar hot water system if support is available. | Widespread frustration with heritage regulations in Yackandandah – identified as main obstacle to solar uptake. |
| Yackandandah Community Development Company (YCDCo) | 12 kW PV and no battery | • Installation of EV chargers is currently in the planning process.<br>• Plan to move agricultural part of the business to a new location in next few years and would be interested in support for investigating solar PV on the new building. | Dedicated resourcing. |
| Yackandandah Community Centre | 6 kW solar Energy efficiency modifications pre-2014 | • Interested in a conversation about the value of adding a battery and exploring the potential for more solar PV. | Heritage regulations and lack of knowledge about the best options. |
| Yackandandah Football Netball Club | Solar 6 kW and 13 kWh battery | • Look at lighting and refrigeration as main items of high energy use<br>• Integrate energy efficiency/sustainability as part of the new build.<br>• Would like to be a leader and net zero exemplar for footy clubs.<br>• Would like TRY expertise to assist in development of sustainability plan | Low awareness within club of energy efficiency and renewables<br><br>Reliant on the architect to incorporate features with no guidance |

## 8.2 TRY Community Energy Check-In Survey Results

### Q1: Please indicate where you live in relation to Yackandandah

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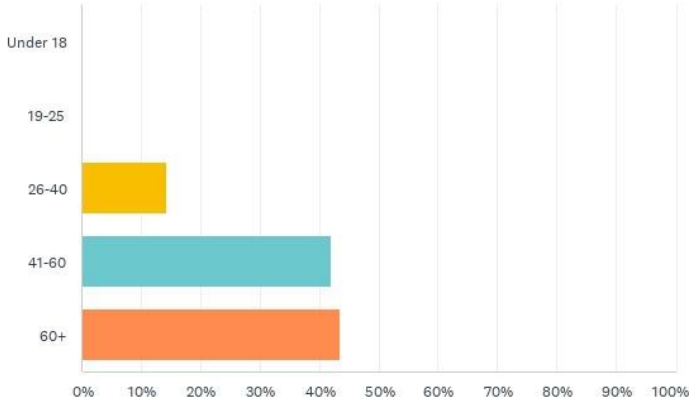
### Q2: Select your age below.

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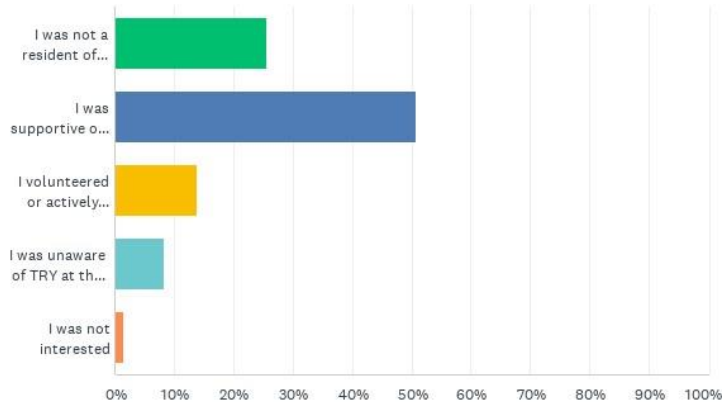
## Q3: TRY was established in 2014. Please select the best description of your engagement with TRY at that time

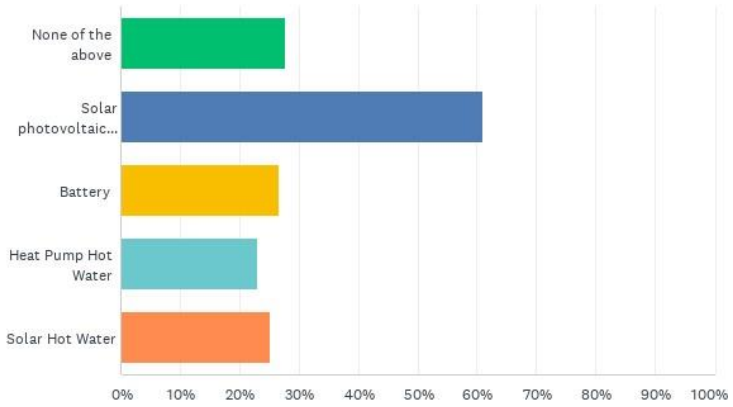





**OTHER (PLEASE SPECIFY)**

- As we were running two businesses, we didn't get involved then my partner got sick and passed away, so other things we more important over those years.
- Did know of try as family live here.
- Moved in in December 2021 from Melbourne.
- Rented in Yack at the time, so felt I was unable to engage.
- I was part of the original 'bulk buy' of panels before 2014
- I had already installed rooftop solar panels prior to 2014.
- I volunteered in 2015 while living in Beechworth .

## Q4: Have you installed any of the following on your home in the past 7 years?

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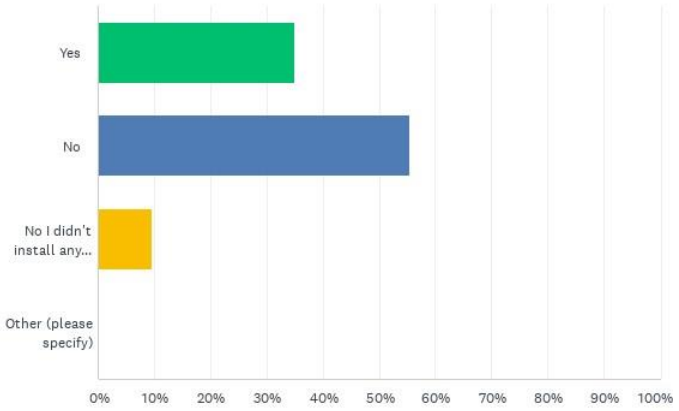
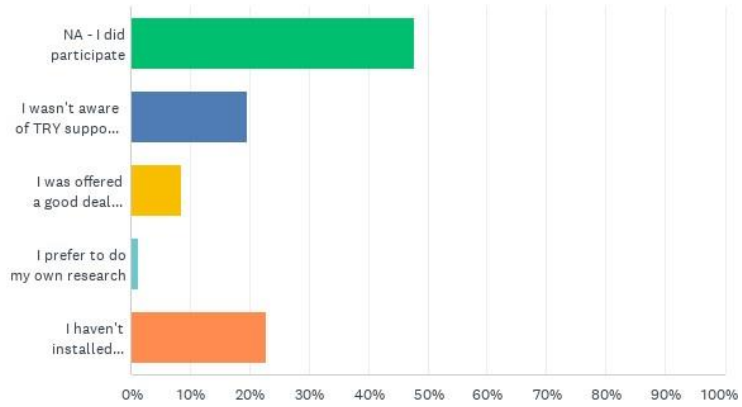
**OTHER (PLEASE SPECIFY)**

- Gas hot water
- 2.5 KW PV came with the property
- We already had solar panels and solar hot water
- Was already off-grid in
- Solar hot water and power installed by previous owners
- Already here
- Installed before that date
- Installed heat pump hot water 10 years ago
- Upgrading existing pv , adding battery, have had solar hot water since early 1980's
- Induction cook top
- 2005 Installed both solar off grid batteries, solar hot water
- Probably buy an EV this year
- Installed Solar panels and hot water February 2013 through Indigo Shire scheme
- Solar installed
- Off grid system
- Bought solar panel and hot water more than seven years ago
- Heat pump ~ 10+ years ago
- Installed PV and hot water more than 7 years ago
- In the process of building so will add solar
- Solar hot water

## Q5: Did you participate in one of TRY's bulk buys or seek support from TRY to achieve this installation?



**Q6: If you have installed solar, battery or a heat pump in the past 7 years but did not participate in one of TRY's bulk buys or seek TRY advice, please indicate why?**





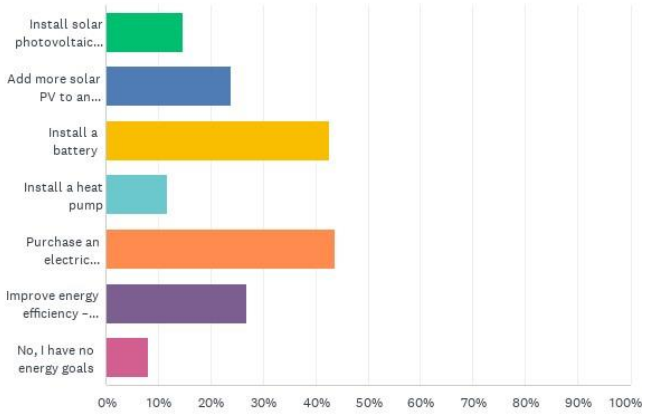

## OTHER (PLEASE SPECIFY)

- I have an old store and not sure about the roof and on the farm they said the trees were too tall so i would only get half the shade, so it seemed all too difficult
- I'd already installed solar panels before the TRY initiative began
- Timing. We consulted with try on an earlier offer but couldn't install as our dwelling wasn't built yet (only shed). There were no offers at the time
- It was before TRY's bulk buys. We actually put PVs on about 10 years ago
- Free hot water upgrade. From government, though time will tell on quality.
- interested in increasing the Capacity of current system
- timing was off
- Not relevant -already had solar installed
- Already had solar panels and hot water
- Already installed
- Old electric HWS failed and needed immediate replacement and wanted to install a solar replacement. Got two quotes. Did end up using Solar Integrity
- It was part of my research in designing and building my house
- Put solar on ourselves 10 years ago
- Installed by Bobbie McKibbin
- We missed the deadline for a solar bulk buy.
- Currently upgrading.
- Had solar before that in the local bulk but 2007.
- It was a complex whole of farm system at that stage beyond capacity of
- Installed panels 15 years ago
- Lived elsewhere
- I rang TRY for information but was told I should talk to a retailer
- I already have solar panels and hot water service more than 10 years old.

- Bulk buy program not applicable when heat pump installed.
- I rang TRY and was told they didn't instal residential solar panels and referred me to Solar Integrity.

- My purchase timing didn’t align.
- Was included as part of my new house build
- Solar hot water wasn't available at the time through.
- Put in my system.
- The system I wanted was not available through TRY installers
- Already had solar before this time frame.
- As part of Mondo wider region.
- I had my own solar business.
- I contacted TRY and they were not interested in helping.
- I was of the understand that TRY don't do off-grid systems.
- Installed mine more than 7 years ago
- Forgotten the details.. was bought through Bobbi and Brett.
- Install was completed by the rental property owner, not me the tenant.
- We're off grid.
- Timing didn't work. But I'd love to now.
- There were no bulk deals at the time of purchase. We did use Solar Integrity.
- TRY gave us great advice and were extremely helpful.
- Prior to TRY.
- Already had solar installed.
- Timing did not suit.
- I have gone off grid and I thought TRY was a hybrid system.
- Haven’t installed yet but would use yak services.
- Was the previous owners that installed? Not sure whether they participated. I am very interested in bulk buy home battery purchase.

## Q7: Do you have any personal renewable energy goals over the next 3 years? Please indicate those that are relevant.



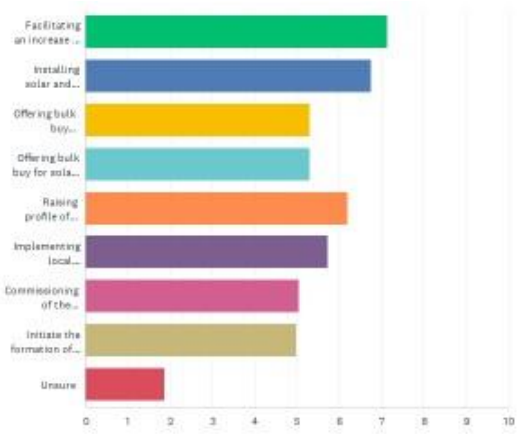



### OTHER (PLEASE SPECIFY)

- Adding double glazed windows.
- Use less energy.
- My new house has a rating of 75%, the old house and shop in the street io have no idea, roof might be too old for solar.
- Increase insulation in roof edges, fill gaps in wall and roof gaps, use household appliances during day where possible (washing machine etc), walk to supermarket when shopping.
- Change over second hot water service That's instantaneous gas to a heat pump, gas oven and gas BBQ to electric. Buy a second electric car with greater range, already have a 30kWNissan Leaf6. Insulation, plant trees to shade the house.
- I aim to reduce my consumption of energy, and better align my usage patterns with the generation patterns of my PV's.
- Better shade structures, more sophisticated heating, renew roof insulation, some energy efficient doors and windows to be put in, convert to solar/water jacket water heater.
- Adding insulation, etc.
- Improve insulation in the floor.
- Dependent on economics of battery installation.
- Reduce usage of car.
- I want to build an energy efficient home that is oriented correctly and has great insulation and glazing.
- Lower consumption, increase generation, possibly small recycling hydro system.
- consider increase extent of double glazing in our home, revisit roof insulation.
- Would like to double glaze windows and insulate house better.
- Looking to upgrade some appliances to better energy rating and use less energy nights.
- Replace windows, fill gaps.
- Add more battery capacity.
- Possibly upgrade battery /capacity.
- Review appliance use.
- House improvements- insulation etc.
- interest in monitoring use in real time and optimising battery storage.
- Double glaze windows.

- Need new hot water system, would like something more energy efficient. Currently have electric hot water system from 1977 that would be where another of our power is used.
- Install solar light tubes.
- Already have electric vehicle.
- House improvements- insulation etc.
- House improvements- insulation etc.
- House improvements- insulation etc.
- Interested in household battery and maybe electric car.
- House improvements- insulation etc.
- I will be moving out of Yackandandah.
- House improvements- insulation etc.
- Use the Cars EV battery as a house supply.
- No specific measures but super happy to take any suggestions on board.
- Do an energy audit for whole of farming system.
- Double glazing, increase insulation, continue to upgrade appliances.
- Not sure what else we can do.
- Be more self sufficient - stop funding large international energy companies who are concerned.
- with profits only, not energy saving.
- Remove gas cooking.
- I have a hybrid vehicle but would prefer a wholly EV if it suited my driving requirements.
- Electric Vehicle that can be used as household battery.
- Reduce energy use and install solar shading and screens on my home.
- I already have a hybrid EV but want to go to a full EV.
- Build a house and will have solar batter and ev charging. Current house likely to be sold off the property so not making big investments like battery.
- Build a new dwelling, possibly off-grid solar.
- Convert under floor heating to solar.
- Install double glazed windows.
- Double glazing
- Improve energy efficiency by replacing roof tiles with thermal blanket and light coloured (heat reflective) corrugated iron.
- minimise use, energy efficient home devices.
- always want to, but don’t' really know how.
- Unsure about to sell so it'll depend on the new home.
- considering EV.
- Underfloor insulation - it’s 120-year-old house but damn efficient already.
- Renovate my home, including recladding old cottage section, to try to minimise heat / cool leakage.
- Try to use larger electrical goods while the sun is at its strongest.
- I can’t extend our PV due to the current maximum being 3.5kw. I would if we could.

## Q8: Number from 1 to 5 what you see as the top 5 achievements of TRY, with 1 being the most important.

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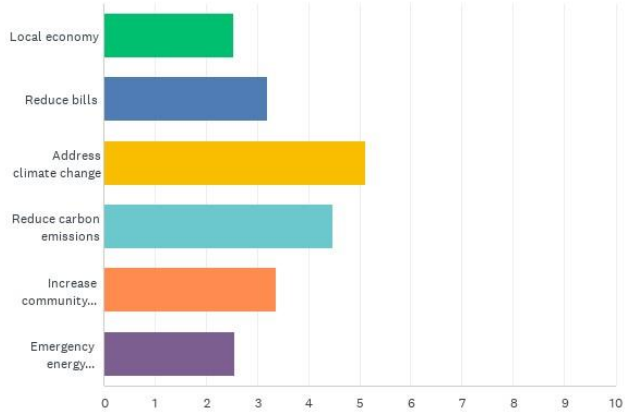
## Q9: What is your main motivation for supporting renewables? Please rank from 1 - most important to 6 - least important.

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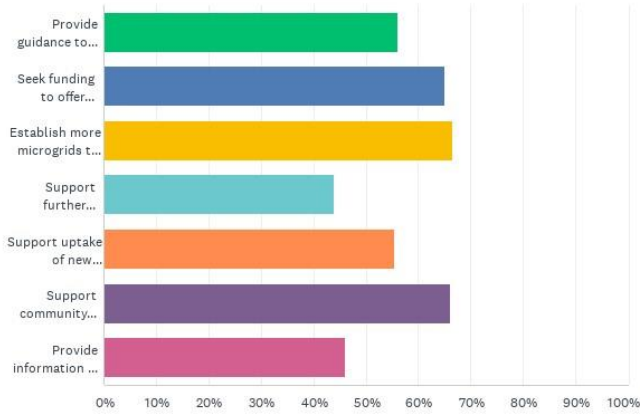
## Q10: What do you see as the priorities for TRY over the next 3 years?

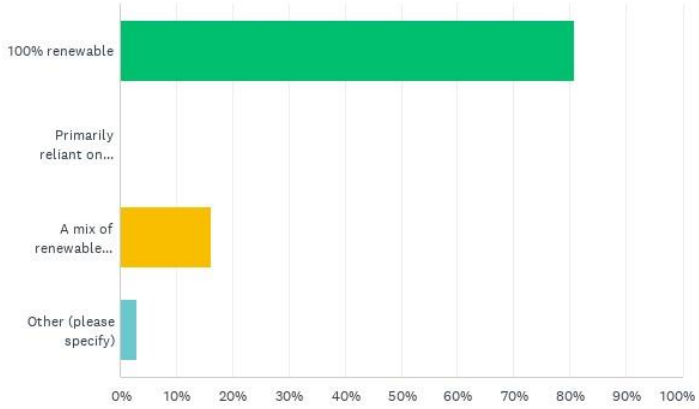





### OTHER (PLEASE SPECIFY)

- Most of the older houses are not lined with bats, there freezing in winter so making it important for people to fix up their houses, to be warmer and better power.
- I don't think that it is a responsible response to the climate emergency to swap profligate fossil fuel consumption with profligate renewable generation, or to swap widespread private car ownership for widespread private EV ownership, without there being some form of behaviour change. Our culture of private consumption has created the climate crisis and swapping one form of consumption for another does nothing to address it. I think TRY's role in the future should be to imagine, test and champion alternatives to private consumption. Community assets, localism, consumption reduction, resource sharing, public transport.
- Support the regeneration movement.
- Increase community resilience with more batteries.
- All of the above.
- All of above.
- Unsure.
- Their business model is flawed. Nothing they or Indigo Power reduces the cost of the average home owner.
- Seek funding to install grid solutions for the poor/renters that are trapped in unsustainable practices.

## Q11: What do you think the future energy supply to the community should look like?

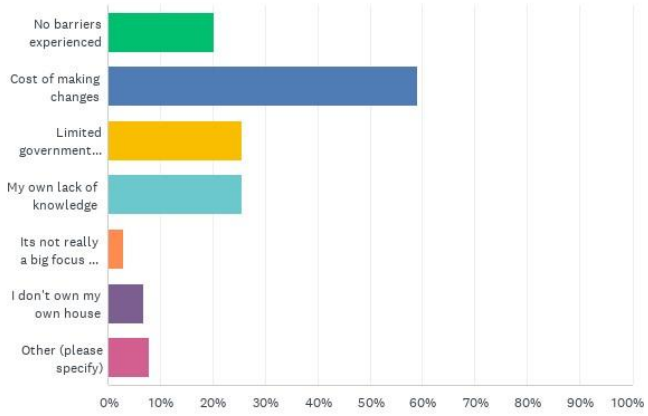





### OTHER (PLEASE SPECIFY)

- Local generation where possible. But TRY's efforts are better spent reducing demand locally than trying to change the mix of energy supply flowing into town.
- Same as now.
- As close to 100% renewable if achievable, otherwise a mix to ensure continuity of supply.
- 150% renewable.
- Although I think we should aim for 100% renewable energy, we should be careful not to put all our eggs in one basket. My partner and I were off grid for nine years in the early 1980s but had back-up systems to support our solar stuff.
- 100% renewable power with local storage and export of extra!

## Q12: Are there barriers that stop you making personal energy changes in your own life? Please tick those that apply.

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### OTHER (PLEASE SPECIFY)

- The new house is 75% its warm and wonderful, I had the bat people come around, but they said the trees block out half a day's sun, so only a small saving for the outlay. So, what do you do, and the old house in town the roof might not be good enough with solar panels on it so that is the choice.
- Embarking on a car free life has revealed the extent to which our culture is shaped by and held captive to private vehicle ownership. Having to push back against this, and other aspects of our culture is by far the strongest barrier to change.
- I have been renting my house, so cost has been an issue as the landlord doesn't directly benefit
- House is shaded in summer.
- Waiting for an electric ute.
- Cost tied up with older person not sure length of time in this house.
- Age of myself and living alone.
- Spare time.
- It still feels experimental- I'm happy to support renewables but it's difficult to coordinate systems approach to energy in my home at the moment.
- I would buy an electric Ute or van but not yet available.
- Waiting for better EV's with longer battery life. Waiting for better batteries for my house.
- Current house to be replaced.
- Limitations on system size imposed by authorities.
- As a renter there is really little opportunity to source affordable renewable power, TRY needs to work at providing 100% of power needs sustainably and affordably for ALL community members not just those that can pay.
- It's taken me lot longer to get to my renovation dreams.
- Tech availability- batteries

## Q13: Do you have any other feedback or comments you would like to share with the TRY committee?

- I think you're doing an incredible job. Keep up the good work!
- Is there any economic incentive for landlords to install solar,
- Thanks for continuing to work towards a sustainable future that addresses climate change- and gives us a future.
- Try is incredibly effective.
- Keep going guys!
- You're doing great things!
- The TRY scheme is great in principle and having alternative tech encouraged and installed locally gives a solar powered alternative to coal sourced electricity. But don't be one sided about the story involved that these technologies require mining and resources to have available. Solar powered and battery tech have used by dates and the cradle to grave of these technologies needs to be deeply considered. Solar power is not a silver bullet. The promotion of Yackandandah has also been a huge part of TRY's scheme or perhaps this was generated by the media itself, but either way, the consequences of promoting Yack town has to be deeply analysed as well. The repercussions are not all positive or supported.
- The sooner we all address climate change with positive action of reducing our need for past energy needs the better of all of us will be.
- As being over 80 years old one realises the world belongs to the young (as it did in my day). It's a rapidly changing world - let the young make the decisions.
- Don't feel solar panels have been a great success. Don't last long enough and not sure of the quality.
- You're doing good works.
- TRY does such an amazing job - well done. I'm wondering if TRY could help in any way to help Yack residents to have energy assessments done on their house to help people highlight how their houses could be more energy efficient. In my experience this goes hand in hand with transitioning to solar and if we can all get our energy bills down then they amount we have to gain from renewables will increase. I've struggled to find someone who offers this service who can come to Yack. I'm thinking if there was a large group of people who wanted this service then we could all pool together to get someone great out here to do it en masse. Love your work.
- Thanks and keep up the advocacy.
- Thank you for your dedication and innovation in working for TRY. I am proud when travelling and working in other places that people know Yackandandah because of its commitment and success in renewable energies.
- Keen to learn and take the steps and perhaps contribute to a reduction in fossil fuel usage and reduce my impact of global warming.
- Great work TRY. You're always active and always trying to get support for the next initiative.
- You do a great job.
- Great work by the team at TRY… thank you.
- Well done. Keep up the good work!
- Well done on achievements to date. You have certainly put Yackandandah front and centre in the movement towards 100% renewables, particularly with work on microgrids, community battery and Indigo Power.
- Keep up the good work!
- Keep up the good work.
- better publicity to new residence on what TRY is and how to get involved.
- You are doing an incredible job. Thank you for all your hard work. It's really important work and shows other communities what can be done.

- We have loved being involved with the Microgrid opportunity and have helped share our experience with people from other communities (Melbourne, Bendigo, Albury etc). They are jealous their communities don't have the 'get-up-and-goers' that TRY has.
- Thank you all for providing a trustworthy, go to, source which the community can connect with.
- What TRY has achieved is amazing. It has given me inspiration to keep trying myself to make our planet sustainable for centuries to come.
- Well done.
- Explaining in plain English and ability to reach out to a range of socio - economic groupings.
- Amazing achievements over several years.
- Keep up the awesome work team TRY!
- Offer maintenance of products e.g. service and clean solar panels.
- Hats off to you all, well done! 👏
- Keep up the great work. You add so much value to our community.
- Encourage residents to explore passive solar. E.g. Strategic shading, double glazing (or similar), insulation, eaves, light colour roofing, less reliance on wood and gas for heating.
- I think TRY have been a remarkable asset to this community.
- We have to move fast.
- Thank you for taking the initiative and the time to make so much happen on behalf of this community.
- proud to be part of TRY.
- Amazing achievements over several years.
- I think that Vehicle to Grid technology is a game changer together with Project EDGE technology. I think in the near future this will be a reality and TRY should be looking at (you probably are?) planning on how this can be encouraged and implemented. For example 100 Electric Vehicles connected to houses in Yackandandah with say, 10kW hr, spare capacity available to the grid would create a 1MWhr community battery. TRY could look at subsidizing part of the cost of the battery in an EV, both creating a "virtual community battery" using Project EDGE technology and encouraging the purchase of EV's. To be 100% renewable maybe an interest in a remote Wind Farm could be considered or any shortfall in energy requirements in winter are made up by export of power in summer.
- I admire your good work.
- Amazing achievements over several years.
- No, good job!
- Wonderful work thank you.
- Amazing achievements over several years.
- Thanks for all your great hard work!
- Good work, keep pushing.
- I think micro grids & financial assistance for installation PV in homes where residents financially challenged.
- Interested in the electric car movement, but need to know a lot more about this.....
- Amazing achievements over several years.
- What needs to be done to achieve a local 100% renewable energy target?
- Amazing achievements over several years.
- Make sure the inverters you install are not mechanically switching…but solid state switching only to the mains return supply.
- Keen supporter.
- Great work.
- Really appreciate the work of TRY and the community energy it demonstrates!
- Love your work!
- Doing a fantastic job already Great team of great people.

- Keep up the great work.
- Great work!
- Keep up the good work. We still have a long way to go, but we are getting there.
- Feel free to be more bold!
- I like the support for local and home-grown industries.
- More power to you!
- You guys are the best! Thank you for all your efforts.
- so proud of TRY and being part of this yackandandah community.
- 'Luvyerwerk'.
- I think the existence of TRY has raised awareness locally, has giving a sense of achievement to local residents and engendered a degree of pride in contributing to something vitally important for future generations.
- I think TRY is an outstanding community-based organisation achieving amazing things, to help our environment, our economy and our community in general. Thank you.
- Doing a fantastic job of raising awareness of renewable energy and options available for communities.
- Thank you for all you have done to forward our pursuit of renewable energy in our region. I think I'd be interested in discussing and exploring carbon neutral measurement in my home and life.
- Thanks for your work.
- Keep up the great work Guys, your legends.
- Keep going, you are all doing a great job and I am proud to be part of the Yack Community and of TRY.
- The culture is obviously great with the group constantly refreshing committee members. Great leadership all on volunteer time. An amazing achievement.
- Keep up the good work!
- Great job so far. Kudos to all the hard work done by all.
- We would like a remedy for the inconsistent supply of power endured if your electricity supply is via a SWER line.
- TRY is doing a great job, implementing change, driving renewable energy uptake.
- I don't understand why you have restricted to certain postcodes. We live 1km from 3749postcode and under 6km from yack post office and own a house in central yack we plan on moving into. All our kids went to yack primary and catch the bus to school from yack, play sport for yack, we almost exclusively shop in yack even with all this and though we are so close we are technically 3747 so TRY had not been interested in us as we are not considered locals due to postcode
- TRY is doing a fantastic job of raising awareness for climate change action and specifically renewables. The organisation has been instrumental in bringing external funding into local community projects that we otherwise would not have received - you should all give yourselves big pay on the back for the positive change in Yackandandah and surrounds. Well done and keep up the great work!
- Put more effort into reducing costs for residents. At this point there is no clear cost savings for residents.
- Keep up the excellent work. Thanks, from the local community and wider Aus. communities who now see what is possible.
- Great direction and results today.
- No, but just wish to thank you for all the amazing work you do.
- TRY is a fantastic leader, educator, influencer, facilitator, and provider in our community. Please keep up the great work.
- Great admiration and pride in TRY's achievement. It's a simple concept but fiendishly complicated for lay people to really grasp beyond solar PV before the meter. I'd appreciate clearer messaging re progress.
- our doing good, but try doing excellent, this is not a business practice, this is the future of the earth we are talking about, stock markets, money and pride don't matter if we don't

have a useful alternative to the climate crisis, and the solutions are obvious 100% community coop owned infrastructure providing cheap renewable electricity we don't need 'green' electricity for the rich we need everyone in the indigo shire to have access to renewable power irrespective of their ability to pay.

- Keep up the good work.
- So proud that TRY is a happening thing in our town - makes me very proud of our town.
- 100% Renewable electrical energy is a fallacy. To think we can be renewable by converting all our existing stuff to electric (including cars) and buying lots of new solar and batteries to run it all is insane. We are just a wealthy western nation throwing perfectly good things out, only to consume new green tech. We are outsourcing the pollution to the developing world but aren't we so clever and green. If we really want to make a change for the better, we need to learn to live with less, live slower, live simpler. Stop buying stuff.
- Think we need to assist those on low incomes.
- No. doing a great job. And have been so out of the loop, am unsure what is now happening.
- If someone can make it easy and I don't have to give it any headspace that would be awesome.
- Ongoing information seminars on what Solar energy is and how best to utilize it.
- Keep up the good work! More community engagement.
- It's a fabulous initiative and we're so proud of our little town's efforts to help the environment.
- Enquires, information and access to services offered could easier to find and access.
- You are doing a great job.
- You are doing a great job! It's amazing that energy pricing has decreased recently.
- Great job guys - keep going!

# Report:
# TRY ‘Community Conversations’ Stall

1 MARCH 2022

CLARE BISHOP

**Introduction**

TRY received $346,000 from the Federal Department of Infrastructure to complete a microgrid feasibility study to analyse technical and financial barriers and opportunities to achieve a 100% renewable energy supply. The study incorporated both a technical review of technologies and physical locations, as well as a business analysis of these options.

Yackandandah-based Mach 2 Consulting has been contracted by TRY to conduct the study, and recruited Tamar Hydro to complete a study of two potential Pumped Hydro Electricity Storage (PHES) sites, whilst Mondo was contracted to complete battery storage assessments and an ancillary market analysis.

As part of the study, several community engagement processes were undertaken: a town hall session in December 2020, in the first phase of the study, introducing locals to the project; and a series of events after the technical feasibility study was complete, in late 2021 and early 2022. This report summarises the first component of that later community engagement phase, a stall outside the local supermarket on a Saturday morning for five weeks in a row, starting in October 2021, at the end of the technical feasibility phase.

**Outline**

A stall was held outside the entrance to the only supermarket in Yackandandah, on five consecutive Saturday mornings for 2.5 hours each time in September/October 2021. TRY banners and promotional material were displayed and 2-3 volunteers greeted passersby and engaged them in conversation and answered questions.

The intention of the stall was to engage with the community to sample their understanding, feelings towards and contribution to TRY’s role in the community and renewable energy in general. The resulting conversations were overwhelmingly positive.

The stall differed from the town hall meeting in December 2020 in that it was sampling random local views about TRY and renewable energy that weren't covered in the town hall meeting because that attracted active Yack community members who were very familiar with TRY.

Due to ongoing COVID-19 restrictions, volunteers and passersby wore masks and remained physically distanced. It was also noted that the number of passersby was perhaps not as

many as might usually be expected on a Saturday morning. Despite this, meaningful conversations were had.

The methods for promoting the stall, as well as photos that were taken, can be found in the Appendix.

**Activities**

18th September, 2021: 8.45am-11.30am (including set up and pack down): 6 conversations

25th September, 2021: 8.45am-11.30am (including set up and pack down): 7 conversations

2nd October, 2021: 8.45am-11.30am (including set up and pack down): 9 conversations

9th October, 2021: 8:45 am-11:30am (including set up and pack down): 6 conversations

16th October, 2021: 8.45am-11.30am (including set up and pack down): 5 conversations

Total conversations: 33

**Observations**

The total number of conversations had was 33.

The majority of community members spoken to approached the volunteers to thank TRY for their involvement in renewable energy and also explained the personal impact it had on their life.

Many people came to ask who TRY were, as they might have heard of TRY but didn't really understand our role in renewable energy. It was found that if individuals didn't have experience in non-profit organisations they struggled to understand the role of TRY, as it is not a direct funder or an installer.

Four community members wanted to register an interest in getting solar systems at Yackatoon, the local retirement village.

One couple had installed solar panels ten years ago that needed to be replaced and wanted to discuss the resulting waste going to landfill that would be caused by unrecycled panels.

Eight people wanted an option to be involved in the renewable energy revolution that did not involve installing infrastructure, and Indigo Power was given as this option.

All participants were excited to be able to participate without huge financial investment – this was especially true for two renters who were spoken with.

About four people wanted recommendations in regards to installers that TRY could vouch for.

Eight people spoken to were very interested in efficient CO2 heat pumps after TRY volunteers brought it up as an option when their existing hot water system needed replacing.

**Conclusions**

This initial engagement was a low-risk way to sample local sentiment towards TRY's projects in Yackandandah given ongoing Covid restrictions. The conversations indicate overall

positive support for TRY, although it is evident that some people do not understand TRY's role in promoting a renewable energy transition.

It was also evident that end-of-life issues, technical guidance, and the capital cost of transition are barriers to entry for those that wish to participate in the energy transition. TRY committee members regularly hear these concerns in the community.

This sample has added to TRY's previous impressions and will help to design a more detailed final community engagement process in early 2022, once Covid restrictions have eased. It is expected that process will consist of interviews with Yackandandah community members, focus group guided discussions and a survey to the Yackandandah community.

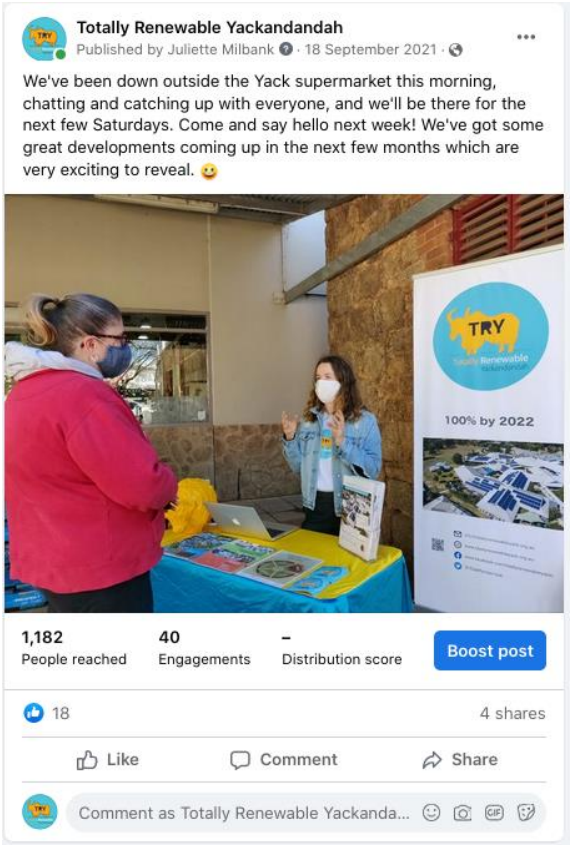
**Stall promotion**

The stalls were promoted by regular Facebook posts, event listings on the TRY website, and an article on the TRY website the day before the final stall.

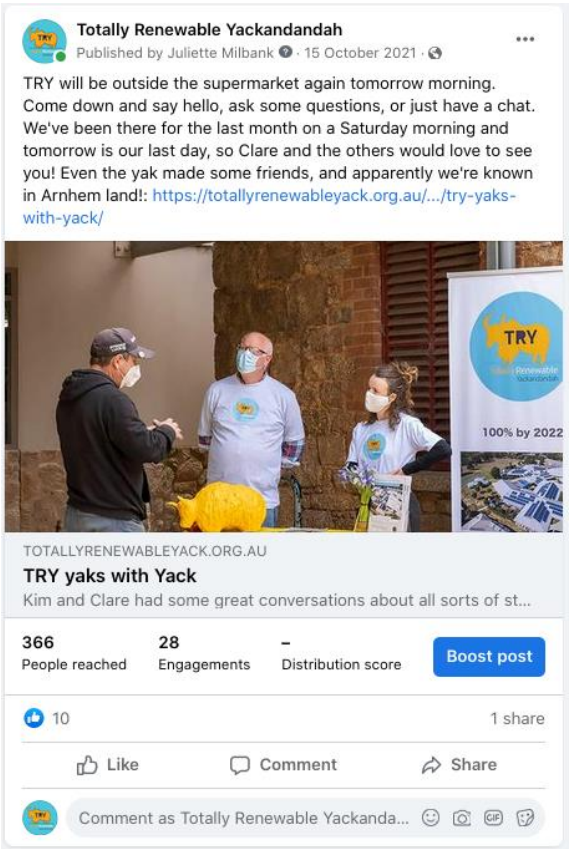
TRY 2021, 'Clare speaking to community member', Facebook post, 18 September, viewed 24 February 2022, https://www.facebook.com/totallyrenewableyack/photos/a.302210906650553/1660946054110358/.

TRY 2021, 'Events', TRY website, viewed 24th February 2022, https://totallyrenewableyack.org.au/events/list/?tribe-bar-search=town+stall&eventDisplay=past.

TRY 2021 'TRY yaks with Yack', News, TRY website, 15 October, viewed 24th February 2022, https://totallyrenewableyack.org.au/2021/10/try-yaks-with-yack/.




Example Facebook post, 18 September 2021




Facebook post linking to an article on the TRY website, 15 October 2021

## Images