

# Community Power Hubs pilot program

Final evaluation

FINAL REPORT - TEXT COPY ONLY

Written by Jarra Hicks and Taryn Lane for Sustainability Victoria

August 2019

## Acronyms

<b>SV</b>	Sustainability Victoria
<b>CPH</b>	Community Power Hub
<b>DELWP</b>	Department of Environment, Land, Water and Planning (Victorian Government)
<b>CORE</b>	Community Owned Renewable Energy

This external final valuation was carried out by Jarra Hicks (Community Power Agency) and Taryn Lane (Akin Consulting). The findings reflect observations and findings of the researchers, rather than those of Sustainability Victoria.

# Contents

- Executive summary ..... 4
  - Overview..... 4
  - Impact..... 4
  - Evaluation methodology ..... 7
  - Program outcomes ..... 8
  - Recommendations ..... 10
- 1. Introduction..... 13
- 2. Evaluation methodology ..... 14
  - Data sources ..... 15
- 3. Background..... 18
- 4. Evaluating the CPH model ..... 19
  - 4.1. CPH governance structure..... 20
  - 4.2. CPH funding allocation ..... 24
  - 4.3. Timelines and milestones..... 25
  - 4.4. Staff and volunteers ..... 27
  - 4.5. The role of Sustainability Victoria ..... 28
- 5. Evaluating CPH activities ..... 31
  - 5.1. Project support..... 31
  - 5.2. Community outreach..... 38
- 6. Evaluating CPH outcomes and impacts ..... 44
  - 6.1. Social..... 44
  - 6.2. Technical..... 54
  - 6.3. Environmental ..... 57
  - 6.4. Economic ..... 59
  - 6.5. Policy ..... 62
  - 6.6. Links with other state government programs..... 62
  - 6.7. Outer region impacts..... 64
- 7. Summary evaluation of the CPH pilot program ..... 65
  - 7.1. Value for money ..... 67
  - 7.2. Community satisfaction..... 68
- 8. Recommendations..... 69
  - 8.1. Expanding the CPH pilot program ..... 69

Appendix: Survey, focus group and interview questions ..... 76

    Survey questions ..... 76

    Focus group questions..... 77

    Interview questions ..... 79

# Executive summary

## Overview

Over the past two years, the Victorian Government has committed funding and support to pilot three Community Power Hubs (CPH). These CPHs bring local stakeholders together to develop community energy projects in and around Ballarat, Bendigo and the Latrobe Valley. This report evaluates the outcomes from the pilot CPHs and the subsequent value delivered in the local communities and to the Government at the end of the two-year pilot period.

The CPH pilot program was established to support and facilitate the delivery of community energy projects in regional Victorian communities. At the end of the two-year pilot, the CPH model is proving an effective means to catalyse community interest in renewable energy into tangible projects. Overall, the program has achieved all the desired objectives and outcomes, and delivered significant value across social, environmental and economic outcomes.

Establishing the CPHs involved partnering with existing local organisations to act as hosts, bringing with them valuable reputation, experience, networks, trust and knowledge. The CPHs played a role in increasing local knowledge and awareness of community energy, as well as facilitating the development and implementation of community energy projects. Key activities of the CPHs included:

- developing community energy projects
- supporting other local organisations and businesses to develop community energy projects
- information provision and community engagement around community energy.

The three CPHs delivered 15 completed community energy projects during the two-year pilot, involving the installation of 1.35 MW of renewable energy, as well as integrating energy efficiency measures. Together, these projects will be producing 1,705 MWh of renewable energy per year and reducing carbon emissions by 1,839 tCO<sub>2</sub>e per year. These projects are also saving their host organisations approximately \$364,000 in electricity costs each year. Over the projected 25-year lifetime of the project, this will equal \$9.1 million in savings (calculated at net present value).

## Impact

Examples of projects delivered through the CPHs include:

- a bulk buy and install of solar PV that also offered battery storage and hot water systems to households, making solar more accessible and affordable. This project installed a total of 326 kW across 42 local homes and four businesses
- 316 kW solar array on a health centre
- 31 kW solar array on social housing assisting low-income residents
- solar streetlights linking a community sporting and recreation reserve to the nearby town
- 180 kW of solar and batteries to service a small off-grid community that had previously relied on diesel generators.

Achievements of the CPH pilot program include:

- 15 community energy projects financed and commissioned
- 1.35 MW of renewable energy capacity installed
- 1,705 MWh of renewable electricity generated each year
- saving communities \$364,000 in electricity bills each year
- 114 public events and meetings held
- 200 businesses and organisations engaged
- more than 20,000 connections made in the community.

In total, the CPHs generated more than \$14.5 million of value from the program within the two-year pilot period, creating a 13-to-1 leverage on the government investment in the program. Over the 25-year life of the projects commissioned during the two-year pilot, this benefit will accrue to a value of \$25.6million (net present value). This equates to \$22 of value for \$1 of government funding.

The CPH pilot program has applied the \$900,000 investment (across the three sites) co-funded from Sustainability Victoria (SV) and the Department of Environment, Land, Water and Planning (DELWP) and the \$260,000 in-kind investment from SV to leverage:

- \$2.2 million in additional funding from community donations, local organisations and businesses, philanthropy and grants
- \$497,000 of in-kind and voluntary contributions of time and knowledge from 150 people
- 20,000 connections with people in their local communities who are now involved in and/or benefiting from community renewable energy projects
- connections and partnerships with more than 200 local organisations and businesses.

In addition, the three CPHs developed a future pipeline of projects to continue to deliver renewable energy and carbon savings in their communities. Current investigations would see future installation of a further 9.7 MW of renewable energy and an investment of \$14.7 million into regional economies. These projects will deliver 9615 tonnes of CO<sub>2</sub>e greenhouse gas emissions reductions each year, or 125,000 tonnes of CO<sub>2</sub>e over their project life.

Compared with the projects already commissioned, the future pipeline of projects has a strong focus on investment models (six projects). Of the remaining projects in the pipeline, half will be funded via community donation and the other half will be privately funded.

The pipeline also presents a greater diversity of technologies with a blend of mini-grids, energy efficiency, mid-scale solar farms, bioenergy and rooftop solar. Importantly, the project pipeline indicates a progression to deliver megawatt-scale community energy, with five projects between 200–400 kW and two projects within the 2-5 MW scale. Six projects in the pipeline are classified as innovative, an additional seven as replicable (replicating an existing model) and two as 'flagship' (the primary project delivered by each CPH).

If the pipeline projects are all delivered, it will generate an additional \$60 million of value from the program, which would increase the leverage on the Government's investment to 72-to-1.

The CPHs also affected indirect greenhouse gas emissions reductions, by encouraging individuals and organisations to think more about their energy choices and behaviour. Almost all (96 per cent) of

survey respondents identified that being involved with the CPH led them to think about other ways they can reduce their greenhouse gas emissions, including considering installing batteries and investing in community energy projects.

The CPHs received high levels of support in their local communities, with 83 per cent of survey respondents saying they felt the model has been successful. Survey respondents identified that the most valuable role of the CPHs has been to support the development of community energy projects and building local capacity to facilitate community energy projects.

One community partner described the value of working with the CPH to deliver solar PV on the roof of a community sporting venue:

*“This was a great experience, we didn’t just achieve [the project], we demonstrated enthusiasm about action on climate change ... this has created positive spirals in our community and generated enthusiasm and positive approaches for making us renewable and sustainable.”*

From the CPH evaluation survey, 92 per cent of respondents thought the CPHs increased local support and understanding for renewable energy within their general community.

The CPHs also increased community knowledge of and access to other relevant Victorian Government energy initiatives, including ResourceSmart Schools, Sustainable Finance, the Victorian Schools Building Authority, SV’s Resource Recovery Grants, Victoria’s renewable energy roadmap, Solar on Public Buildings program, Pick My Project, Environmental Upgrade finance and Regional Development Victoria. In some instances, the CPH successfully supported community organisations to apply for other government programs (see Section 6.4).

## Evaluation methodology

A Theory of Change logic is presented in Table 1, outlining the ways the inputs and activities of the CPH pilot program created outputs, leading to outcomes and impacts. The full range of outcomes and impacts from the CPH are presented in Section 6.

Table 1: Theory of change for the CPH pilot program

Inputs	Activities	Outputs	Outcomes	Impact
<ul style="list-style-type: none"> <li>- \$900,000 Victorian Government grant (50 per cent DELWP and 50 per cent SV), from which each CPH received a budget of \$255,000</li> <li>- \$260,000 in-kind support from SV</li> </ul>	Establish three CPHs: one each in the Latrobe Valley, Bendigo and Ballarat, to support communities to deliver community energy projects through: <ul style="list-style-type: none"> <li>- education and information provision</li> <li>- developing project feasibility and business cases</li> <li>- building networks and relationships</li> <li>- running community events</li> </ul>	<ul style="list-style-type: none"> <li>- 15 projects financed and commissioned</li> <li>- 1.35 MW new renewable energy capacity added</li> <li>- \$2.2 million leveraged financial contribution</li> <li>- 20,000 people involved and/or benefiting</li> <li>- 226,000 content views on Facebook / CPH website</li> </ul>	<ul style="list-style-type: none"> <li>- 1,8639 tCO2e saved each year</li> <li>- \$364,000 saved each year on energy costs</li> <li>- Increased support for renewable energy</li> <li>- Increased awareness of climate change</li> <li>- Increased skills and knowledge</li> <li>- Attracted 12,500 hours of volunteer and in-kind labour, worth \$497,000</li> <li>- Created 16 local jobs</li> <li>- Developed 15 pipeline projects with a capacity of 9.7 MW and a capital value of \$14.7 million</li> </ul>	<ul style="list-style-type: none"> <li>- Increased commitment to climate action</li> <li>- Increased community resilience</li> <li>- Increased employability of people involved</li> <li>- Increased local community capacity to deliver community energy projects</li> <li>- \$11 million flow-on economic impact in the local economy from activities to date</li> <li>- \$45 million flow-on economic impact from projects in the pipeline</li> </ul>

This evaluation draws on both qualitative and quantitative data sources to assess the outcomes and impacts from the program. The evaluation methodology included interviews (12 people) and a survey (52 respondents) with various stakeholders involved in each of the three CPHs, a focus group with six SV representatives, document analysis and Facebook and website analytics.

A social return on investment methodology was used to quantify blended value (social, economic and environmental outcomes) from the program. Analysis involved developing a series of appropriate indicators and a quantitative value tool to calculate a range of quantifiable social, environmental and economic outcomes from the CPHs. The methodology is explained in Section 2.

However, it is imperative to note that a number of CPH outcomes and impacts were qualitative in nature and could not be quantified. The value leveraged on government investment presented only captures the CPH outcomes that could be quantified and monetised as part of the program evaluation, using a light social return on investment approach.

While these figures are indeed impressive, in reality the value derived from the CPH is even greater when non-quantifiable outcomes and impacts are considered. For example, qualitative data revealed participants' increased capacity in a number of knowledge areas and an increased sense of employability – neither of which could be quantified in the scope of this evaluation.

## Program outcomes

Overall, the CPH program achieved all the desired objectives and outcomes, as summarised in Table 2.

Table 2: Summary of CPH pilot program outcomes for each evaluation measure

Evaluation measure	Pilot CPH outcome
The extent that the project objectives are being achieved	
a.1 Test and refine the CPH model for any future wider rollout in Victoria	<p>The CPH model has been successfully implemented and refined in the three communities. It has proven to be a highly effective model for rapidly deploying support for community energy, with key strengths in:</p> <ul style="list-style-type: none"> <li>- utilising the existing interests and assets of local organisations</li> <li>- facilitating community leadership and volunteerism</li> <li>- fostering collaboration</li> <li>- supporting other local organisations to develop community energy projects</li> <li>- increasing the capacity of people involved to deliver community energy projects.</li> </ul> <p>In each instance, the model has been adapted slightly for local context, indicating the relative strengths and weaknesses of the model and its adaptability for future appropriateness and the potential for program expansion.</p>
a.2 Facilitate the delivery of at least one local community energy project in each CPH area within the timeframe of the pilot CPH project	<p>Each of the three CPHs met and exceeded this objective, with 15 community energy projects financed and commissioned between them (two in Bendigo, six in the Latrobe Valley and seven in Ballarat). All are behind the meter solar PV projects (they use the majority of electricity produced from the solar PV onsite rather than exporting to the grid), and many involved energy efficiency.</p> <p>All projects are financed through community donations, grants and private investment. As yet, there have been no community investment models deployed, however several are in the project pipeline.</p>
a.3 Facilitate the development of a pipeline of local community projects	<p>Each of the three CPHs met and exceeded this objective, with 15 community energy projects in the project pipeline between them (four in Bendigo, seven in the Latrobe Valley and four in Ballarat). The projects delivered represent a range of innovative community energy business models, as well as flagship and replicable projects. These projects are at various stages of development. They represent a broader range of renewable energy technologies, and projects at a larger scale than have been delivered thus far. This reflects the longer timeframes required to deliver more complex and larger community energy projects.</p>
a.4 Increase local capacity and capability to facilitate community energy	<p>Local capacity to deliver community energy increased significantly in each of the CPH communities. The projects completed and in the pipeline are a testament to this. The cohorts that reported the largest increase in capacity to facilitate community energy include CPH staff and volunteers, roundtable advisory group members, host organisation representatives and project partners. Capacity has been built in:</p> <ul style="list-style-type: none"> <li>- knowledge of a range of community energy business models</li> <li>- technical knowledge</li> <li>- legal and financial aspects</li> <li>- communications and community engagement skills</li> <li>- project management.</li> </ul> <p>This capacity was greatly enhanced by the three CPHs networking with each other – all of them expressed the value in learning from each other and being able to pass this on to their local community.</p>

<p>a.5 Increase local access to information and support to facilitate the delivery of community energy</p>	<p>Information and support to deliver community energy increased in each community through the CPH. This was particularly evident among the partners and hosts of the projects delivered through the CPH. Each CPH made information and support available in different ways, either by building CPH staff and volunteer capacity, or employing consultants and contractors.</p> <p>It was identified that information sharing with the general public in each host community has been less of a priority. This is reflected in lower rates of increased awareness of and support for community energy among the general public, compared with those who have been directly involved with the CPH.</p>
<p>The extent that the project outcomes are being achieved</p>	
<p>b.1 Reduce greenhouse gases</p>	<p>The projects financed and commissioned through the CPH program will deliver 1,839 tonnes of CO<sub>2</sub>e greenhouse gas emissions reductions each year. Over the expected 25-year life of the projects, this will generate 24,469 tonnes of CO<sub>2</sub>e greenhouse gas emissions reductions. When the projects in the pipeline are factored in, they will save an additional 9,615 tonnes of CO<sub>2</sub>e greenhouse gas emissions reductions each year, or 125,000 tonnes of CO<sub>2</sub>e over the project life. In addition, involvement with the CPHs has increased people's knowledge of the need for emissions reduction and of ways they can take further action. The evaluation revealed individuals and organisations are considering further actions to reduce their greenhouse gas emissions as a result of their involvement with the CPHs.</p>
<p>b.2 Support communities in implementing their renewable energy projects</p>	<p>The CPH model proved effective at providing support to communities to implement community energy projects. The CPHs have supported 30 different community energy projects to some stage of project development, and have scoped or provided advice to many times this amount over the two-year pilot. Each of these projects involves and benefits local individuals, organisations, businesses and services in different ways. Just under 20,000 people have been engaged, involved or are benefiting from the 15 projects financed and commissioned through the CPHs. In addition, dozens of other community project ideas were scoped and found to be not viable, therefore saving the proponent time via sense checking.</p>
<p>b.3 Support other relevant Victorian Government energy priorities and initiatives</p>	<p>The CPHs increased knowledge of and access to several other Victorian Government programs and initiatives. Almost all survey respondents (92 per cent or 44 of 48) identified that their involvement with CPHs led them to become aware of or access other SV or state government initiatives, in particular, Solar Victoria's solar PV and solar hot water program, the Renewable Communities Program, Agriculture Victoria's energy grants program, the regional renewable roadmaps and other energy initiatives. Respondents also indicated their increasing support for groups in the region that have received or applied for other grants by providing networking and communications opportunities. For example, Pick My Project and Bank Australia. The CPHs provided guidance and support for a number of these applications.</p>
<p>b.4 Boost the renewable energy industry in Victoria</p>	<p>The CPHs contributed to the renewable energy industry by supporting uptake of renewable energy in communities, as well as through enhancing community awareness and support for community energy and renewable energy more generally. Enhanced community awareness and support has been strongest in the cohort of people directly involved with CPHs or benefiting from a CPH project. Among this cohort, 80 per cent of survey respondents felt: "Very positive about renewable energy development in their area." The baseline Wallis survey of the general public revealed only a slight increase in awareness and support for community energy and renewable energy. Support for developing local community energy projects remains high across all CPH regions (more than 88 per cent).</p>

## Recommendations

Based on this evaluation, the following high-level recommendations are made for the continuation of the CPH pilot program, the improvement of the CPH pilot program, and the future rollout of the CPH program across Victoria. The detailed recommendations are outlined in Section 8.

### **1. It is recommended that the CPH program be continued, including continuing to support the three existing CPHs**

The model was found to be highly effective in delivering the desired objectives and outcomes within the short pilot period. The model represents excellent value for money, as part of a suite of policies to support renewable energy development in a way that engages and benefits local communities.

The model as it stands has many strengths that enable fast and effective establishment of CPHs and the capacity to facilitate community energy, through a collaborative approach with local stakeholders. It has proven effective at supporting local community energy development and community energy partnerships, and at attracting community volunteering, in-kind and financial contributions. The model demonstrates an effective means of delivering a government program, with a highly effective role for SV in program management and oversight.

However, there are aspects to the model that can be improved, to increase its effectiveness going forward, and when transitioning from the pilot phase into a more permanent form.

### **2. To improve the performance of the existing CPH program, it is recommended that:**

#### GOVERNMENT:

- allocate additional funding to the CPH pilot program over a longer timeframe – as with the existing program, funding (cash and in-kind) should be provided to each CPH, as well as to overall program support
- seeks to understand and address regulatory, policy and market barriers that currently limit community energy project development and business model innovation.

While this was beyond the scope of this evaluation, regulatory, policy and market barriers to community energy remain. A systematic approach to working with the CPHs to address these is recommended.

#### CPHs:

- resource admin and project management roles as paid roles
- consider or continue to employ staff in communications/community engagement and project development roles, to facilitate in-house CPH capacity building and knowledge retention
- increase the focus on community investment models of community energy going forward
- consider the option of partnering with large renewable energy developments, for example, in community co-investment initiatives or similar
- focus on community engagement and awareness-raising activities, alongside project-level activities
- expand communications and community engagement activities to reach out to the general public, beyond the focus on communications and community engagement that are project specific
- consider the role of small and large regional communities and what models may work differently in smaller communities compared to larger towns.

SV:

- keep milestones negotiable and flexible to enable responsiveness to local context, while delivering on program objectives
- support and resource community engagement and awareness-raising activities, for example, by building additional capacity for CPHs in this area
- facilitate a collective approach to harvesting and making available the intellectual property, resources and templates created through the CPH pilot program – both to ensure the legacy of the current program and to enhance a coordinated approach to any future programs
- develop ways to capture and share the knowledge and resources developed by each CPH with other CPHs and the broader community energy sector
- increase links with the broader community energy sector to help ensure learning and resources from other states are captured and applied in Victoria
- continue to support CPH staff and volunteers to build their capacity to deliver a range of community energy models and activities, including attention to the soft skills elements
- consider the potential to broker low-interest loans and/or underwriting for projects that proceed to implementation
- refine the CPH reporting methodology, in terms of what data is captured and how
- consider establishing a collective impact framework, with social return on investment indicators developed as part of this evaluation.

**3. It is recommended that the CPH model be rolled out across other regions of Victoria.**

To facilitate comprehensive coverage across the state, it is recommended more CPHs are established, along with the coordination and resources needed to support them. Specifically it is recommended:

- the minimum funding timeline for future CPHs is four years.
- the collaborative governance model developed continues to be applied, including having a local host organisation and a roundtable advisory group. Continue to use the host organisation as a way to access local reputation, trust, networks, resources and knowledge.
- the level of funding provided to each CPH be increased, as the financial resourcing of the pilot CPHs was considered to be too low for the ambition of the program and needed an unsustainable over-reliance on voluntary labour.
- to mitigate volunteer burnout, CPHs should be encouraged to hire staff to fulfil administrative functions, communications/community engagement and community energy project support/development roles.
- five to ten per cent of CPH budget can be used as seed funding for capital costs, as this would position CPHs to progress projects more rapidly, and enable better leverage to attract other sources of funding.
- the number of CPHs be expanded to at least six across the state. The desired scale and reach of each CPH needs to be well considered. A regional approach (in contrast to a town-based approach) was put forward as a good catchment with the ability to support multiple smaller communities, which are less resourced and often more exposed to climate change impacts. However, if each CPH is to have a wider catchment, the budget allocated should increase commensurately.

- milestone and reporting negotiation and flexibility is enabled, to allow for a bespoke approach for each CPH location. Balance the need to ensure the CPH and its goals are locally appropriate, with goals that push the CPH to expand their skills, while also delivering on program objectives.
- a focus on communications, community engagement and community development be included from the outset, alongside the focus on supporting community energy project development.
- a CPH support program is established with a focus on capacity building, collaboration and peer-to-peer mentoring. This could be an expansion of SV's current role, drawing in other expertise from the broader community energy and renewable energy sectors. This program would:
  - empower current CPHs to support newly established CPHs to ensure learning is shared and networks are built among the CPHs
  - build the capacity of CPH staff and volunteers from the outset
  - facilitate ongoing knowledge and resource sharing
  - fill critical knowledge/expertise gaps.
- extensive and comprehensive training for CPH hosts, roundtable advisory group members and staff is provided at the start of the program. This should draw on the expertise and experience from existing CPHs, as well as the broader community energy and renewable energy sectors. The initial training of CPHs is of the utmost importance to give people access to the correct experts and studies, while building local capacity. While CPH host organisations are likely to have some relevant experience with community energy, a wide range of knowledge and skills are required to effectively deliver the CPH objectives.
- support a spectrum of models to be deployed, such as ownership, investment, donation, etc.
- ways to support the evolution of community energy within the communities that the CPHs support be considered, especially those who are working beyond renewable energy towards net zero emissions. These initiatives will help the Victorian Government achieve its broader and ambitious carbon reduction targets.
- the potential to broker low-interest loans and/or underwriting for projects that proceed to implementation be considered.

# 1. Introduction

The purpose of establishing the CPH pilot program was ‘to support and progress community energy that is strongly governed, financially viable and socially and environmentally sustainable.’

Operationally, this involved:

Bringing the community together and helping the community to access the skills and expertise required to develop and deliver community-based renewable energy projects. This involves local volunteers, businesses, community organisations, not-for-profit groups and government agencies working to organise and support local community energy project ideas. The approach will look to assist testing project ideas and progressing those that are viable into bankable projects delivering local benefits, and connecting them to capital to deliver. (source: [communitypowerhub.com.au](http://communitypowerhub.com.au) 2018)

Over the past two years, the Victorian Government has committed funding and support to trial three CPHs which bring local stakeholders together to develop community energy projects in and around Ballarat, Bendigo and the Latrobe Valley. This report evaluates the outcomes from the pilot CPHs, and the subsequent value delivered in the local communities and to the Government at the end of the two-year pilot period.

Community energy projects are those in which a community (of geography and/or of interest) is involved in initiating, developing, owning, operating and/or benefiting from renewable energy and energy efficiency development. Such projects can include renewable energy generation, as well as energy management, energy efficiency and innovative ways to buy, sell and share electricity. Crucially, a community is involved in both the process of establishing the project, as well as benefiting from its outcomes. Common benefits from community energy projects include reduced electricity costs, increased energy self-reliance, income generation and increased knowledge and awareness of renewable energy.

The CPH model deployed by Sustainability Victoria (SV) in the two-year pilot involved partnering with an existing local host organisation in order to increase awareness and implementation of community energy in the three regional Victorian communities of Bendigo, Ballarat and the Latrobe Valley. Key activities of the CPHs include:

- developing community energy projects
- supporting other local organisations and businesses to develop community energy projects
- information provision and community engagement around community energy.

This report considers what has been achieved by the two-year CPH pilot in terms of delivering social, environmental and economic value in the three host communities and for the Government. It assesses what worked well in the CPH model and what could be improved, as well as giving recommendations for future extension and expansion of CPH pilot programs.

The report first outlines the methodology and introduces the background of the CPH pilot before presenting an evaluation of CPH structures and activities, including governance, project support and community engagement. It then presents the findings around CPH outcomes and closes with recommendations for the future.

## 2. Evaluation methodology

This report evaluates the outcomes, effectiveness and value delivered by the three CPHs for their local communities and the Government. The evaluation involved qualitative and quantitative processes to identify the extent to which the:

- CPH pilot objectives were achieved
- CPH pilot outcomes were achieved
- CPHs engaged with the three communities and stakeholders
- CPHs provided value for the three communities
- CPHs improved collaboration and access to funding for community energy projects.

The evaluation also includes recommendations for the future rollout of CPH pilot programs.

This evaluation used interviews (12 people) and a survey (52 respondents) with various stakeholders involved in each of the three CPHs, a focus group with six SV representatives, document analysis and Facebook and website analytics to deliver qualitative and quantitative assessments. Each of these methods is described below.

The evaluation design is informed by Impact Evaluation and Theory of Change logic, and a simplified social return on investment (SROI) methodology.

Impact Evaluation uncovers both planned and emergent outcomes to evaluate the specific elements of a program that may or may not be working, to inform decisions about future design of the program for best impact. It is geared towards evaluation for the purposes of both accountability and lesson-learning.

Theory of change logic helps to identify how program inputs and activities have created outputs and led to outcomes and impacts.

The SROI methodology is used to quantify blended value (social, economic and environmental outcomes) from programs. SROI is a form of cost–benefit analysis that emphasises the importance of valuing social and environmental outcomes alongside economic outcomes. This involves identifying appropriate metrics (or proxy metrics) for what can be quantified, as well as being transparent about what cannot. SROI methodologies include stakeholders in determining appropriate measures to capture the blended value outcomes of a program. In this case, the range of SROI indicators was developed in consultation with research participants.

To determine the SROI values, including the overall economic value delivered through the CPHs, a quantitative value tool was developed. This spreadsheet calculates the value of electricity savings, greenhouse gas emission reductions, voluntary labour contributions, in-kind contributions, investment leveraged from other sources, the value of community engagement activities and the flow-on impacts of spending in the local economy.

The spreadsheet draws on monthly and annual CPH reporting data, as well as additional data requested as part of this evaluation. The values for flow-on economic impact were calculated using regional economic modelling (REMPPLAN) tailored to each specific region of the CPHs and included both direct and flow-on (supply chain and consumption) impacts on the local economy in terms of numbers of jobs and level of economic activity. These multiple datasets provide a comprehensive picture of the blended value generated through CPH activities, and the leverage gained on the original government investment made into the program.

However, not all outcomes and impacts created through the CPHs can be quantified or monetised. Data was analysed by thematic analysis informed by the CPH pilot program objectives. This report presents trends witnessed across all sources of data, as well as unique insights that offer useful points of learning that may have been raised by a single participant. Key findings and recommendations have been cross-referenced across the multiple participants and data sources (focus group, interviews and data analysis).

## Data sources

A combination of document analysis, surveys, interviews and focus groups were deployed to reach CPH host organisations, staff, partners, community members and SV representatives:

### **Document analysis**

Analysis of existing CPH monitoring and evaluation materials and the external evaluation report completed for year one of the CPH pilot program. This included reviewing the reporting records of CPH activities and the metrics associated with the projects already delivered and those in the pipeline. It also included a review of governance documents and plans, such as communications and community engagement plans. Document analysis provided the foundation data for both qualitative and quantitative evaluation.

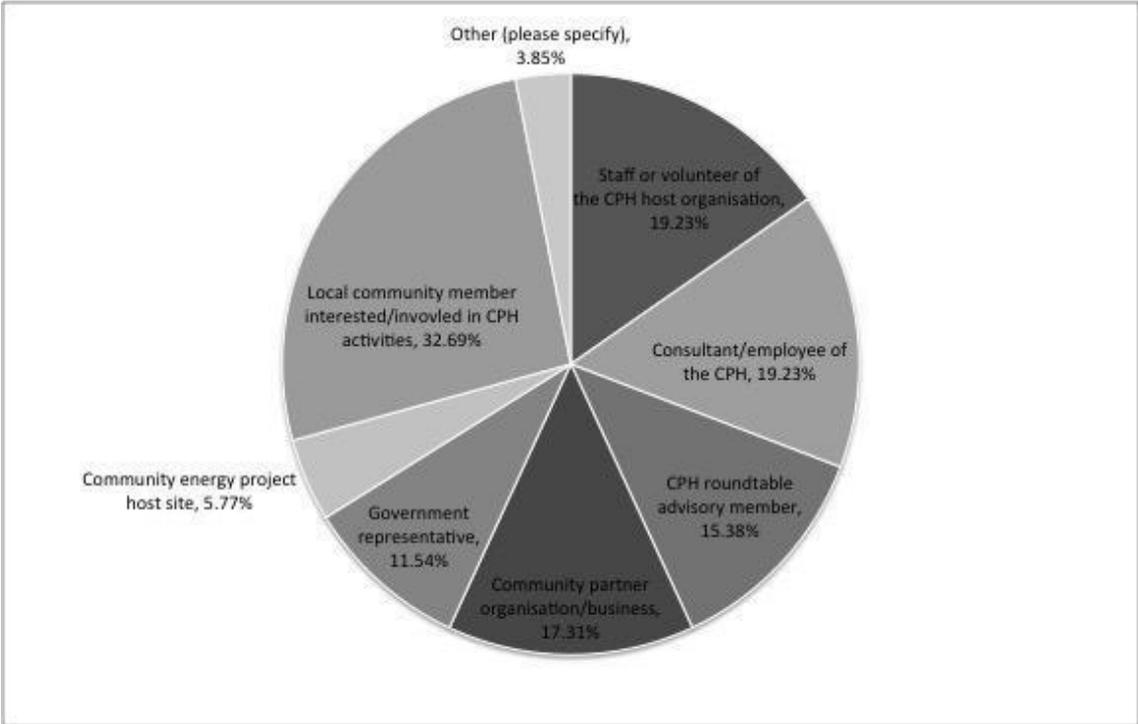
### **Survey**

A 38-question survey was designed and deployed via Survey Monkey to elicit people's perceptions of the CPH pilot program design and its outcomes, as well as to get recommendations for the program's future. Survey questions used a combination of multiple choice, Likert scale and open-ended questions.

The survey was distributed to relevant email and e-newsletter lists, as well as via social media accounts. It was open for three weeks. It received 52 responses, with 48 respondents completing the survey to the end. All three CPHs were represented; 27 respondents were associated with the Bendigo CPH, 19 with the Latrobe Valley CPH and six with Ballarat CPH.

Respondents represented a broad range of roles and forms of engagement with each CPH, including staff/consultants, volunteers, community partner organisations, government representatives and local community members (see Figure 1 ). The survey provided a basis for quantitative and qualitative data.

Figure 1: Survey respondents and their relationship with the CPH [Q.2]



**Focus group**

One focus group was held with six SV staff who were active in supporting the CPHs. The focus group enabled participants to collectively identify and discuss the outcomes and impacts, what worked well and what could be improved. It was particularly useful at teasing out different perspectives on multifaceted phenomena and generating common ideas for improved practice. This provided in-depth qualitative data.

**Interviews**

Nine interviews were carried out, involving three people from each CPH. This included one person in a governance role, one in a project management or project delivery role and one community partner. Interviews lasted 30–60 minutes and enabled in-depth investigation of issues and attitudes towards how effective the CPHs were at meeting objectives. This method provided in-depth qualitative data.

**Facebook and website analytics**

Each CPH’s Facebook performance and the CPH pilot program website were reviewed, drawing on google analytics.

**Baseline data**

Data was brought in from the Wallis survey commissioned by SV to gather baseline measures of awareness, knowledge and involvement in community energy in each of the three CPH communities. The Wallis survey was conducted in two waves; the first wave measured benchmark awareness and sentiment ahead of the launch of the CPH pilot (in late 2017) and the second wave was a comparative measure towards the end of the two-year CPH pilot program (in mid-2019). The survey was conducted using computer-assisted telephone interviewing with 150 residents in each of the three regions, totalling 450 interviews per wave. Participants were selected by random sample from

an accredited supplier of publicly available landline and mobile phone records used exclusively for market and social research.

The findings from the Wallis survey complement the methodologies listed above to provide data on the flow-on impact of the CPHs on awareness, knowledge and involvement in community energy among the general population of each CPH community.

### 3. Background

The concept for CPHs began as a policy to support community energy developed by community energy proponents. The concept, described as 'Landcare' for renewable energy, was developed by the Community Power Agency in 2016. The Agency and the Coalition for Community Energy lobbied to establish the concept across the country.

In 2016, the Department of Environment, Land, Water and Planning (DELWP) and SV agreed to develop a pilot CPH at three sites: Ballarat, Bendigo and the Latrobe Valley. A budget of \$900,000 for two years was allocated, with SV agreeing to deliver and facilitate the pilot with in-kind support valued at \$260,000.

In early 2017, SV developed pilot CPH guidelines, including the selection and application process for the place-based host organisations. Regionally based SV representatives played a facilitator role and each host was given \$255,000 over two years for administration, engagement and project feasibility.

In mid-2017, the pilot CPH program was officially launched by Minister for Energy, Environment and Climate Change and Solar Homes, Hon Lily D'Ambrosio, with the following successful host organisations:

- [Bendigo Sustainability Group](#)
- Ballarat Renewable Energy and Zero Emissions
- [Gippsland Climate Change Network](#)

Year one of the CPH pilot (June 2017 to June 2018) focused on:

- establishing governance arrangements
- establishing a website and social media profile
- raising social awareness
- building capacity
- identifying local community energy projects
- prioritising local community energy projects
- localised baseline social research (via Wallis survey).

Year two (June 2018 to June 2019) focused on:

- building capacity
- developing an investment portal
- delivering one flagship project (per CPH) to the point of raising capital
- delivering at least three replicable projects
- evaluating and measuring benefits
- legacy planning for the future of the CPHs
- re-testing localised social research (via repeated Wallis survey).

In June 2019, SV secured a pool of \$45,000 per CPH to extend the pilot CPHs to 30 June 2020. The activities supported under this funding are to:

- deliver a minimum of two community energy projects currently in the pipeline to installation stage
- continue to use the collaborative governance model to ensure that local organisations supporting community energy projects are cooperating and working together

- implement strategies and actions that contribute to the long-term sustainability of local community energy projects that can be progressed beyond 30 June 2020
- hold at least one public forum to engage the local community in community-owned renewable energy and activate involvement related to the opportunities being focused on by of the CPH.

## 4. Evaluating the CPH model

The CPH model is designed to draw on the strengths, assets and passion of existing local organisations to support the uptake of community energy in communities. During the two-year pilot, the three CPHs successfully established the structures and skills needed to support and deliver community energy projects in their communities.

Key aspects of the CPH model include the:

- governance structure
- funding model
- program timelines and milestones
- use of staff and volunteers
- role of SV.

Each of these aspects are covered in turn, with reference to what worked well and what could improve the CPH model for future delivery. Table 3 summarises the key aspects, with further detail given throughout this section.

Table 3: The key aspects of the CPH model

Aspect	Description	Challenging attributes	Successful attributes
Governance	Each CPH is hosted by an existing local organisation. CPH governance is led by a roundtable advisory group comprising key local stakeholders and a project control group comprising CPH staff and volunteers and host organisation representatives.	<ul style="list-style-type: none"> <li>- The host organisations had different levels of pre-existing knowledge of community energy and different levels of experience in project management and delivery.</li> <li>- Some felt the governance model was too prescriptive and did not allow enough flexibility to context.</li> </ul>	<ul style="list-style-type: none"> <li>- Collaborative governance model draws on existing strengths and networks and fosters cooperation.</li> <li>- Having a local organisation as the host to lead the CPH.</li> <li>- Drawing on key local expertise and representatives in the roundtable advisory group.</li> </ul>
Timelines and milestones	The two-year CPH pilot was structured around the delivery of a series of milestones. SV oversaw milestone reporting, in which CPHs were supported to implement the milestones within their context.	<ul style="list-style-type: none"> <li>- The short two-year pilot period made it difficult to progress towards financial self-sufficiency and progress larger, more complex projects.</li> <li>- The flagship project was challenging to deliver and acted to deprioritise a number of other smaller, replicable projects.</li> <li>- Milestones did not adequately prioritise community engagement and</li> </ul>	<ul style="list-style-type: none"> <li>- Flexibility of SV's milestone management approach.</li> <li>- Upfront payment of instalments to CPHs.</li> <li>- Ability to support existing project ideas into fruition – acting as the catalyst.</li> </ul>

		outreach, especially early in CPH establishment.	
Funding	A \$900,000 Victorian Government grant (50 per cent DELWP and 50 per cent SV), from which each CPH received a budget of \$255,000, and \$260,000 in-kind support from SV.	<ul style="list-style-type: none"> <li>- Inability to allocate funding for seed capital for community energy projects.</li> <li>- Level of funding was low and placed stress on the CPHs to source high levels of voluntary and in-kind contributions.</li> <li>- Competing interests for how to allocate funds.</li> </ul>	- Upfront milestone payments.
Staff and volunteers	Each CPH decided to spend its funding in different ways: two CPHs employed part-time staff, and all employed contractors to fulfil some roles. Volunteers made a significant contribution to all CPHs.	<ul style="list-style-type: none"> <li>- Some volunteer burnout due to heavy reliance on volunteers.</li> <li>- Sometimes hard to keep the roundtable advisory group volunteers engaged.</li> <li>- Costlier approach of using consultants rather than in-house staff.</li> </ul>	<ul style="list-style-type: none"> <li>- Employing staff to do administration and project management, as well as project development.</li> <li>- Significant in-kind support from the roundtable advisory group and working group members.</li> <li>- Developing in-house skills of staff and volunteers.</li> <li>- Local contractors were upskilled in community energy and are now a competitive alternative to Melbourne-based contractors.</li> </ul>
Role of SV	SV played a key support, management, networking and information provision role for the CPHs, particularly through SV's regional representatives.	<ul style="list-style-type: none"> <li>- Did not provide enough technical and regulatory support.</li> </ul>	<ul style="list-style-type: none"> <li>- Flexible and supportive approach.</li> <li>- Partnership approach.</li> <li>- Conduit to government.</li> <li>- In-kind contribution.</li> </ul>

## 4.1. CPH governance structure

Establishing effective governance structures under the auspices of a local host organisation was key to the ability to deliver the CPH pilot program. One objective of the program is to 'test and refine the CPH model for any future wider rollout in Victoria,' including an expectation that CPHs will 'establish suitable governance and planning to enable community energy to progress and grow into the future in their region.' Within this, there is also an objective of increasing local capacity and collaboration, achieved in part through an expectation that each CPH 'establish and coordinate local networks.'

In line with these objectives, each CPH established a collaborative governance structure that proved capable of delivering desired activities in an accountable manner and which successfully engaged a range of local organisations.

Collaborative governance is a governance model that brings multiple stakeholders together to work on agreed goals within agreed operating principles, while avoiding the need to establish a new organisation. This model seeks to enable 'the interests of stakeholders to be represented in pursuit of a common purpose' (Bendigo CPH Governance document, p.3).

Collaborative governance aims to align the strategies and resource allocation of multiple organisations to encourage integrated service delivery, deliver of shared priority outcomes, shared learning and relationship building. In the case of CPHs, collaborative governance was seen as a

means of drawing on the strengths and assets of existing organisations, including their expertise, experience, networks and passion, to successfully support local community energy projects to thrive.

The CPH governance structure comprises several aspects:

- host organisation
- project control group
- roundtable advisory group
- project working groups
- staff.

These are described in Table 4.

However, each CPH implemented slightly different governance structures with varying degrees of ease and success. Each CPH has a unique blend of local stakeholders participating in their collaborative governance.

Table 4: CPH governance aspects

<b>Governance aspect</b>	<b>Role</b>	<b>Members</b>
Host organisation	Holds and is responsible for the contract with SV. The host organisation board plays an ultimate oversight and sign-off role. Provides access to existing office space, resources, knowledge, skills, networks and reputation.	Established local not-for-profit organisations in the community: Bendigo Sustainability Group, Ballarat Renewable Energy and Zero Emissions and Gippsland Climate Change Network.
Project control group	Provides operational, financial and governance oversight of the CPH.	Representatives from the host organisation, SV and roundtable advisory group (who are not also a member of the host organisation).
Roundtable advisory group	Provide feedback, advice and connections necessary to progress projects. Provide a forum for sharing information and learning. Provide guidance to ensure the CPH meets the program objectives in a way that is aligned with the context and needs of the local community and the strategic renewable energy direction of the region.	Representatives from local not for profit organisations, council, financial institutions, business and education providers, as well as individuals with an interest, knowledge or passion for community energy. Not all CPH roundtables include members from all categories.
Project working groups (optional)	Progress specific project ideas or areas of CPH activity.	Host organisation members, CPH staff, SV and roundtable advisory group and other stakeholders as appropriate (e.g. local business operators, or project partners).

While the governance structure was outlined by SV, each CPH was required to develop a governance document outlining how they would operationalise the collaborative governance model. They also produced a program framework to clarify how the CPHs’ planned activities and available resources will lead to the delivery of the program objectives over the two-year pilot.

In general, there was widespread support for the governance structure used by the CPHs from the full range of local stakeholders. However, they also recognised aspects that worked well and what could be improved. Survey respondents from Bendigo (10) felt the governance was working best, and respondents (3) from Latrobe Valley were least supportive of the governance structure. More

focus and training around community engagement and participation at the start of the pilot is recommended to ensure stakeholders are fully utilised through the process.

## What worked well

In general, interviewees and survey respondents, as well as focus group members, felt the collaborative governance model works well and is well-suited to the objectives of the CPH program. Many interviewees were very appreciative of the proposed structure and the draft governance documents, and felt free to modify them to suit their context. One host organisation described having taken the draft documents and 'ran with them,' feeling they have worked very well. It was generally recognised that the guidance provided by SV and the CPH pilot program design was very useful, but that willingness to be flexible was crucial.

There was strong consensus across all data sources that the approach of having a local host organisation and a roundtable advisory group worked well and was a means to access existing technical knowledge and networks. However, it was key that the CPH model enabled the employment of staff or consultants to support delivery of the program objectives. Participants identified that it is important for the CPH host organisation to be an established organisation with existing connections, relationships and a strong local reputation. Host organisations with existing knowledge and experience in leading community projects generally, and community energy projects in particular, found the process of establishing their activities much easier and were able to do so more quickly.

In general, having a host organisation was: "Extremely productive as they come in with a platform of knowledge and expertise in the project" (roundtable advisory group member). Generally, the relationship between the host organisation and the other elements of the CPH (e.g. the roundtable advisory group) functioned well. As one roundtable member expressed: "They [the host organisation] are very approachable, easy to work with, very keen on partnerships... I really value their expertise."

In general, several factors appear to contribute to being an effective host organisation.

An effective host organisation:

- is an established and well-respected local organisation
- has strong and broad local networks and relationships, and existing relationships with state and national community energy and renewable energy stakeholders
- has strong organisational governance and management systems
- has a strong track record of project development, management and delivery
- has community energy specific knowledge and experience, including awareness of business models and basic legal, technical, financial, regulatory and community aspects
- has a strong track record in community engagement and communications using a broad range of techniques and mediums
- has a base of volunteers and staff that hold some of the above and will be involved in CPH delivery.

Some interviewees and focus group participants felt it was important for the host organisation and/or the CPH to have a physical space the community could come to.

Both interview and focus group participants commented on the value of the CPHs in bringing together a diverse group of people and organisations to offer a great range of expertise and backgrounds to the CPHs. One member described the roundtable advisory group as: “Good to get lots of expertise at the table, and this helps us achieve lots in a short timeframe. It’s good for helping us be effective at prioritising to be strategic.”

The model is recognised for having built local networks and connections, which will contribute to the effectiveness and resilience of localised community energy activity over time. Two CPHs found working groups to be useful in driving projects forward, as they empowered local community representatives to be involved in delivering projects. In establishing working groups, the CPHs invited multiple stakeholders with the necessary skills, knowledge and connections to realise the project (for example, local progress associations and local banks).

CPH experience indicates that internal communication and some overlap in membership across the host organisation, the project control group and the roundtable advisory group is important to the success of the governance model. If there are staff, current experience indicates that it works best to have them represented on all three for ease of coordination.

## What could be improved

The CPHs had different views on how malleable and negotiable the draft governance model was. Some felt it was too prescriptive, but also lacked the necessary detail to implement it successfully. A small number of interviewees raised some criticisms that there was not enough flexibility to tailor the governance model to the CPH organisation’s local context. Some felt that the governance and program design was controlled by SV and expectations were significant, given the host organisations had very different levels of experience with community energy.

One CPH host organisation is a network, rather than a project-driven organisation and this caused some difficulties. While they do have good networks and relationships, they lack some of the other desirable organisational, project and community energy specific knowledge and skillsets needed to lead and support project development. As they commented: “We were starting with a blank canvas, so we have had a lot of challenges. We didn’t have a lot of the existing organisational infrastructure or processes” (roundtable advisory group member).

In some instances, there were challenges in bringing the CPH structure to life.

“There has been a belief that if you set up the bodies and tell them what the responsibilities are, that’s enough. There hasn’t been a process of thinking about what you can do to develop the power Hub, how they can use our expertise and how can we contribute” (roundtable member).

Another roundtable member felt disappointed in their CPH’s ability to use the collaborative potential of the roundtable members: “The people in the roundtable drifted away. The meetings were quarterly. Some of them showed up but they weren’t connected outside of the meetings.”

Two CPHs felt that their roundtable advisory groups: “Are not particularly engaged” (roundtable member) or that engagement was inconsistent, whereas another CPH showed strong engagement from the roundtable and working groups, with the interviewees showing high literacy of the programs activities.

Findings indicated that while the roundtable advisory group has been useful to some extent for all CPHs, its usefulness is enhanced where members are more actively and regularly engaged and are

given clear, tangible things to contribute to. A less engaged roundtable advisory group means less people are regularly engaged and invested in the CPH. This may contribute to the CPH being less integrated into the community, and leveraging less benefits from in-kind contributions and potentially leading to more volunteer burden on the host organisation representatives.

Experiences of the effectiveness of the project control group varied. Two CPHs have active project control group. The other CPH omitted this element and, instead, the host organisation's board fulfils this role. One CPH with a project control group found there to be some confusion and overlap between the host organisation's board, the project control group and the roundtable advisory group. The other CPH with a project control group finds it to be operating effectively.

## 4.2. CPH funding allocation

The CPH pilot program provided \$255,000 in funding to each CPH host organisation, to be spent on supporting their communities to access the skills and expertise required to develop and deliver community energy projects.

### What worked well

The funding agreement gave flexibility to the CPH to determine the most effective and locally appropriate way to allocate funds. However, funds could not be allocated towards the capital costs of community energy projects.

Releasing funding to the CPHs as upfront payments was fundamental to the viability of the model, with one host organisation representative saying: "If we had to fund it upfront, we couldn't do it."

The three CPHs chose to allocate their funding in different ways, with different outcomes. One CPH, for example, is run entirely by voluntary effort and the funding is directed to sourcing consultants to provide expertise to the projects they support. They preference local consultants where possible and look for opportunities to build up the skills and capability of locally based consultants to be better equipped to take on future work.

This approach supports project leaders (external to the CPH) to take ownership of project development and access the skills and knowledge they need. However, it also means that the CPH is not developing in-house skills and expertise that can serve as an ongoing resource to multiple projects. Hiring consultants is also often a costlier approach.

The other two CPHs employed staff to drive CPH activities, including both developing projects in-house (as is the focus in Bendigo) and supporting projects led by others (more common in the Latrobe Valley). Employing staff has the benefit of consistency over time and being able to build and retain specialised knowledge.

Research participants had mixed feelings about the funding allocation. SV staff generally felt the level of funding was appropriate, while those involved with the CPHs felt the funding allocation had challenges.

### What could be improved

The one aspect of the CPH model that was identified by 33 per cent of survey respondents as working least well was the funding allocation. Interviews and focus groups revealed this sentiment related to three key things:

- The challenge of a two-year funding timeframe for the pilot program, and the unrealistic expectation that CPHs could achieve financial self-sufficiency beyond this.
- Restrictions on allocating CPH funds towards the capital costs of community energy projects. This prevented the CPHs ability to offer financial support to get a 'quick win' project early in the CPH operation.
- The level of funding allocation meant CPHs felt they needed to choose between hiring staff and funding other activities, such as project feasibility studies and community engagement.
- Not having adequate funding to progress larger scale, innovative and complex projects, as the feasibility studies for medium and large-scale projects are costly and, for some technologies, may take years.

For example, the survey results revealed that for CPHs with paid staff, a key challenge was the limited ability to provide funding to assist community energy projects (25 per cent) – likely referencing both the limited funds for the CPH pilot program and the fact that funds could not be directed towards capital costs. This also indicates the funding level available to the CPHs was such that they felt they could either employ staff or provide feasibility funding to projects.

### 4.3. Timelines and milestones

The two-year pilot progressed through a series of milestones set at the project outset by SV. The seven milestones were designed to monitor and track the progress of the CPHs in line with funding allocation. In the first year, milestones focused on signing the funding contract, establishing governance plans and structures, and identifying and prioritising projects. The second year's milestones included identifying project feasibility studies, developing flagship projects, carrying out capacity building activities and delivering replicable projects. Milestones were set out in the funding agreements between SV and each CPH host organisation.

#### What worked well

As mentioned above, funding allocation and milestones were designed to allocate upfront funding, to enable CPHs to undertake the necessary work without putting undue pressure on the host organisation.

Importantly, milestones and milestone reporting could be adapted as the pilot progressed and could respond to the experience, learning and needs of the three CPHs. SV regional representatives worked closely with each CPH to facilitate effective reporting and communication around milestone progress.

"Reporting for milestones was iterative," stated a CPH host organisation, which allowed for flexibility, some responsiveness to context and opportunities for clarification to ensure that meeting milestones was a mutually beneficial process.

As one SV staff explained: "The milestones were pretty loose, they were flexible, we added in capacity building along the way, the flagship project was flexible. The milestones were different to how government does it normally."

## What could be improved

The two-year pilot for the CPH pilot program was universally considered to be too short across all datasets and participant types. Most participants recommended a three or four-year commitment to the pilot. The common feeling was that at the end of two years, the CPHs have just become established in their governance and activities, and are now becoming well known in their communities and have built their knowledge and capacities to support community energy.

All CPHs felt they were gaining momentum and had a strong desire to keep going. As such, there was a common disappointment that the pilot was ending, with one participant stating: “I feel as if [the CPHs] are just hitting their straps and are ready to go, but now the end is too soon, they need funding” (SV staff). The short timeframe also made it difficult to complete complex, innovative or larger projects.

Mixed feedback was received on two milestones in particular:

### **Milestone 5: The flagship project**

SV staff, hosts organisations and CPH staff generally agreed that the requirement for a single ‘flagship’ project was counterproductive. The idea behind this milestone as stated by SV was, “about reducing the risk of not having a key project delivered by the end of the two years.”

They went on to suggest that: “Maybe it would have been better to have more flexibility, so it could have been three of the same type of project, but smaller.”

In practice, participants felt that pursuing one significant flagship project distracted them from being able to deliver a number of other smaller, but less innovative projects. The reason for requiring each CPH to deliver a flagship project was to drive the development of the new type of community energy project to that community.

### **Milestone 1: Establishing governance structures**

Some participants from host organisations and CPH staff felt the first milestone placed too much emphasis on establishing governance structures at the expense of other critical activities. In particular, there was a common reflection that equal emphasis should have been placed on starting early community outreach activities, to begin establishing the CPH in the community earlier through communications and engagement. While governance is critical to CPH success and was a useful milestone, there was a desire to have prioritised this alongside other activities crucial to the early establishment of each CPH in their local community.

While the general milestone approach was effective and well supported, this feedback indicates the importance of flexibility to milestone implementation, so that the particularities of local context can be taken into account.

A small number of interviewees felt the milestones design was overly prescriptive and limited each CPHs ability to tailor their structure, activities and timings to the needs of the local community. One roundtable advisory group member felt disappointed that: “The parameters and priorities were set up for us and they weren’t necessarily the ones that fit for this particular area.”

They went on to explain that: “My experience of anything grant funded is that you have to tailor your ideas to their priorities.”

In line with the point made above on Milestone 1, another roundtable member commented that: “The process was mistaken in its early phase – the other two communities were at different phases

and [we should have] taken emphasis off governance, pushed a lot harder for communication officers and community engagement at the start, engagement."

Another CPH staff stated: "I would have put more emphasis on building community interest in renewable energy and encouraging community engagement... and we didn't have any previous experience with community energy. I think what we were expected to do in 18 months was enormous and we only really focused on two or three of the objectives in the contract, and they weren't the objectives that, given the choice, I would have focused on."

There was a feeling that some milestones were far more detailed and onerous than what was outlined in the original contracts signed by the CPHs. There was also a sense from some people that: "They [SV] were not always very clear or necessarily on board with what we wanted to be working on" (CPH host organisation representative).

In comparison, the majority of participants noted that SV was very open and constructive in resolving any arising issues with the milestones and that the pilot program was flexible enough to be responsive to local context.

#### 4.4. Staff and volunteers

The CPH model provided funding to the host organisations and gave them autonomy over how to best use the funds to deliver the program objectives. As such, the CPH model provided no stipulation on the use of staff, contractors or volunteers to deliver the program. Each of the CPHs approached their labour requirements in different ways, with differences in the use of paid staff, contractors and volunteers to deliver administration and project activities.

##### What worked well

Employing staff was seen as highly valuable by most interview and focus group participants. In two CPHs, staff were responsible for administration, communications, community engagement, project investigation, design and delivery and volunteer coordination. Having staff enabled the CPH to bring in desired skillsets and provided a consistent presence in the local area.

Paid staff played a key role in two of the three CPHs and the other engaged contractors as needed. In Bendigo, the three staff were people with existing roles in the host organisation and existing knowledge and experience in community energy. This worked well in supporting the CPH to become quickly established, deliver two replicable projects adapting a familiar model, and be able to lead on developing innovative projects.

As one host organisation explained: "One of the biggest differences with the Bendigo Hub is that we decided to contract three people who are already involved."

These three staff all sit on the host organisation's board, the roundtable advisory group and working groups and thus play a role in easing communications and governance of the CPH, as well as project delivery.

The Latrobe Valley CPH originally hired one staff person as a project officer and later employed a communications officer. Ballarat CPH hired multiple individual contractors to do work where needed. There was a reflection that having only one staff person might be difficult, whereas in Bendigo having three part-time staff meant they were tapping into three different skillsets and backgrounds, and that staff had others to go to for feedback, advice and support. Each CPH also secured significant

levels of volunteer and in-kind labour, particularly from roundtable members, project partners and local businesses. It was also common for staff to also be partial volunteers which creates a strong case for future CPHs to employ people already engaged.

### What could be improved

Heavy reliance on volunteers was raised as a challenge of the CPH model. This was most frequent in Ballarat CPH (who employed no staff, only contractors), but also in the other CPHs. As one participant commented: “It is a big responsibility for a community group to take responsibility for this, given the time required. It is a challenge: they are volunteers and very passionate. It hasn’t been a huge issue yet, surprisingly, everything is still progressing really well. But there is a concern that people get burned out, overwhelmed, overworked, undervalued” (roundtable member).

## 4.5. The role of Sustainability Victoria

A key element of the CPH pilot program was the in-kind support provided by SV through their regional representatives. This provided 2 to 2.5 days per week for each CPH and half a day for the other regional representatives (who were not co-located with a CPH) to support local community energy initiatives in their region. This in-kind contribution was valued at \$260,000.

### What worked well

SVs approach to supporting the CPHs to establish and meet their milestones was raised as something that worked well. This was raised in relation to SV staff being open and accessible to discuss issues and find commonly agreed solutions. In particular, there was seen to be a good balance of guidance and flexibility, leading to conditions ripe for innovation.

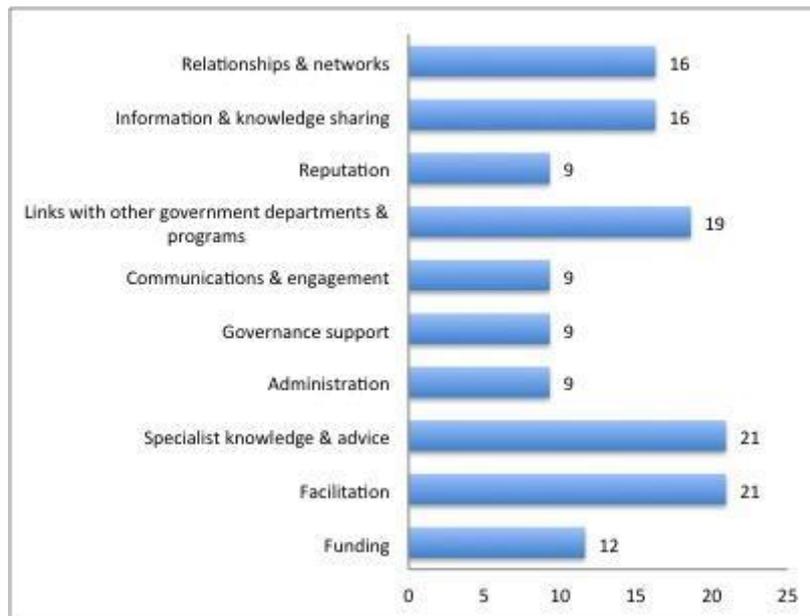
As one participant described: “It would have been very limiting to have everything in the program pre-established, but as long as there is trust, then we can work it out together. We are happy to be flexible and this is a way we are innovating. A lot of government programs are so strict that they would squeeze the innovation out. Whereas here, with upfront payments, and the way we work together it’s possible” (CPH host organisation representative).

The vast majority of survey respondents (87 per cent) felt that SV played a ‘pivotal’ or ‘important’ role in delivering the CPH pilot program. In an open-ended question that asked, ‘What was most beneficial about the role that SV has played in the CPHs?’ respondents identified a variety of important roles. Thematic analysis revealed several key roles, as shown in Figure 2.

One respondent stated that the partnership approach worked well: “Support to CPH host (organisations) as partners and working with them on a shared experience. Community-based grants often benefit from some ongoing 'structural' support from the state, in the way SV staff have done.”

Another respondent stated: “The SV reps have opened doors – starting a conversation with 'we are funded by the Victorian Government to establish solar rooftop projects', is far more likely to lead to engagement than 'we want to talk to you about solar on your roof'.”

Figure 2: The most beneficial roles played by Sustainability Victoria staff in their support of the CPHs [Q.33]



Interviewees from CPH host organisations valued the role of SV’s regional strategic coordinators and described the relationship as ‘collaborative,’ ‘trusting,’ ‘productive’ and ‘positive.’ Research participants identified several key supportive roles played by the regional representatives, including:

- building trust and connections between community and state government
- being based locally and understanding local context
- flexibility of their input and grant management approach
- regularity and consistency of involvement and contact
- proactiveness
- contributing valuable understanding of working with communities
- facilitation skills
- connection to other state government initiatives and networks
- administration and program support
- resourcing – providing catering, access to venues, etc.
- technical support
- communications and marketing support
- knowledge of governance processes and requirements.

In an interview, one CPH host stated: “The role of the SV coordinator has been wonderful, as someone local who we can meet more regularly and who can provide local coordination ... They did reporting on our behalf. We built a lot of trust – like the ability to tweak the contract – it wasn’t a top-down monitoring approach.”

Another CPH host stated that this was the most beneficial and productive government relationship they had encountered. Another CPH host commented that it was the easiest grant they had managed, and that SV staff had gone out of their way to make it easy.

Roundtable advisory group members were also complimentary about the role of the coordinator, again reinforcing the importance of local SV staff, their role as a link to broader government, and their role in getting the CPHs together to share learnings. One roundtable member stated the role as:

"Very necessary support. It made a big difference to me as chair of the project control group, to have them backing me up."

However, one roundtable member wanted more technical support from SV staff to better refine projects to address barriers around legislation and regulatory restrictions.

The focus group with SV staff mirrored the level of trust that had been established. One SV staff member stated that: "It would need to be more prescriptive if you didn't have regional representatives on the ground."

Another commented that they were: "A good connection point. They [the CPH] were very good at asking for advice, taking advice and involving us. They didn't take advantage of us. We were part of the team."

Another positioned themselves: "As an equal – a peer as well as contractual, in some ways facilitating the CPH to get to the end point as well as possible."

The SV staff perceived their roles as:

- adding value
- relationship management
- contract and risk management
- providing a connection with other government programs
- being adaptive and solutions focused.

SV also played a key role in identifying, resourcing and organising capacity building activities. For example, SV organised training workshops such as the energy storage and microgrids for community energy groups with sector experts.

The model we have got is ideal, with SV. You need flexibility, so each Hub can operate according to their geographic area and skills levels.

**SV staff**

I think it's been really important to have state government involved and having those links in the community. So, it's more integrated and not an adversarial relationship. The three Hubs like the model having SV involvement.

**SV staff**

The contribution of the funding organisation (in this case SV) to the CPH pilot program is highly valuable and critical to its success and should be continued in any future CPH rollout.

## 5. Evaluating CPH activities

The CPH pilot program successfully established three CPHs that have proved capable of effectively governing and delivering the desired activities. This is the first time the CPH model has been implemented in Australia, making it a significant achievement that all three CPHs were successfully established in a short timeframe and have gone on to deliver a range of activities to support CE. This is a testament to the program design, SV's oversight role and the commitment of community partner organisations to see the CPHs succeed.

The CPHs were established to support communities to deliver community energy projects. As such, CPH activities have revolved around project support, communications and community engagement. The sections below evaluate these activities in turn.

### 5.1. Project support

Supporting the establishment of community energy projects was the main focus of activity for all three CPHs. Although the CPHs had varying levels of pre-existing knowledge about community energy, they were all successful in instigating and supporting community energy projects in their communities in different ways.

The range of activities carried out by the CPHs to support projects includes:

- energy audits and energy use assessments
- business model design
- technical plans and advice
- financial modelling and funding assistance
- establishing governance structures (e.g. legal structures, agreements)
- project management
- managing grid connection
- contracting services/consultants
- community engagement
- funding feasibility studies
- building partnerships to deliver the project.

Often, the CPH would deliver only some of these roles, working in conjunction with the project site owner, other consultants, businesses and volunteers. Figure 3 outlines the different roles that survey respondents felt the three CPHs fulfilled.

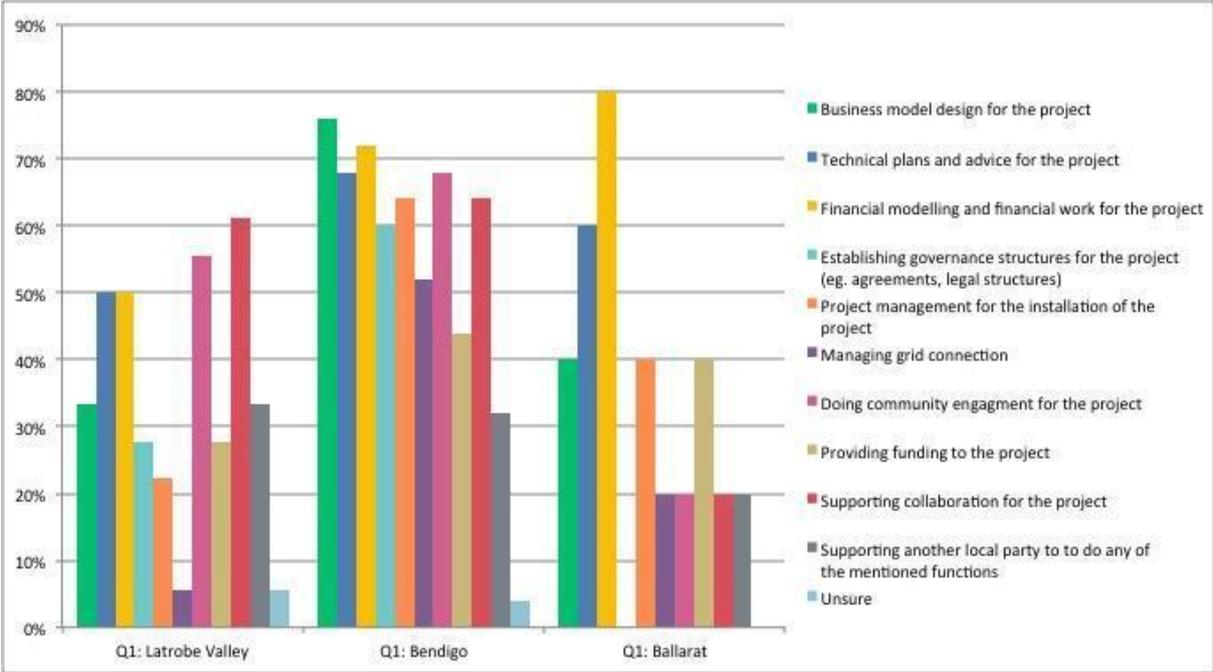
There was a range of approaches to project support across the CPHs. Two CPHs played a direct project development and delivery role, securing the project site or organising the program to be deployed. The other played a service connection role, making a range of consultants and contractors available to the projects they support. The interviews and focus group gave good insights into where each CPH is at in regard to becoming a more established service for their local areas.

As seen in Figure 3, the Bendigo CPH offered the most comprehensive range of service through the various aspects of projects delivery. Bendigo CPH focused on both supporting others and leading project development themselves to deliver more innovative models of community energy. This was made possible by their high pre-existing level of knowledge and experience of community energy.

The support offered by the Latrobe Valley and Ballarat CPH’s was very strong in some aspects of project development, and less strong in others, for example managing grid connection and establishing governance structures needed for the project. This reflects that these CPHs have developed or accessed some, but not all of the skills and knowledge areas needed to comprehensively support the multifaceted nature of community energy projects.

Regardless, both the Latrobe Valley and Ballarat CPHs have successfully supported project delivery by bringing in external skills and expertise where required. Given the short program timeframe, the different levels of pre-existing knowledge of community energy and low levels of staffing, the diverse nature of the roles played by each CPH to support community energy projects is impressive.

Figure 3: Survey respondents identified their local CPH as having fulfilled the following roles to support community energy projects (per cent)



The role of the CPH in supporting projects and the value this delivers to the community is described by a member of the CPH host organisation:

Most communities are not organised, such that they can get together to consider something like a renewable energy project, for example no phone numbers, email addresses, place to meet, no ‘go to’ person who moves socially between different groups and can get people together with a few calls/emails. To get the above happening (just the organisation let alone anything else) requires a person from within the community who has the time and legitimacy to do this developmental work (and such a person can be hard to find).

Once people from a community can be got together, then a facilitator can help them consider options, as well as support them by writing and sharing information, and generally organising. Such a facilitator gets their legitimacy from the ‘go to’ person, described above, until such time as the facilitator is accepted in their own right. If we look at the popular Danish success stories, there is usually an almost full-time person from within the community undertaking this sort of developmental work.

Even if a community energy project doesn't arise from these activities, the connections that have been built are a valuable form of community resilience, which we know is needed as the effects of climate change become more widespread. Technical capacity building is easier to develop than community engagement.

**CPH host organisation representative**

There was the consistent view across all participant types that the support of the CPHs was integral to the success of the local projects and their ability to be delivered. Of survey respondents, 69 per cent were directly involved in initiating, planning or delivering a community energy project with CPH support, and 79 per cent of survey respondents identified the CPH as being 'very important' for realising community energy projects. In contrast, only 6 per cent of respondents felt the CPH role was 'neutral' and none felt it was 'not important.' Several interview participants stated their projects would not have proceeded without the support of the CPH.

The Hub has helped identify projects, they are aware of what groups are trying to achieve, then approach them and offer an opportunity to assist in progressing ideas further and undertake feasibility studies. They are good at seeking new projects and turning ideas into concrete projects.

**CPH host organisation representative**

## What worked well

There was a sense of achievement and satisfaction with those projects that have been delivered. The CPHs successfully supported local community organisations to understand their energy use and their renewable energy generation options, and to co-design a project that would meet their needs. A project partner involved in a solar PV project on the roof of a community building stated: "We are volunteers, we don't understand the technicalities of the project. With the support of the Hub, this week we are putting energy efficiency heaters and coolers in, then we have put tenders out for solar and inverters."

Another community project partner explained the comprehensive and multifaceted role the CPH played to support the delivery of their solar PV project:

"Our project was a really challenging project because the building is council-owned and we are just a user group. So, the approvals had to go to council, that was a challenge. The CPH got it through the maze, but it wouldn't have happened without it. They did a lot of work beyond determining the specs of the project and managing contractors."

A CPH staff member described the value of the CPH working in partnership with local organisations to deliver projects; the CPH brings technical, legal, financial and governance knowledge and the community organisation has the need, has a site (to install renewable energy generation) and brings the community engagement. This staff member commented: "We were confident in what we could achieve, but it's a whole new world for the community group. It was great to see the complete amazement on people's faces [when we delivered the project in a short timeframe] – they didn't think it was possible."

Timelines for delivering projects were generally considered sufficient from the perspective of community partners. However, this was usually where the community partner had an established

project idea, some level of past experience with renewable energy or were pursuing a straightforward project. For example, one community partner reported: “The Hub support is very good – we have been looking at doing a renewable energy project for years but haven’t been able to get it up, but just the interaction with the Hub brought it to fruition in a short time.”

Another stated: "Our project has been amazing, such a short turnaround."

Another community partner was impressed by the quick pace of the project delivery enabled by the combination of CPH efficacy and community desire: “The speed with which we were able to raise the funds necessary to build the project ... that shows a lot of community support for renewables. The community is frustrated that governments aren’t doing enough, and they need to do something themselves. They want to do something themselves. The CPH helped to facilitate that.”

The CPH model is thus proving an effective means to catalyse community interest in renewable energy into tangible projects. The timeline of the CPH pilot program, however, has acted to support particular models of community energy better than others. For example, the CPHs have delivered many donation-based projects and projects in partnership with local organisations with access to private funding (e.g. a hospital or Lions club).

However, the two-year pilot and the level of funding was not conducive to supporting larger, more complex and more innovative projects involving broad community engagement or community investment, as these types of projects invariably take longer and may require funding for feasibility, as well as seed capital.

The CPH partnership allowed the community to become actively involved in power-saving, renewable energy and climate change mitigation.

**CPH host organisation representative**

## What could be improved

All CPHs have experienced challenges in finding appropriate partners in the community with which to deliver community energy. In many instances, CPHs investigated the potential of a host site, and the owner decided to proceed with a private renewable energy project. While still being valuable in terms of increasing the uptake of renewable energy, such instances do not meet the central objective of supporting community energy.

In other instances, negotiation with project’s host organisation extended project timelines significantly, as: “Waiting for the host organisation [of the project site] slowed things down – fitting it within their broader goals, priorities, strategy, governance.” **CPH host organisation representative**

Finding community groups and individuals willing to invest the time required to deliver projects was also a challenge. There were also slow response timelines and difficult bureaucratic processes when dealing with local government and state government departments (not SV or DELWP). For example, one CPH sought to install solar PV in partnership with local public schools. However, the process for approval from government departments has taken an extended period of time.

In other instances, projects experienced an: “Extraordinarily slow response from council” (CPH staff). In others, the CPH would undertake feasibility studies, but it was then up to the host organisation to decide to proceed and it could be: “Hard to get the organisations to commit” amid their competing interests and demands on time and resources (CPH host).

Working with newly engaged community partners with no established project idea and no prior experience with renewable energy or community energy meant that projects took longer to progress. As such, the timelines of the two-year pilot were considered too short to support this cohort to complete projects.

As one project partner described, "We have a lot of learning to do. Very few of us realised the technicalities – we weren't well prepared. It isn't the fault of the program, but there was an expectation that things could be mastered and delivered quickly."

A roundtable advisory group member similarly felt that: "Those within the Hub have done their best, timeframes were short (to) get grassroots community groups up to speed and across the line."

This was also affected by the level of skill of the project host in community energy. Even where community partners have prior knowledge, the two-year pilot was simply not long enough to complete community energy project ideas that are innovative, medium scale (over 100 kW) or with high levels of community engagement and community involvement. For example, one community partner is pursuing a large and complex project that involves deep and ongoing community participation. They felt the process required for their project was at odds with the CPH timeline.

The CPHs are only just gaining momentum towards delivering community energy projects based on community investment. Bendigo CPH in particular, have been working on legal contracts and securing 10–12 host sites to deliver a series of community investment projects. As SV staff commented: "It takes a long time to engage with the stakeholders to develop the investment projects – it's not a quick process. There are so many stakeholders and elements to it."

It is common for many community energy projects using a community investment model to take four to six years to become operational.

### Project delivery

Project support activity resulted in 15 projects being delivered, with 1.35 MW of renewable energy installed, under construction or having reached financial close (see Table 5).

The CPHs sought to deliver a combination of flagship, innovative and replicable projects. One of the program milestones was for each CPH to have a flagship project ready to construct by the end of the two-year pilot. Ballarat and the Latrobe Valley achieved this and Bendigo is well progressed to deliver theirs later in 2019. The other target was to deliver nine replicable projects (three per CPH). There are 15 now that have secured capital and nine of these are operational, significantly exceeding the targets. Two additional innovative projects have been achieved. As stated by an SV staff member: "We've overachieved on the project targets in terms of number and kW of installed capacity."

Table 5: Projects completed with support from the CPHs during the two-year pilot

CPH	Project	Summary
Ballarat	Ballan Community Centre	6.6 kW solar PV on community Centre
	Coghills Creek Community Hall	6 kW solar PV on Community Centre
	McCallum Industries	40 kW solar PV on disability employment enterprise
	East Grampians Health Service	526 kW solar program in three stages across two campuses
	Invermay Reserve	10 kW solar PV on community centre with bowls, cricket and tennis club

	Ballarat Table Tennis Centre	20 kW solar PV on community sporting centre
	BRI Solar	30 kW solar PV on Australian Disability Enterprise site
Bendigo	Community Housing	30 kW across eight social housing units
	Eaglehawk Table Tennis and Badminton Stadium	30 kW solar PV on community not-for-profit sporting stadium
Latrobe Valley	Gippy Bulk Buy	Local bulk buy of 326 kW solar PV and solar hotwater for households and local small business
	Licola Solar and Storage	180 kW solar PV and battery storage including heating, lighting and control system
	Rotary House Traralgon	50 kW solar PV and energy efficiency measures of local cancer care centre
	Yinnar Arts Resource Collective	Renovate existing building with energy efficiency and renewable energy features including 5 kW solar PV
	Community College Warragul	50 kW solar PV on vocational education centre
	Yinnar Solar Street Lighting	1 km solar lighting and battery system lighting pathway linking town and its recreation centre
<b>Total</b>	<b>15</b>	<b>1.35 MW</b>

All 15 projects use solar PV technology at a small scale (<100 kW), mounted on the roofs of various community organisations and services (e.g. local hospital, community halls, sport centres, community housing) and were most often deployed in conjunction with energy efficiency assessments and/or retrofits. For example, one project is a bulk buy and install of solar PV that also offered battery storage and hot water systems to households, thereby making solar more accessible and affordable. This project installed a total of 326 kW on 42 homes and four businesses. Another deployed solar streetlights to a community sporting facility. Another installed 180 kW of solar and batteries to service a small off-grid community that previously relied on diesel generators.

The 15 completed projects were funded through a combination of community donations, grants and private investment by the project sites/owners (households, community organisations or local services). None of the projects delivered to date were funded via a community investment offer. This was due to the level of complexity and the longer timeframes required for community investment projects and the fact that none of the CPHs host organisations had delivered this form of project before. However, significant progress has been made towards developing the legal agreements and structures needed to deliver a number of investment projects that are currently in the project pipeline and expect to be delivered in 2019.

Interview and focus group participants identified key factors that contribute to the success of project delivery, including:

- the project having a dedicated representative working on the project on behalf of the community organisation
- making use of the community organisation’s membership base and networks for fundraising
- finding project partners with an interest in renewable energy, a suitable electricity demand/cost profile and own an appropriate host site (e.g. roof space)
- having a paid project officer (e.g. CPH staff) or a consultant to drive the project.

## Project pipeline

Each CPH has worked to establish a strong pipeline of future projects, which are currently at various stages of development. So, there are strong future project opportunities, but there are also significant barriers.

Together CPHs have 15 projects totalling 9.8 MW in the project pipeline, all of which have already completed basic feasibility investigations and some of which are in the process of capital raising (see Table 6). In comparison to the projects already delivered, the pipeline of projects has a strong focus on investment models (six projects). Four projects have plans to be funded via community donation and another five will be privately funded.

The pipeline also presents a greater diversity of technologies with a blend of mini-grids, energy efficiency, mid-scale solar farms, bioenergy and rooftop solar. Importantly, the project pipeline indicates a move to deliver megawatt-scale community energy, with five projects between 200–400 kW and two projects 2 MW or above. Nine projects are classified as innovative, and five as replicable

Table 6: Projects in the CPH project pipeline

CPH	Project	Summary
Ballarat	Ballarat Squash and Racquetball Centre	50 kW solar PV on community sporting centre
	Timber Training Bioenergy Boiler	400 kW bioenergy boiler for kiln drying of wood using on site waste wood
	Peel Street Precinct	Combination of wind (10 kW) and solar (36 kW) in embedded network
	Mollonghip Community Energy Hub	Onsite multiple solar PV and battery with small-scale wind operating with localised energy trading
Bendigo	Bundled packaged solar for Special Purpose Vehicle (SPV) investment	240 kW solar PV on local host sites including Bendigo Tramways (Stage 2), Heathcote Mitre10, Bendigo Golf Club, Central Deborah Gold Mine, Beck Legal and AFS Accountants
	Bendigo Social Housing Solar	56 kW solar PV on 14 community housing stock
	Rooftop solar PV investment package	219 kW solar PV on three local schools using SPV model
	Community solar farm	2 MW solar farm outside Bendigo
Latrobe Valley	Neerim South Hospital	100 kW solar and energy efficiency upgrades on a private healthcare facility
	Yallambee social impact embedded network	A smart grid solution for a not-for-profit 100-bed hospice and the interconnected Yallambee Village (96 units). Involves 330 kW PV and 100 kW storage
	Cowwarr Recreation Reserve lighting upgrade	Deliver an energy efficiency upgrade of football/netball club, including LED floodlights (5.4 kW)

	Traralgon Neighbourhood Learning Centre efficiency and solar	15 kW solar PV and energy upgrades on community facility
	Latrobe Valley community investment solar project	60 kW solar PV on local building in the Latrobe Valley owned by local investors via Special Purpose Vehicle with 10 year Power Purchase Agreement proving annual dividend, after which system is gifted to site.
	Ramahyuck Solar Farm	6 MW community solar farm
	Fulham Correctional Facility	300 kW solar PV and energy upgrades on commercial facility
<b>Total</b>	<b>15</b>	<b>9.8 MW</b>

Representatives from two of the CPHs felt there was an unlimited pipeline of opportunity for community energy in their communities. Some, however, are sceptical about the future potential for community energy, identifying regulatory barriers that limit the ability to share and trade energy in innovative ways. They further commented on the difficulties in developing the project pipeline. This indicates that a certain attrition rate of projects investigated, versus projects that proceed is to be expected.

There was a high level of uncertainty about the ability to carry the pipeline forward with current CPH funding commitment coming to an end. Most participants expect it will become the responsibility of the project host sites to take the projects forward. As one CPH host organisation representative said: "It will be up to the sponsors to make a financial commitment or seek external funding. The Hub has presented the case, identified a good return on investment process for them, now it is up to their executive and board to make a budget allocation."

Another roundtable advisory member similarly commented that: "It will depend on the other project partners to move it forward. They will need professional expertise and project management. It will be hard."

Another identified option is for the CPH to secure ongoing funding in order to "Get this pipeline to continue" (roundtable member). CPHs have been seeking additional funding and in June 2019 both the Latrobe Valley and Bendigo CPHs were notified that they were successful in their applications for a non-government grant. These grants (totalling \$35,000) will support them to deliver projects in their pipeline over the next six months. In addition, \$45,000 has been secured for each CPH for the coming 12 months from Sustainability Victoria.

The barriers related to project support listed above under '*What could be improved*' also apply to projects in the pipeline.

## 5.2. Community outreach

The purpose of CPH community outreach was to raise awareness, increase literacy on community energy and to promote the CPHs and providing local access to information on community energy. Community outreach has also enabled the CPHs to build local networks and connections with other local stakeholders.

Survey respondents consistently felt that the CPH community outreach activities enabled the community and community energy projects to access knowledge (85 per cent), specialist skills (77 per cent), relationships (77 per cent) and resources (66 per cent), including funding (58 per cent).

Communications and community engagement activities were central means of delivering community outreach, as described below.

### Communications

The three CPHs engaged in a range of communications activities to increase local awareness of community energy and access to community energy information. While a level of communications targeted the general public, a significant portion of CPH communications were more targeted towards its networks of members, supporters and project partners.

General public facing communications included:

- the CPH website
- a Facebook page for each CPH
- print, radio and TV media.

In addition, newsletters and one-on-one communications (phone and email) were used to target members, supporters and project partners. The existing networks of the CPH host organisations have been a valuable means of reaching interested members of the community. Table 7 shows a breakdown of CPH communications.

Table 7: Breakdown of various CPH communications activities

Aspect of CPH communications	Number
Media articles (newspaper, radio, TV)	188 articles
Social media posts	680 posts
Facebook followers	1,075 followers
Website and Facebook views	206,513 views

The communications contexts inherited by the three CPHs were very different. One CPH host community had low levels of pre-existing interest or knowledge in renewable energy. This CPH had a significant local learning curve to address through its communications. As one survey respondent explained: “The initial awareness of the concept of community energy was poor to non-existent.”

The other two CPHs, by contrast, had already established communications channels and had been raising the awareness of renewable energy in the community for several years.

#### What worked well

Overall, the CPHs deployed a range of communications methods targeting both engaged stakeholders and the general public. As a result, 71 per cent of survey respondents said the CPH communications were ‘very effective’ or ‘effective’ and 84 per cent of respondents felt that CPH communications content was relevant and useful. Responses to communications were most positive in Bendigo and most mixed in the Latrobe Valley.

The CPH acted as a trusted local broker of information on a range of renewable energy and energy efficiency options and services. The CPH host organisation saw a need to be accessible as a source of trusted information firsthand, with one stating: “The projects I’ve been working with, the not-for-profit groups, they don’t understand what renewable energy could mean for them. A lot of the work has been educating them and assisting them to determine future options. We are a trusted source of local information. Especially in the solar space – we are able to give them an unbiased appraisal.”

To help provide information and education, the CPHs developed useful tools such as a bioenergy guide, webinars, project prioritisation tool and videos.

### What could be improved

Interview and focus group participants all identified the central importance of communications to achieving CPH objectives. There was a common sentiment that communications should have been a greater focus from earlier in the program. As one survey respondent commented: “Some high-level communications and engagement with people earlier on would have helped a bit more.”

Interview and focus group participants recognised that the ‘learn by doing’ approach to communications worked to some extent, but the real value is in getting specific training and accessing communications expertise. As one CPH host commented, they really: “Needed to employ a communications officer – everything we do is about community engagement and communications. We really should have had that upfront to build momentum.”

To address this, one CPH has gone on to employ a communications officer and another has accessed consultants where needed. In addition, in October 2018 (following the year one program evaluation), all three CPHs went through a communications and strategic planning process with SV. The output was a detailed communications plan for each of the CPHs to be deployed through to the end of the program.

Several interview and focus group participants felt more could be done to collate existing resources in the community energy sector and to make these centrally available, for example, on the CPH website. There was also a recognised need to translate existing resources to be context and audience appropriate. In addition, there is a need to capture and communicate the learnings of the CPH pilot program, to share that information beyond the key people involved.

Some communications challenges emerged when one CPH began to seek interest in a community investment project, given Australian Securities and Investments Commission rules regarding prohibitions about publicly seeking investment. After being given legal advice, they were able to understand the rules and found ways to appropriately communicate about the project. This learning has now been shared among the three CPHs.

The recommendations that emerged from various data sources to enhance communications were:

- use stories of success
- increase local media (newspaper, radio, TV)
- resource communications activities early in CPH and project timelines
- have a community energy information stand at a local council building or other similar facilities or cafes.

## Community engagement

Each CPH carried out a range of community engagement activities, although community engagement was given different levels of emphasis by each CPH and at different times over the two-year pilot.

Community engagement activities included:

- running information sessions and events
- site tours to operating projects
- outreach and meetings with community organisations and project partners

- presentations at symposiums and conferences
- market stalls.

In interviews, CPH host organisations and staff clearly indicated an understanding that community engagement is highly important to achieving CPH objectives. Given the CPH role is to facilitate community energy projects, community engagement focused on project-related activities and building relationships and partnerships with project partners.

Amid the various objectives of the CPHs and in the context of limited time and resources, relatively little emphasis has been placed on community engagement activities purely for the purpose of raising awareness and education. As such, community engagement to date has centred on scoping potential projects, including identifying potential project partners and host sites, and working with project partners to deliver community energy projects.

Interview participants from all three CPHs reflected on the important role community engagement played in generating interest and securing interested project partners. One roundtable interviewee stated: "I don't think people have brought ideas to the Hub, I think we have had the ideas and then gone out to generate interest and support."

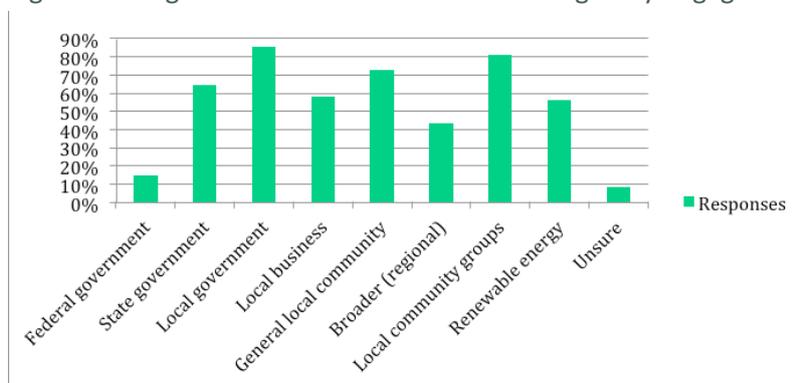
All three CPHs have hosted public events, often as part of the project scoping or delivery process, and these have helped to grow the CPH networks and relationships (see Table 8). Lessons from the pilot around the need for capability building have been recognised and SV is planning a program of events for the rest of 2019 that include capacity building in these areas.

Table 8: Breakdown of various CPH community public events activities

Aspect of CPH community engagement	Number
Number of CPH events held	114
Total number of participants across all events	4,863

Through their community engagement activities, the CPHs regularly collaborated with a range of stakeholders. Survey respondents identified that CPHs regularly engaged with a range of local, regional, state and national stakeholders, as shown in Figure 4.

Figure 4: Range of stakeholders that the CPH regularly engages with [Q.15]



When asked to assess CPH community engagement activities, 76 per cent of survey respondents said they were 'very effective' or 'effective.' Responses to community engagement were most positive in Bendigo and most mixed in the Latrobe Valley. This likely reflects the lower base of awareness of and engagement with renewable energy and community energy in the local community in the Latrobe Valley.

Of the survey respondents who said that community engagement had been ‘very effective,’ 89 per cent went on to also say that networking, partnerships and collaboration had been very valuable and enabling for the CPH and/or local community energy projects. Those who felt engagement had been ‘somewhat effective’ also felt the value leveraged from networking, partnerships and collaboration was less. Networking, partnerships and collaboration have been most valuable and enabling in Bendigo, where there was already a strong and established level of interest and networks in community energy. This indicates that the value of community engagement builds over time.

The purpose of the Hubs is to get out there and support people to do it for themselves. We ultimately want locals to invest millions in the local energy system. Sixty-five people have expressed interest in investing. We have over 150 potential project host sites with direct engagement – and we have done energy assessments on over 100 sites. That’s a lot of engagement!

**CPH host organisation representative**

### What worked well

Each CPH built strong local relationships that supported community engagement and project success. The representation of the roundtable advisory group members in their various organisations and community networks was perceived to be a strength, opening doors for community engagement. One roundtable advisory group member stated: “We probably have the most diverse representatives at the roundtable that I’ve ever seen. They then have links back [to their organisations] to help projects progress.”

Two CPHs developed a partnership approach to support other local organisations to deliver community energy projects. This approach is helping to deepen CPH engagement with their communities and broaden feelings of project ownership.

When delivering a project, the CPH often supported local project partners to lead on project-level community engagement. For example, one host stated the benefits of this: “We work with the local community so there is long-term ownership of the project. It is a good process to engage the relevant sectors of the community.”

Such partnerships mean the CPHs have been able to fit in with existing structures and activities. Interviewees from one CPH felt that community engagement has been facilitated through having consistent staff and volunteers and a space where people know they can go for information. Community members and project partners really valued the opportunity to visit and learn from others through the site visits organised by the CPH to operating community energy projects.

### What could be improved

While all CPHs recognised that community engagement is as important as technical knowledge and financial feasibility, all CPHs struggled to prioritise community engagement activities. It is worth noting, however, that this was more the case in year one of the pilot than in year two. As the CPHs implemented projects, they successfully involved project partners in delivering community engagement activities to support the success of the project. For example, to deliver a project funded through community donations, it needs outreach and engagement with the community who will become your donors.

It was common for interview and focus group participants to raise regrets that there was not more emphasis on community engagement in the early phases of CPH establishment. In hindsight, participants recognised that community engagement is a specific expertise and it took time for the CPH to develop (or source) the capacity to plan and deliver effective community engagement.

There was a recognition that: “There will always be more and you can always miss people. The people that are easier to engage are the ones that are already connected in some ways. The Hub’s challenge is to broaden out from their existing network” (roundtable member).

So far, CPHs have primarily expanded their engagement by tapping into the networks of project partners, rather than the general public. This could be an area for future focus. As described in Section 6.1, this focus of engagement has limited the ability for the CPHs to significantly increase the general community’s awareness of community energy. Interview participants recognised that targeted outreach to vulnerable groups such as youth and low income has not occurred and is an important future activity.

The community solar info sessions put on by the Hub led to some great increased knowledge in the local community. Over 115 people attended the session in [town]. People appreciated hearing about batteries and what technology is available. For people who are new to the area, it was a good opportunity to network and make contacts.

**CPH staff member**

## 6. Evaluating CPH outcomes and impacts

The CPH pilot aims to support community energy projects in such a way that:

Reduces greenhouse gas emissions, and mobilises local action on climate change... while building the knowledge and participation of what community energy is locally, helping to build local capacity and skills, and making sure the benefits remain local and are realised. (CPH website 2018)

Alongside facilitating the delivery of projects, the CPHs have an objective to increase local capacity to facilitate community energy and increase local access to information and support on community energy.

The CPHs delivered a range of social, technical, environmental and economic outcomes, as elaborated below. These outcomes are understood through both qualitative and quantitative data analysis.

### **Participants in the CPH offered their reflections on the value of being involved:**

A highlight [of the CPH program] has been the breadth of the projects, getting out and exploring opportunities with the communities, working on projects that are very rewarding, that benefit the organisations involved and reducing emissions. Working as both a project control group member and consultant – working with dedicated and passionate group of people. I've learned a lot personally.

#### **Project control group member**

This was a great experience; we didn't just achieve the project – we demonstrated enthusiasm about action on climate change for other people that we talked to. This has created positive spirals in our community – it has generated enthusiasm and positive approaches. They are helping to make us renewable and sustainable.

#### **CPH project site partner**

### 6.1. Social

The objectives of the CPH pilot program include, 'increasing local support to facilitate the delivery of community energy' as well as 'increasing local capacity and capability to facilitate the delivery of community energy.' Both of these objectives have been achieved, as illustrated below.

In addition, interview participants raised the importance of the CPH to realising a number of other social outcomes, including:

- providing leadership and a much-needed community voice in the transition to renewable energy
- enhancing social connections, especially for the communities living around the CPH projects that have been delivered
- bringing diverse people and organisations together around a common cause
- providing a platform for communities to act, which builds a sense of empowerment
- increasing a sense of pride of place and community.

One thing that is happening is that communities are seeing themselves as distinct communities and a legitimate voice – that’s good for community energy, but also for those communities more broadly.

**CPH host organisation representative**

Of the survey respondents, 30 per cent feel more connected to [their] community as a result of being involved with the CPH.

### Raising awareness and support for community engagement

The CPHs directly engaged, involved and benefited a large number of people in their communities, as shown in Table 9. This engagement had outcomes for raising awareness and support for community engagement.

Table 9: Number of people directly engaged, involved or benefiting from CPH activities

Activity	Number of people
People actively involved in delivering projects	139
People who have attended a CPH meeting or event	4,683
Members benefiting from community energy projects delivered with CPH support	14,454
<b>TOTAL</b>	<b>19,276</b>

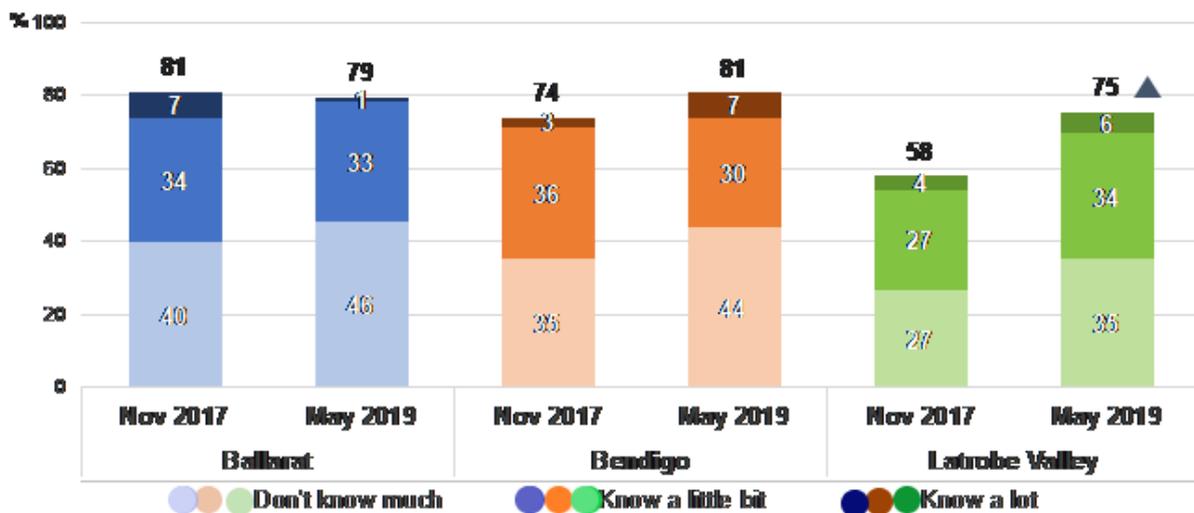
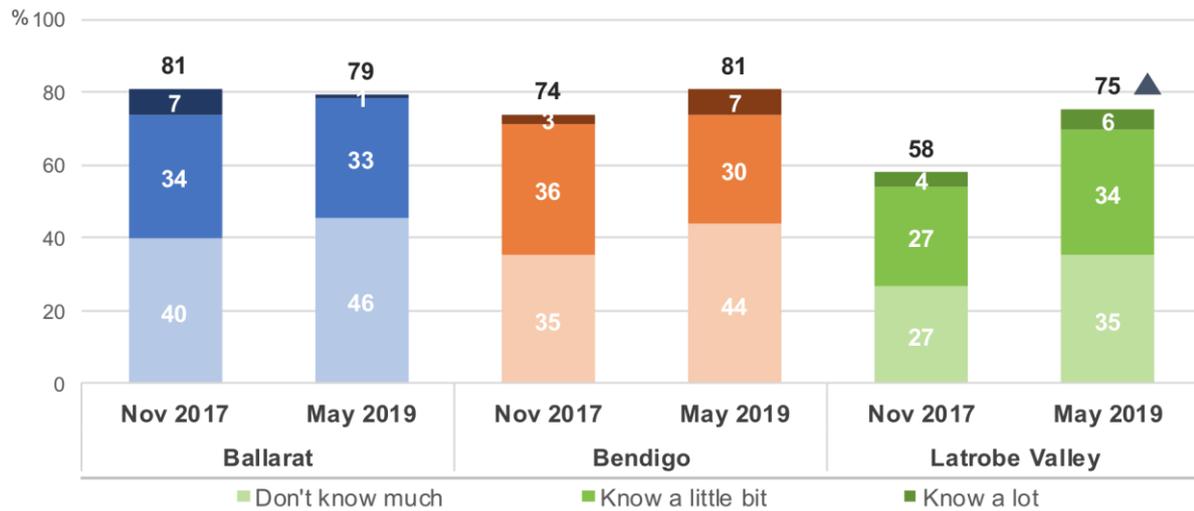
In addition, the CPH Facebook pages as of June 2019 have 1,075 followers combined and the CPH website and Facebook posts received 206,513 view. This level of communications and engagement has influenced the awareness-raising outcomes of the CPH.

Increasing local knowledge and support for community energy occurred to a greater and lesser extent in different segments of each CPH community. A majority of CPH activities (project support, as well as communications and community engagement) focused on segments of the community with an active interest and involvement in community energy project delivery. This included members of the roundtable advisory group, project partners, project host organisations and other interested individuals (e.g. members of an email list). Among this cohort, there was a noticeable increase in people’s levels of awareness of support for CE, as revealed in the evaluation survey. The segment of the community with a lower rate of increase in levels of awareness and support for community energy is among members of the general public. This is the cohort included in the Wallis survey.

SV did the Wallis survey to evaluate the role of the CPH pilot program in changing community attitudes. A community baseline survey was carried out in November 2017 to understand local perceptions and awareness about community energy in each of the three pilot CPH communities. A follow-up survey was carried out in April 2019 to determine changes in community attitudes.

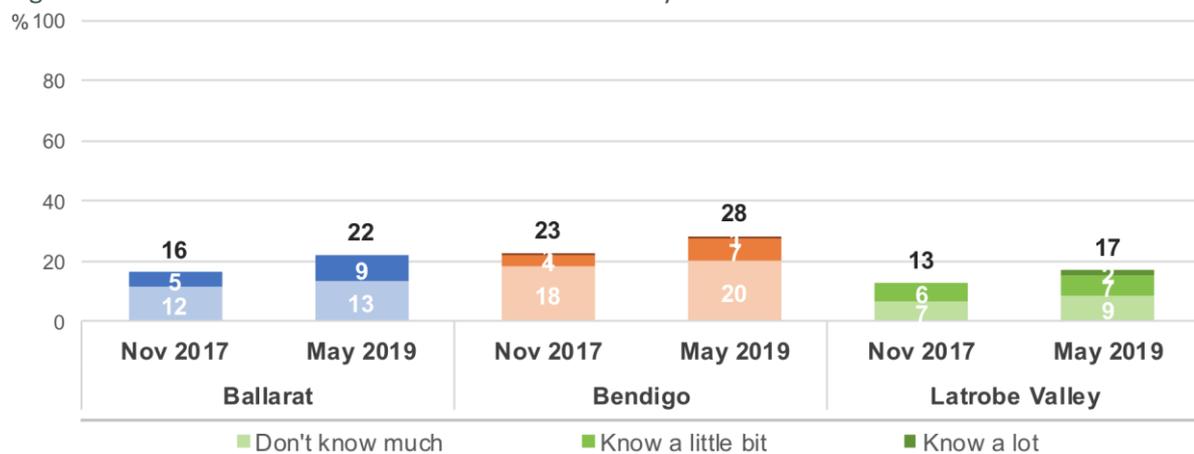
The Wallis survey found that overall awareness of community renewable energy increased among participants from two of the regions (the Latrobe Valley and Bendigo), as shown in Figure 5. The depth of participant knowledge about community energy remained fairly static. Of note was the growth in the Latrobe Valley, which had the lowest level of community awareness of community energy in 2017 and a significant increase to 2019 (from 58 per cent in 2017 to 75 per cent in 2019), as illustrated in Figure 5. In Ballarat, awareness of community energy decreased marginally (by 2 per cent).

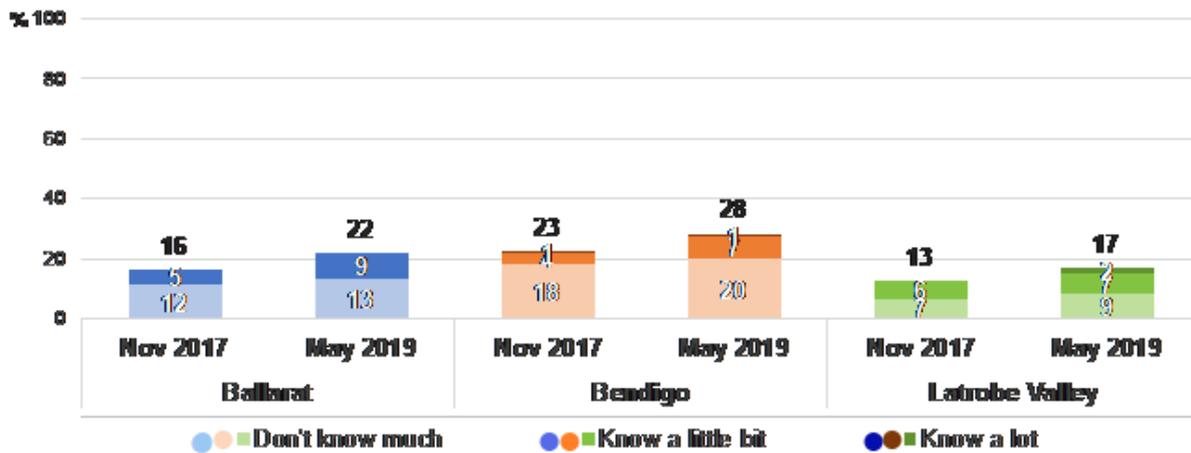
Figure 5: Awareness of the concept of community renewable energy in each CPH community



The Wallis Research also found a slight (5–6 per cent) increase in awareness of the CPHs in each region, with approximately one in five residents in all regions knowing something about the CPH, as shown in Figure 6.

Figure 6: Awareness of the CPH in each CPH community

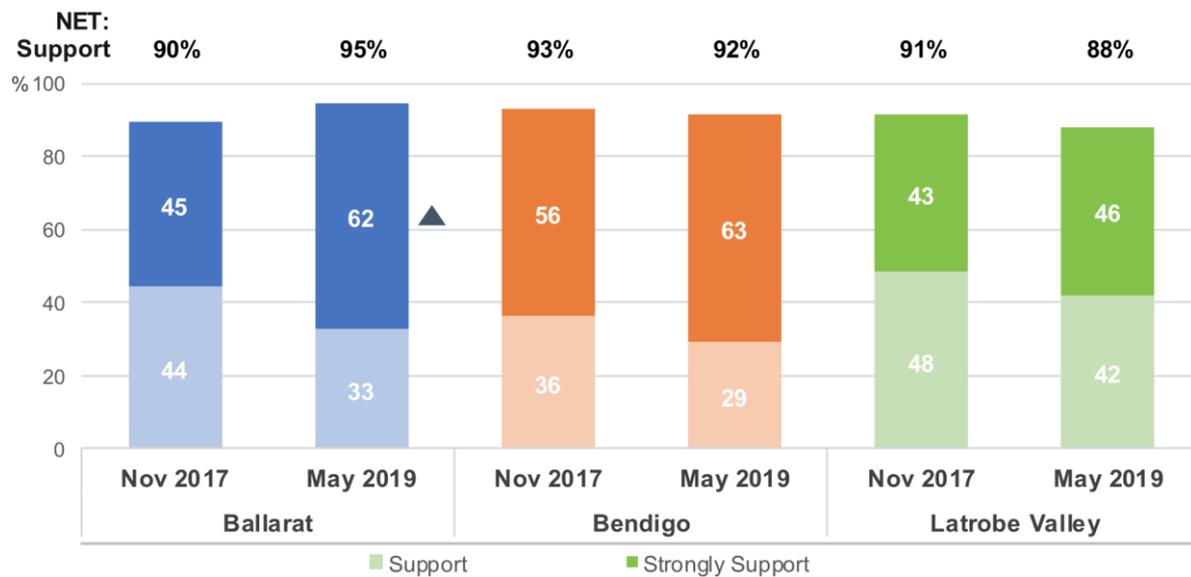


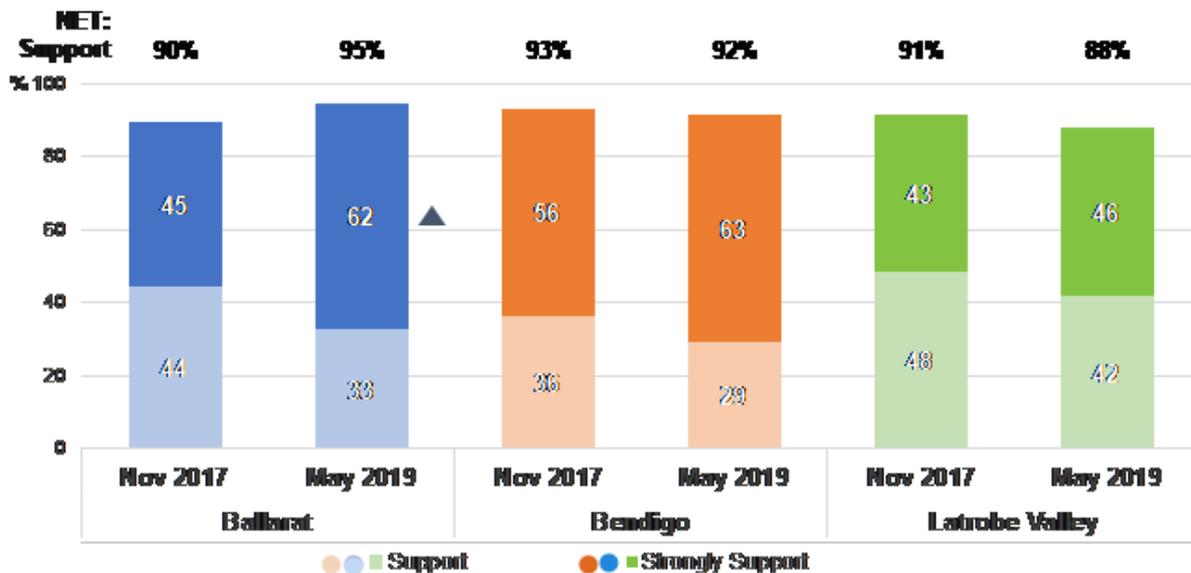


In addition, the Wallis survey identified a medium level of broader awareness of specific community energy projects delivered by the CPHs. In the Ballarat region, 65 per cent of participants had not heard of any of the projects; in Bendigo, 52 per cent weren't aware; and in the Latrobe Valley, 46 per cent were unaware. This could be influenced by the fact that many CPH projects were completed in the two months preceding this follow up survey and their profile in the community might still be growing.

How community awareness of community energy and the CPH translates into support for community energy is shown in Figure 7. Support for developing local community energy projects remained high across all regions (more than 88 per cent), with particular growth in the Ballarat region. However, support for community energy among survey respondents dropped by 3 per cent in the Latrobe Valley.

Figure 7: Support for developing community energy in each CPH community

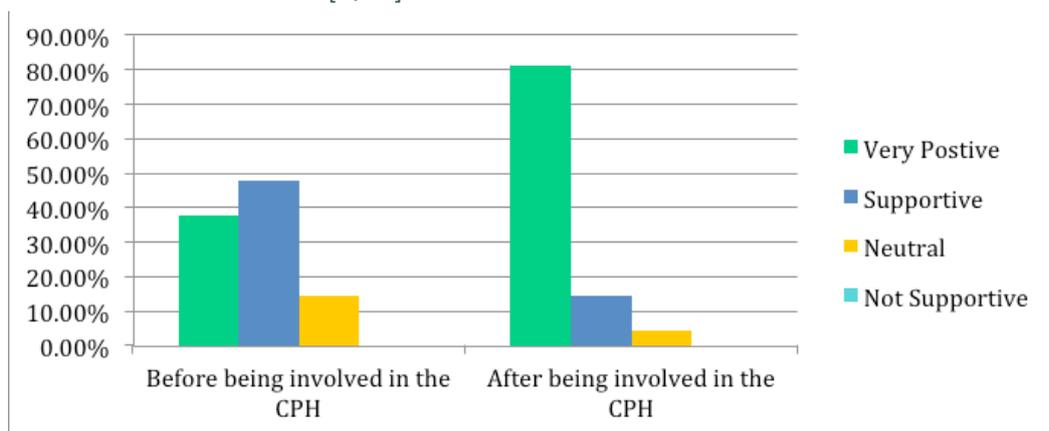




The survey conducted as part of this CPH evaluation targeted respondents who had an existing level of contact and involvement with the CPH. Among this cohort, there was significant self-reported growth in people’s level of support for both community energy and renewable energy development. Indeed, 80 per cent of respondents felt ‘very positive’ about renewable energy development in their area as a result of their involvement in the CPH. Of these, 58 per cent had gone from being ‘neutral’ or ‘supportive’ to ‘very supportive.’

Positive shifts in attitude were significant across respondents from all three CPH communities and were consistent across all stakeholder types. While no respondents started out being unsupportive of renewable energy development, the number of respondents with a neutral attitude went from seven down to two, as shown in Figure 8.

Figure 8: Attitudes towards renewable energy development in the local area before and after involvement with the CPH [Q.24].



From the CPH evaluation survey, 92 per cent of respondents thought the CPHs increased local support and understanding for renewable energy within their general community. The remaining 8 per cent were neutral; no respondents thought there had been no increase.

In the focus group, an SV staff member reflected on: “How far Latrobe Valley has come – they started from such a low base of community knowledge and interest in community energy and renewables, and it wasn’t an organic start, but they have exceeded expectations.”

An interview participant from another CPH described the increased optimism around community enthusiasm that is growing now that projects are up and running in their community. A CPH host explained how the CPH increased awareness of community energy: “Through word of mouth it has influenced our partners and their patrons – hospitals, healthcare services, cemetery trust.”

## Building local capacity

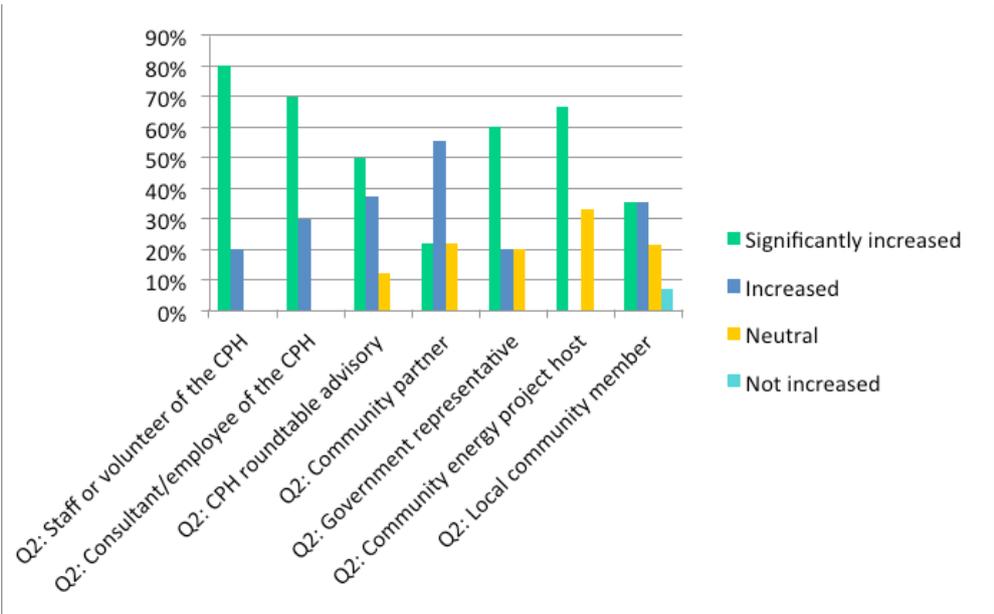
Increased local capacity and capability to deliver community energy is a stated objective of the CPH pilot program. All participants in the evaluation identified that building local capacity to deliver community energy projects has been a major benefit of the CPHs and this occurred on multiple levels across CPH staff, volunteers, contractors, host organisation members, roundtable members and project partners. In addition, each CPH developed networks and connections that supported the delivery of community energy projects, as well as creating resources to share and capture key learning.

Absolutely it has built capacity, so many different skills and capacities and people – not just the Hub group, but the broader people in [Hub area] and the host organisations. I think that’s one of the strongest outputs.

**SV staff**

Almost half (46 per cent) of survey respondents identified that knowledge of community energy had ‘significantly increased’ in their organisation or group, and another 38 per cent said it had ‘increased,’ 16 per cent were neutral and 2 per cent said it had not increased. Increases in community energy knowledge were consistent across all CPHs, indicating that regardless of the different base levels of knowledge at the beginning of the program, all CPHs increased their knowledge through the program. The stakeholders who reported the highest level of knowledge development were CPH host organisation staff and volunteers, CPH staff and contractors, government partners and community energy project host sites. Local community members who were interested or involved in CPH activities reported the least increase in knowledge. This is depicted in Figure 9.

Figure 9: Percentage and type of survey respondents who felt that knowledge of community energy increased in their organisation [Q.2 and Q.30]



All participants who were interviewed identified that the CPH experience provided them with increased capacity and learnings across a range of skills:

- knowledge of community energy business models
- business case development
- program and project management
- community engagement
- communications
- community development
- technical aspects of community energy, such as solar PV and energy efficiency assessments
- investment models
- legal and governance aspects of community energy.

As evidenced in this list, delivering community energy requires competency across a broad range of expertise. While one CPH had a high level of existing capacity to deliver community energy, they expanded their capacity to deliver new models of community energy and deepened their knowledge of various community energy competencies. The other two CPHs successfully built a range of capabilities through the CPH pilot program.

Following on from the year one evaluation, SV developed and undertook a skills gap audit to support professional development of the CPH host organisations and roundtable members. A review of the skills audit results indicated that the requests for skills development varied across the CPHs, but included skills such as digital communications, community engagement, communications, marketing, income generation, feasibility studies, battery storage, solar PV – incentives, pumped hydro, wind, solar hot water, energy efficiency, electrical design and maintenance.

To meet this gap, CPHs were resourced with \$35,000 additional funding to support this capacity building. The CPHs approached this in different ways such as site visits, awareness sessions, resource development and skills sharing.

Several interviewees referenced the importance of the collaborative governance approach to skill sharing and for accessing a range of expertise. Through being involved, roundtable advisory group members and other host organisation and CPH volunteers were able to both contribute and gain new capabilities. As one person described: "There have been lots of learnings for the whole team – in terms of technical aspects, the investment model, grid connection, engagement with community. Through the roundtable and the working groups, 20-plus people have raised our capability."

On a number of occasions, CPHs worked with local consultants, and in the process, enhanced their knowledge and ability to deliver community energy specific services. For example, a local law firm increased their familiarity with energy regulation and community share offers needed for investment-based projects. In Ballarat, three individuals built their skills and went on to establish new consultancy services. This means the CPHs were able to source the expertise required locally (rather than needing to go to external consultants) and these skills are now available in the community in the future. However, it was also noted that this capacity building process takes time and, as such, affected project timelines.

When [the CPH] started out doing the solar studies for potential project sites, we were really happy to go with [a Melbourne-based consultancy] because we have that relationship and we would get a good product. But we also got one of our members to be part of that work so they could learn and upskill. Now this person has developed his skills and experience to be able to do these solar studies himself using the process and tools that he learned, and he provides a really good product, really quickly and tailored it to what the host site and the Hub are after.

**CPH host organisation representative**

In all instances, CPH staff brought existing relevant knowledge and experience to their roles and the CPH: "really benefited from that" (roundtable advisory group member). In addition, the value of having increased CPH staff and volunteer capacity in the niche skills and knowledge required to support community energy was widely recognised.

The presence of staff and volunteers with niche community energy capability has both sped up the time required to deliver projects and increased the ability to share skills with local project partners and contractors. As one CPH staff commented: "Obviously as you become more skilled it becomes easier."

Being able to retain staff and volunteers who have the required skills was identified as integral to the future of the CPH. As one CPH host organisation member expressed: "If the projects continue depends to a large extent on whether the project officer continues and if we can continue to get funding for the role, and if they want to continue."

In reflecting on the impact of the CPH on building capacity in the community, the CPH hosts felt this was difficult to measure. The project partner interviewees, however, were all very concrete about their learnings. As one project partner stated: "I have learned a lot – I knew nothing at the start, now I know about the solar, batteries and greenhouse gases."

Another commented that the project involved: "Learning as you go so that you know what you are talking about and can get others in the [community organisation] up to speed."

In particular, project site organisations stated an increase in confidence and ability to tackle initiatives that flowed on from their project, with one interviewee stating: “I was reasonably aware of what we were trying to achieve, but the documentation of the process, supported our awareness and focus on climate change. As a consequence, we are looking at multiple projects around climate change or energy efficiency – including insulation, LED lighting. They were on the radar before, but this process has increased the priority and urgency, brought it into a practical reality.”

In the survey, 60 per cent of respondents felt that the skills, knowledge and networks they developed through the CPHs will aid them in future employment opportunities. This has potentially significant future ramifications for local employment.

## Networks and connections

The CPHs ability to build local relationships and networks increased the capacity to rapidly and successfully deliver community energy projects. Significant relationships and networks were established around each CPH, through the roundtable advisory group, the CPH working groups, project partners (e.g. local businesses and organisations), project host organisations, the SV regional representatives and interested local individuals.

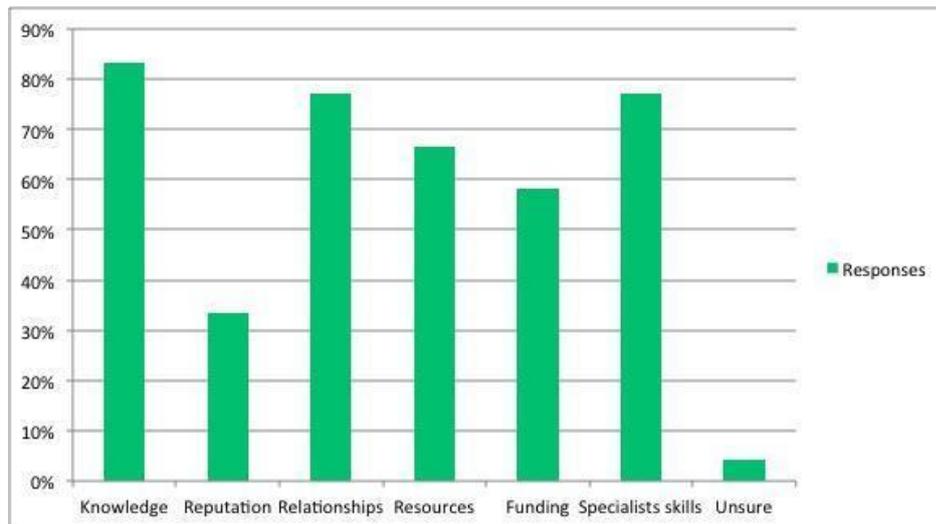
The Hub builds networks, connections, alliances, linking people with a good idea to others and finding that connection – it’s really useful.

### **Roundtable advisory group member**

As mentioned in Section 5.2, the CPHs regularly interact with local and regional community organisations, businesses, service providers in their vicinity, as well as with local and state government representatives and the renewable energy industry.

Survey respondents consistently felt the CPH networks and collaborations with other stakeholders enabled the community and community energy projects to access knowledge (85 per cent), specialist skills (77 per cent), relationships (77 per cent) and resources (66 per cent), including funding (58 per cent), as shown in Figure 10. CPH networks and collaborations were seen to play a less important role in terms of accessing reputational benefits.

Figure 10: Benefits identified by survey respondents that the CPH has been able to access as a result of their networks and relationships [Q.16].



Through building relationships and networks, the CPHs have developed collaborations with stakeholders to deliver projects and access resources. Interviewees described how the CPHs have built a range of new collaboration with:

- regional thinktank groups.
- funding organisations (e.g. Bank Australia)
- energy retailers (e.g. Powershop)
- the Victorian Community Solar Alliance
- large-scale renewable energy developers.

Interviewees also identified potential to continue to grow collaborations, especially with the renewable energy industry.

### Sharing resources

The three CPHs had high levels of interaction throughout the program, often facilitated by SV workshops. These interactions enabled CPHs to share resources and knowledge, leading to efficiencies for all three CPHs. During interviews, CPH staff commented on the different skillsets of the different CPH staff and volunteers, and how they used that to their advantage to share knowledge on certain technologies, financial models, legal and governance aspects.

Throughout the two-year pilot, the three CPHs recorded 177 inter-CPH interactions, in which they shared information, resources and learning. The CPH also developed and shared resources in an effort to support each other’s capacity building. For example, a range of legal templates were developed.

In addition, the CPHs built connections with other community energy groups in Victoria to share knowledge and generate shared resources. As an SV staff member explained: “We have always looked for opportunities to connect with other community energy groups in Victoria. That is why we resourced the small-scale community solar guide and its webinars, and the train the trainer session, and connected groups to finance toolkit training and microgrid and storage workshops.”

Two participants raised concerns about the legacy impact of the knowledge gained through the CPH pilot program and the need to share it. As one SV staff person expressed: “I think there is a dense nut

of technical information that they are happy to talk with people about, but they don't have that information published anywhere – energy generation, energy management, legal information, financial information. It would be good to share this information better. There is a risk that this information is too concentrated in a small team and could be lost. It would be good to publish it or train others up.”

It is recommended that this information is harvested and made public via the CPH, SV or sector-based websites such as the Coalition for Community Energy.

## 6.2. Technical

An objective of the CPH program was to ‘facilitate the delivery of at least one local community energy project in each CPH area,’ to ‘facilitate the development of a pipeline of local community energy projects’ and to ‘support communities in establishing their renewable energy projects.’

Survey and interview participants acknowledged the value of government support (both funding and SV’s approach to implementing the program) to increasing uptake of community energy and to speeding up the project development process. As described in Section 5.1 and summarised in Table 10, the CPHs have far exceeded these objectives, having completed 15 projects and having another 15 in the pipeline.

Table 10: Summary of projects the CPHs supported to completion and those in the development pipeline at 30 June 2019

Project status	Definitions	Number of projects	Renewable energy capacity(MW)
Completed	Projects have secured capital finance <i>and</i> have completed installation or will do so in the following six months as at 30 June 2019	15	1.35
Pipeline	Projects require continuing feasibility work and/or are seeking capital finance as at 30 June 2019	15	9.82

The Hub is enabling us to progress faster, at a much quicker pace. We are on the cusp of real progress, with so many projects in the pipeline.

**CPH host organisation representative**

Each CPH has delivered a combination of replicable, innovative and flagship projects. These projects have had technological outcomes in terms of increasing the uptake of renewable energy and energy efficiency, as well as generating community energy business model innovations and generating support for the renewable energy sector in Victoria.

### Business model innovation

The CPHs have developed a number of innovative projects that are providing case studies for what is possible for communities to achieve with community energy. Through the pilot program, CPHs were able to explore innovative community energy business models and technologies which otherwise may be deemed too high risk.

As one consultant to the CPHs explained: “They have been innovative and also we have been able to cover a lot of new territory.”

In addition, because the CPHs are committed to community energy and to delivering projects that deliver community benefit, they have been motivated to problem solve and find innovative solutions to challenges that would otherwise stall. The links between the three CPHs and each of their respective networks of roundtable members, project partners and volunteers, as well as the support from SV, has also been a valuable source of knowledge to help overcome the challenges associated with innovating new business models.

Snapshots of innovative projects are outlined in Table 11.

Table 11: Innovative projects delivered or being investigated by the CPHs.

Project	Stage	Detail
Solar PV for Community Housing	Operating	Addresses social equity issues by developing a community energy project on social housing that benefits some of the most marginalised and disadvantaged in their community. “Social housing residents have been missing out on the benefits of solar all this time, this project will give them an opportunity” (CPH staff).
Biomass boiler	Feasibility	Scoped and delivered business plan for an industrial laundry in a Disability Service Provider to switch its gas-fired boiler to 2 MWt biomass. “We have been able to show what would get biomass projects over the line” (CPH consultant). This study has supported other bioenergy projects to get underway.
Ramayuck Solar Farm	Feasibility	A medium-scale solar farm (5–6 MW) on land owned by a local Indigenous co-operative that involves a range of local and state stakeholders.
Mollonghip Power Hub	Feasibility	A village-scale settlement developing a local energy trading mini-grid project with solar PV and battery using farm sites for larger scale solar.
Licola Wilderness Village	Construction	Solar PV and battery storage with a control system to deliver heating and lighting and control system for an off-grid community.
Yinnar Solar Street Lighting	Construction	Working with local government asset and procurement teams to deliver solar street lighting to meet the long-term wishes of the Yinnar community to illuminate the walkway from the sporting recreational reserve to the town centre.
Bendigo mid-scale solar farms	Feasibility	Delivering investment projects for mid-scale solar (2 MW); a size and model that can be replicated in communities where land and connection suitability exists.
RE for Hospitals	Construction	526 kW solar program in three stages across two health campuses. Provided options, expertise and resources to identify and design solutions with funding plan. Deliver cost reduction while complying with department centralised procurement and debt requirements. Allows services and employment to be maintained.
Yalabee Aged Care microgrid	Capital raising	An embedded network in an aged care facility using solar PV and battery technology.
Renewable energy for schools	Feasibility	An investment project using Special Purpose Vehicle arrangements with solar packages across multiple schools, each under the 100 kW threshold.

As a result of these innovations, the CPHs have successfully demonstrated new models of community energy, which can act as case studies for future projects. Because CPHs are established to support

the uptake of community energy, they are committed to sharing resources and the learning needed to replicate these models.

## Supporting the renewables sector

The CPHs are supporting renewable energy development in two key ways:

- supporting the installation of renewable energy through community energy projects
- increasing local awareness and support for community energy and renewable energy.

Although the contribution of CPH projects may be relatively small in terms of MW of installed capacity (compared to large corporate projects), they involve a large number of people and ensure local communities benefit from renewable energy.

As evidenced in Section 6.1, the CPHs have increased community support for community energy and renewable energy, particularly among community members that were involved in the CPH or in a CPH-supported project. Increases in support for community energy were lower among members of the general public who had no direct contact with the CPH or a CPH-supported project.

Interviewees were unpresuming about the CPHs' impact on achieving the broader Victorian renewables targets, given the development of large-scale renewable energy projects and the amount of rooftop PV currently being deployed.

One CPH host organisation member stated: "I don't know if we have seen much of a shift [in public attitudes to renewable energy as a result of CPH activities]. This region is pretty switched on – in every direction you can see wind farms."

However, he went to recognise that: "Perhaps what [the CPH] has done is taken the community through to a plan of action. It has showed there is a case to follow through and make these things happen... So, it's played a role in transforming awareness into actuality."

Some of the ways in which interviewees and focus group participants considered that the CPHs contributed to the renewables sector in Victoria were:

- contributing to the momentum and mainstreaming of community energy
- providing case studies, support and confidence to encourage communities to establish community energy projects
- demonstrating the added local benefits of community energy in terms of social and economic outcomes
- increasing the number of people who have had direct involvement with and benefit from renewable energy
- unlocking new community energy models that are replicable
- supporting the social sector to invest in renewable energy, where they otherwise may have not been resourced to do so (e.g. disability employment providers, social housing, health providers)
- building confidence of the CPH host organisations to be more engaged in community energy
- providing a channel for new renewable developers to speak to the community.

It is difficult to forecast the future impacts that may flow from CPHs activities. It is likely that CPH activities to date will continue to affect local outcomes, and that future projects will continue to build this impact. As one CPH host stated, they are now increasingly connected and driving renewables in their region: "We are involved in many discussions – bulk buys, virtual power plants,

pumped hydro storage, 60 MW solar farm, a local energy retailer.” The future project pipeline holds promise to continue the valuable work already delivered through the CPHs.

## 6.3. Environmental

Reducing greenhouse gas emissions is an objective of the CPH pilot program. This has been achieved through measurable, direct emissions reductions as a result of installed community energy projects, but also through indirect emissions reductions associated with behaviour change and future planned energy efficiency upgrades.

### Direct greenhouse gas emissions reductions

CPHs contributed to direct greenhouse gas emissions reductions through the delivery of both renewable energy and energy efficiency projects in the community. In some instances, energy efficiency has been a significant component. For example, the plans for one solar PV project were scaled down, saving \$120,000 in capital costs by ensuring that old air conditioners were replaced with more efficient ones.

Direct greenhouse gas emissions reductions as a result of the projects delivered are 1,839 tCO<sub>2</sub>e per year and the projected reduction in greenhouse gas emissions from projects in the pipeline is 9,615 tCO<sub>2</sub>e per year. Over a 25-year period, these projects are modelled to deliver 24,469 and 125,000 tCO<sub>2</sub>e respectively.

For many participants, greenhouse gas emissions reductions and action on climate change are driving motivators behind their community energy projects.

As one community project interviewee explained: "For our project, our selling point wasn't just reduction of costs. Our members were just as interested in how many emissions we were saving. We will save 50 tonnes this year, and that will grow to 100 tonnes per year."

For others, however, achieving reductions in the cost of electricity was a primary motivator, alongside an appreciation for the positive environmental impacts from renewable energy and energy efficiency projects. There was also a recognition that reductions in electricity bills can support further emissions reduction by freeing up finances for future actions: "The cost of living impacts how active people can be, in regard to what they can do at home – putting solar or insulation, double-glazing and so on" (CPH staff).

The emissions reductions are significant – we provide that data to all the projects we support ... It definitely has an impact on the community organisations we work with in terms of reducing energy usage and cutting energy costs.

We make sure that the financial and environmental benefits have been delivered and understood – and how that translates to greater wellbeing in the local area.

**CPH host organisation representative**

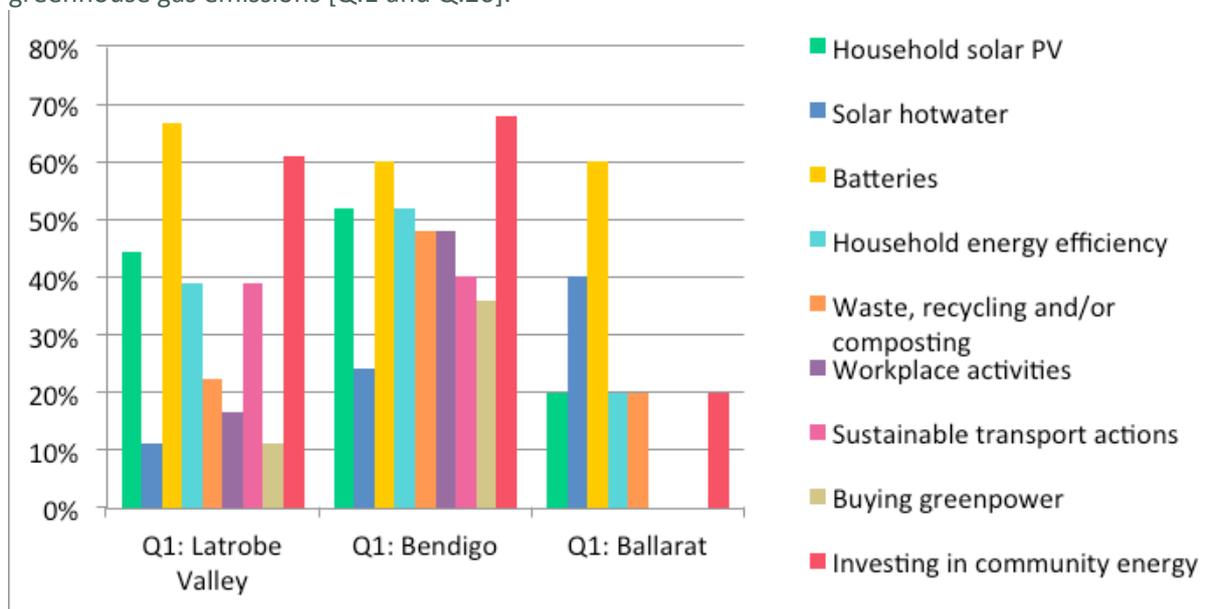
## Indirect emissions reductions

The CPHs have also affected indirect greenhouse gas emissions reductions through encouraging individuals and organisations to think more about their energy choices and behaviour. Almost all (96 per cent) of survey respondents identified that being involved with the CPH led them to think about other ways they can reduce their greenhouse gas emissions; only two respondents did not.

The actions that respondents are considering are shown in Figure 11, with the two most popular options being installing batteries and investing in community energy projects. The range of activities being considered and the number of people considering each option is highest in Bendigo, possibly reflecting both their level of pre-existing community interest and engagement with the CPH host organisation and also the identified strengths of the Bendigo CPH’s communications and engagement activities.

However, it is worth noting that results in the Latrobe Valley and Ballarat are also impressive in this regard. While value of long-term behaviour change as a result of people becoming engaged and in the CPHs is difficult to measure with certainty, these changes in people’s thinking are certainly positive.

Figure 11: Percentage of survey respondents who were considering actions to reduce their greenhouse gas emissions [Q.1 and Q.26].



One roundtable group member described how they witnessed a community partner: “change their thinking about alternatives to fossil fuels... [they are now] looking at running their places more efficiently and they are seeing the benefits of running things on renewables rather than diesel.”

Participants commented on perceived environmental flow-on impacts via organisations that are engaged with the CPHs. For example, one community organisation involved in the CPH is directing the savings made as a result of solar installations towards other sustainability education programs in the wider community.

There was also a witnessed increase in literacy about climate change, with one host describing how it was more meaningful to describe the linkage with bushfires and heat stress to understand the benefits. The increase in local awareness and how engagement around and promotion of a

community energy project can flow through to household actions was commented on by a roundtable member: "I had a conversation on the weekend about the spin-off impacts of [community energy project] – for the members and energy efficiency. Certainly, also what can happen at home in regard to energy efficiency and solar. The media coverage of the projects also influences that."

Many of the project partners that the CPHs have worked with are now considering further renewable energy or energy efficiency measures they can take.

## 6.4. Economic

The CPHs had a range of economic outcomes both for local communities and the government. The CPH program has leveraged the government’s \$900,000 investment in the program and SV’s \$260,000 in-kind contribution to attract a significant level of community contribution in the form of in-kind voluntary labour, donations and project host investments in community energy projects.

The projects the CPH has supported are providing cost benefits to the project hosts, and the increased economic activity in the CPH regions has led to job creation. Importantly, the projects supported by the CPH have enabled access to renewable energy for individuals and community organisations that were unable to access these benefits in the past.

The various economic outcomes from the program are outlined below.

### Increasing community benefit from renewable energy

Renewable energy has the potential to offer significant financial benefits to regional communities. The CPHs have helped to enable more local individuals and organisations to access these benefits. The completed projects supported by the CPH are together saving individuals, community organisations and community services \$364,000 per year. Over the projected 25-year life of the project, this will equal \$9.1 million in savings (calculated at net present value).

As described in Section 5.1, the CPH has supported community organisations and services to install renewable energy and energy efficiency measures where they had previously been unable to do so, despite having been aware and interested in the possibility of renewable energy. This was enabled by providing expert advice, support to complete feasibility studies, the innovation of new community energy models, and more.

The CPH rep worked with us for months on our feasibility study. He has given us countless hours. If we had to pay for his time, it would probably cost \$40–50,000.

**Survey respondent**

Through their activities, the CPHs have increased access to renewable energy and energy efficiency, and the energy cost savings that result from these. For example, a roundtable advisory group member described the economic benefits for households of a solar PV bulk buy project delivered by one CPH, stating: "The bulk buy installed something like 50 new PV systems, out of 200 enquiries across the three local government areas. Those people are certainly better off."

## Jobs

The CPHs directly created six local jobs, by employing staff, contractors and local services to deliver the CPH activities, contributing \$649,029 to local wages (\$106,8742 was spent on consultants external to the community). As such, the CPHs contributed to supporting local business, as well as increasing local knowledge and capacity to work with community energy.

The evaluation survey revealed that 60 per cent of respondents felt the skills, knowledge and networks they developed through the CPHs will aid them in future employment opportunities and their ability to secure jobs in the future.

In addition, the increased economic activity in the region that occurred as a result of the CPHs and CPH delivered projects led to a flow-on impact of creating 10 jobs. The CPH pipeline of projects has been modelled to create 76 local jobs.

## Leveraging resources: In-kind and volunteering

All three CPHs are leveraging significant in-kind and voluntary contributions from their host organisations, members of the roundtable advisory group and project partners. The three CPHs have attracted 12,425 hours of voluntary labour, worth at least \$497,000.<sup>1</sup> This contribution has been a significant factor in enabling the projects delivered through the program. For example, one volunteer from a project host organisation contributed around 2–3 hours per week for several months and then 25 hours per week for a 10-week fundraising period. This volunteer felt very proud of their contribution and the outcome of the project, stating: “We could all take some pride and benefit from what we could jointly achieve.”

In addition, the CPHs attracted 418 hours of in-kind labour worth over \$16,000<sup>2</sup> from local businesses, such as legal and engineering firms.

The CPHs gained access to a wide range of skills through voluntary and in-kind contributions. In particular, the roundtable advisory group were considered to have been: “Very beneficial, because we’ve had some strong community leaders involved and people with technical knowledge, financial knowledge, governance practitioners and more” (CPH host organisation member).

It is worth noting, however, that there was a common concern that the current CPH model expects a lot in terms of in-kind and voluntary contributions. It was queried if this is being adequately recognised and whether it will be sustainable in the long run. In the interviews, one roundtable member had a strong opinion about the CPH model being over reliant on volunteers, stating that: “If you are going to ask a community to do something, then that community has got to have the ability and the right to determine how it’s going to operate. If you are going to ask the community to implement a government program, then it should be providing the money and resources to do it – people should be paid, not asking the community to volunteer.”

Another CPH host stated: “We are pleased it is coming to an end, nursing this project along is not all that we do, but it [the volunteer and in-kind contributions from the community] has meant that the

---

<sup>1</sup> Calculated at \$40 per hour, as per Volunteering Victoria’s opportunity cost wage rate for volunteers.

<sup>2</sup> In-kind labour refers to labour paid for by a third party. This figure is also calculated at \$40 per hour, as per the volunteering cost. In reality, however, these in-kind contributions came from professionals whose services would generally cost in excess of \$100 per hour.

dollars invested went a long way. You don't mind that in the norming and storming stage. We would need a greater emphasis on paid staff to keep going."

As such, future CPH delivery may need to consider a lower reliance on voluntary labour.

### Increasing access to funding

All three CPHs played a role in supporting community energy projects to access funding. The ways in which the CPHs supported projects to access funding involved:

- establishing and promoting fundraising drives to secure community donations
- lobbying council and other stakeholders for letters of support for projects
- developing sound business cases to attract project host investment and/or loans
- support in writing grant applications to government and philanthropic grant-makers
- seeking in-kind contributions (catering, meeting space, event venues and so on).

This effort resulted in attracting \$2.2 million of additional funding for the CPHs and their supported projects, as shown in Table 12.

Table 12: Additional funding sourced by the CPH for CPH-supported projects.

Funding type	Funding amount	Description
In-kind contributions (non-labour)	\$48,965	Discounted venue hire and catering
Community funding	\$977,394	Donations and host organisation contributions
Philanthropy	\$260,500	Non-government grant funding sourced
Government grants	\$225,883	Additional grant funding sourced outside of CPH pilot program
Other	\$686,600	Bank loans, other
<b>TOTAL</b>	<b>\$2,199,342</b>	

For example, the Ballarat CPH was successful in supporting three of its community energy projects to develop business plans and then write grant application with the respective project host organisations. These applications to the state government's Renewable Communities Program were all successful. There was a recommendation for funding that a portion of the CPH budget should have been allocated to contribute to capital costs, as a contribution to leverage other funding.

In the focus group, SV staff felt there was potential for stronger relationships to be built with philanthropic givers and corporate supporters, building on CPH success so far. However, there were also instances where competition (or the perception of competition) restricted the CPHs' ability to successfully access funding.

One CPH staff commented that the CPH pilot program had been perceived to be competing with other local commercial and government programs. Further they felt that a number of the projects in their pipeline of works were lost to other programs. A roundtable advisory group member further elaborated that: "I think it's a shame that the Hub was viewed as a competitor, not as a collaborator. Some of the projects that we could have done, like solar for community buildings, another government agency was doing that at the same time – so they took up opportunities and funding that we could have accessed."

## Flow-on economic impact in the regional economy

The CPHs increased economic activity in each of their regions and this had a flow-on effect in the local economy. Regional economic modelling (REMPPLAN) revealed that increased money flow from a direct increase in demand for products and services to the CPHs, as well as the flow-on supply chain and consumption effects has created a flow-on economic impact of \$797,000 in Bendigo, \$5.3 million in Ballarat and \$4.9 million in the Latrobe Valley. In total, the CPHs contributed \$11 million of economic impact in regional Victorian communities.

## 6.5. Policy

Regulatory change is needed at a state and national level to facilitate a broader range of community energy business models. CPHs identified that regulatory, bureaucratic and legislative barriers are holding back the pipeline, particularly in regard to options for trading and/or sharing electricity, as well as a lack of support mechanisms for mid-scale projects, in comparison to large-scale and households.

As yet, there is little evidence of outcomes associated with overcoming or changing regulatory hurdles or ensuring that supportive policies are implemented or maintained. It may be that this has not been a focus of CPH activity to date, or that there are intended or unintended restrictions on policy, advocacy and lobbying activities; it is not the remit of the CPH to undertake advocacy work.

There was, however, an instance of one CPH working with SV staff to identify and overcome regulatory barriers to a desired community energy business model involving public high schools. Facilitating solar arrays on school buildings has been a challenge for many schools and organisations in Victoria. CPH staff said that the complex network of stakeholders, regulations and processes has limited the uptake of solar on these important community entities.

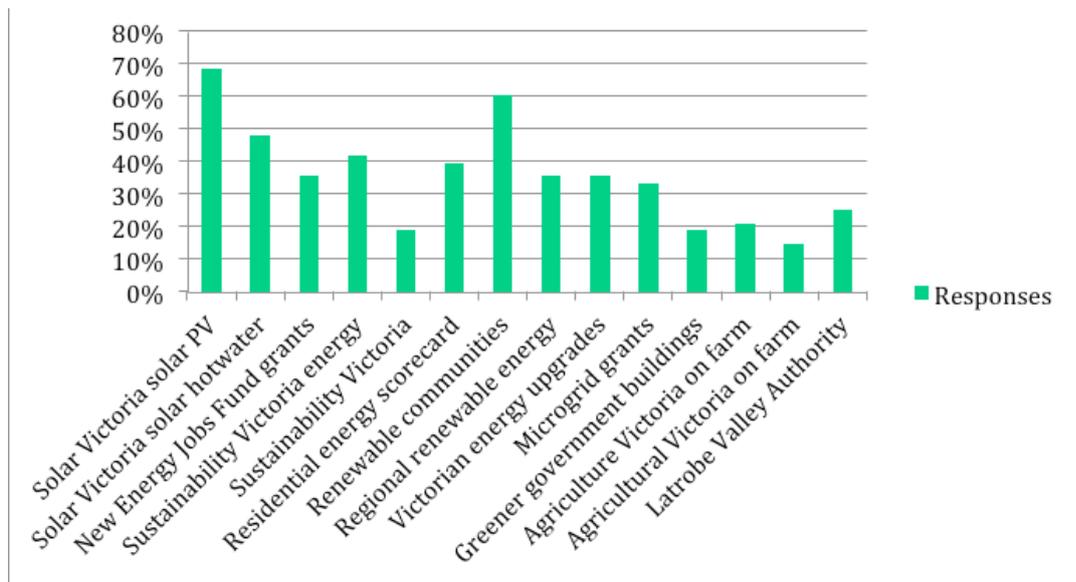
The CPH successfully engaged numerous schools and worked with the Victorian School Building Authority to work through a number of issues to the satisfaction of the Authority and the schools. This work involved tackling procurement, legal, finance and installation and maintenance arrangements to enable community energy projects to proceed on public school buildings.

This process required two ministerial exemptions and the project is close to being launched at the time of writing, and represents a significant change that the CPH pilot program has facilitated. Once complete, this work will pave the way for schools across Victoria to develop their own community-owned energy projects.

## 6.6. Links with other state government programs

Supporting other relevant Victorian Government energy priorities and initiatives was an objective of the CPH pilot program. The CPHs met this objective by sharing information about and linking in with other government programs and initiatives. For example, 92 per cent (44 of 48) of survey respondents identified that their involvement with the CPHs led them to become aware of or access other SV or state government initiatives. In particular, the Solar Victoria solar PV and solar hot water program, the Renewable Communities grants and SVs other energy initiatives. This breakdown can be viewed in Figure 12.

Figure 12: The percentage of survey respondents that became aware of or accessed certain Victorian Government initiatives through their involvement with the CPH [Q.29].



This was mirrored in the interviews and focus groups, with one project host describing the benefits of government energy efficiency support programs. As one CPH volunteer commented: "One of the early learnings was that there was no value without energy efficiency, quite often businesses weren't strategic about thinking about how their business might change with energy efficiency. We let them know when they could apply for grants – hot water grants, residential energy scorecards, Agriculture Victoria energy grants, and SV gas efficiency program."

There was also commentary from SV staff about some of the additional connections occurring between SV programs and other government department offerings, such as ResourceSmart Schools, Sustainable Finance, the Victorian School Building Authority, Resource Recovery Grants, Victoria's renewable energy roadmap, Solar on Public Buildings grants, Pick My Project, Environmental Upgrade Agreements and Regional Development Victoria. In a number of instances, CPHs successfully supported community organisations to apply for other government programs (see Section 6.4). As one community project described: "The CPH supported us in applying for the recent 3CA Climate Change Grant for insulation, by providing advice and also a letter of support."

As discussed in Section 6.2, some state government program opportunities were perceived to be competitive rather than complementary to the CPH pilot program. One CPH staff commented that to overcome this: "There also needs to be a lot more communication between government departments, so they aren't working against each other – which they were [in their region]. Funding opportunities were announced for projects and the Hub put in some submissions, but they were competing with departmentally based projects and they were unsuccessful."

It was noted by interviewees that there was a barrier to CPHs applying directly for some grants as they were not eligible. The way around this was for the host organisation to apply or for the CPH to support community projects to apply directly.

In addition, CPH expertise is contributing to other government initiatives, via CPH staff and volunteers sitting on committees, reference groups and boards. For example, two members of the

Latrobe Valley CPH project control group are now on the steering committee for the Gippsland Smart Specialisation Strategy on energy running in conjunction with a number of government departments, RMIT, Melbourne University, Latrobe Valley Authority, Ausnet, Gippsland Solar and other local businesses and suppliers. This provides a significant opportunity to spread awareness of the value of community energy, share skills and knowledge, explore opportunities for collaboration on projects and contribute to strategic direction.

## 6.7. Outer regional impacts

CPH activities have created incidental and broader benefits that are serving to enhance the pilot program's reach across the state. Although not all areas have a local CPH, other community organisations interested in community energy have been able to seek information and advice from the three CPHs.

As an SV regional representative who does not have a CPH in their region described: "There have been benefits beyond the immediate Hub communities ... There are passive and active flows of information, lots of discussion and advice provision, that has flown on to real change, real projects in other communities. There is a new group in my region who have been chatting with the [CPH]. And I've gained knowledge over time too."

Another SV regional representative, who also does not have a CPH in their region, commented: "Being able to connect my community with [the CPH] even though they aren't in the region – it has been empowering for smaller groups in my region."

## 7. Summary evaluation of the CPH pilot program

The CPH pilot program has delivered all the program objectives and desired outcomes, as demonstrated in detail above and summarised in Table 13.

The program has delivered significant project outcomes that are making a tangible contribution in each of their communities.

For the funding amount, the program has delivered impressive value for money and has been implemented in such a way as to elicit high levels of community satisfaction with the program, as elaborated in Table 13.

Table 13: Summary of CPH pilot program objectives and outcomes achieved

Evaluation measure	Pilot CPH outcome
The extent that the project objectives are being achieved	
a.1 Test and refine the CPH model for any future wider rollout in Victoria	<p>The CPH model has been successfully implemented and refined in the three communities. It has proven to be a highly effective model for rapidly deploying support for community energy, with key strengths in:</p> <ul style="list-style-type: none"> <li>- utilising the existing interests and assets of local organisations</li> <li>- facilitating community leadership and volunteerism</li> <li>- fostering collaboration</li> <li>- supporting other local organisations to develop community energy projects</li> <li>- increasing the capacity of people involved to deliver community energy projects.</li> </ul> <p>In each instance, the model has been adapted slightly for local context, indicating the relative strengths and weaknesses of the model and its adaptability for future appropriateness and the potential for program expansion.</p>
a.2 Facilitate the delivery of at least one local community energy project in each CPH area within the timeframe of the pilot CPH project	<p>Each of the three CPHs met and exceeded this objective, with 15 community energy projects completed between them (two in Bendigo, six in the Latrobe Valley and seven in Ballarat). All are “behind the meter solar” PV projects (they use the majority of electricity produced from the solar PV rather than exporting to the grid), and many involved energy efficiency.</p> <p>All projects are financed through community donations, grants and private investment. As yet, there have been no community investment models deployed, however several are in the project pipeline.</p>
a.3 Facilitate the development of a pipeline of local community projects	<p>Each of the three CPHs met and exceeded this objective, with 15 community energy projects in the project pipeline between them (four in Bendigo, seven in the Latrobe Valley and four in Ballarat). The projects delivered represent a range of innovative community energy business models, as well as flagship and replicable projects. These projects are at various stages of development. They represent a broader range of renewable energy technologies, and projects at a larger scale than have been delivered thus far. This reflects the longer timeframes required to deliver more complex and larger community energy projects.</p>
a.4 Increase local capacity and capability to facilitate community energy	<p>Local capacity to deliver community energy increased significantly in each of the CPH communities. The projects completed and in the pipeline are a testament to this. The cohorts that reported the largest increase in capacity to facilitate community energy include CPH staff and volunteers, roundtable advisory group members, host organisation representatives and project partners. Capacity has been built in:</p> <ul style="list-style-type: none"> <li>- knowledge of a range of community energy business models</li> <li>- technical knowledge</li> <li>- legal and financial aspects</li> <li>- communications and community engagement skills</li> <li>- project management.</li> </ul>

	<p>This capacity was greatly enhanced by the three CPHs networking with each other – all of them expressed the value in learning from each other and being able to pass this on to their local community.</p>
<p>a.5 Increase local access to information and support to facilitate the delivery of community energy</p>	<p>Information and support to deliver community energy increased in each community through the CPH. This was particularly evident among the partners and hosts of the projects delivered through the CPH. Each CPH made information and support available in different ways, either by building CPH staff and volunteer capacity, or employing consultants and contractors.</p> <p>It was identified that information sharing with the general public in each host community has been less of a priority. This is reflected in lower rates of increased awareness of and support for community energy among the general public, compared with those who have been directly involved with the CPH.</p>
<p>The extent that the project outcomes are being achieved</p>	
<p>b.1 Reduce greenhouse gases</p>	<p>The projects completed through the CPH program will deliver 1,839 tonnes of CO<sub>2</sub>e greenhouse gas emissions reductions each year. Over the expected 25-year life of the projects, this will generate 24,469 tonnes of CO<sub>2</sub>e greenhouse gas emissions reductions. When the projects in the pipeline are factored in, they will save an additional 9,615 tonnes of CO<sub>2</sub>e greenhouse gas emissions reductions each year, or 125,000 tonnes of CO<sub>2</sub>e over the project life. In addition, involvement with the CPHs has increased people’s knowledge of the need for emissions reduction and of ways they can take further action. The evaluation revealed individuals and organisations are considering further actions to reduce their greenhouse gas emissions as a result of their involvement with the CPHs.</p>
<p>b.2 Support communities in implementing their renewable energy projects</p>	<p>The CPH model proved effective at providing support to communities to implement community energy projects. The CPHs have supported 30 different community energy projects to some stage of project development, and have scoped or provided advice to many times this amount over the two-year pilot. Each of these projects involves and benefits local individuals, organisations, businesses and services in different ways. Just under 20,000 people have been engaged, involved or are benefiting from the 15 projects delivered through the CPHs. In addition, dozens of other community project ideas were scoped and found to be not viable, therefore saving the proponent time via sense checking.</p>
<p>b.3 Support other relevant Victorian Government energy priorities and initiatives</p>	<p>The CPHs increased knowledge of and access to several other Victorian Government programs and initiatives. Almost all survey respondents (92 per cent or 44 of 48) identified that their involvement with CPHs led them to become aware of or access other SV or state government initiatives, in particular, Solar Victoria’s solar PV and solar hot water program, DELWP’s Renewable Communities grants, Agriculture Victoria’s energy grants program, the regional renewable roadmaps and other energy initiatives. Respondents also indicated their increasing support for groups in the region that have received or applied for other grants by providing networking and communications opportunities. For example, Pick My Project and Bank Australia. The CPHs provided guidance and support for a number of these applications.</p>
<p>b.4 Boost the renewable energy industry in Victoria</p>	<p>The CPHs contributed to the renewable energy industry by supporting uptake of renewable energy in communities, as well as through enhancing community awareness and support for community energy and renewable energy more generally. Enhanced community awareness and support has been strongest in the cohort of people directly involved with CPHs or benefiting from a CPH project. Among this cohort, 80 per cent of survey respondents felt: “very positive about renewable energy development in their area.” The baseline Wallis survey of the general public revealed only a slight increase in awareness and support for community energy and renewable energy. Support for developing local community energy projects remains high across all CPH regions (more than 88 per cent).</p>

## 7.1. Value for money

From initial funding of \$900,000 and an in-kind contribution from SV of \$260,000, the CPHs have gone on to leverage \$14.5 million of financial value in their communities during the two-year pilot. This represents a 13-to-1 leverage on government investment. Over the 25-year life of the projects completed during the two-year pilot, this benefit will accrue to a value of \$25.6 million (net present value), creating a leverage of 22-to-1 on government funding. Should the pipeline projects all be delivered, it will generate an additional \$60 million of value from the program, which would increase the leverage on the government investment to 72-to-1.

The financial value generated through CPH activities within the two-year pilot period can be summarised as:

- \$363,954 in savings on electricity bills each year from renewable energy and energy efficiency
- \$496,990 of labour contributed in-kind or voluntarily
- \$446,350 of value derived from using community networks and relationships to drive communications and community engagement
- \$1 million in community funding (donations, project host's investment, in-kind)
- \$1.2 million of additional funding sourced from grants, philanthropy and loans
- \$94,956 per year in avoided costs of other equivalent means of generating greenhouse gas emissions reductions (i.e. via purchasing offsets from other Renewable Energy Target Large scale Generation Certificate); and
- \$11 million flow-on economic impacts.

The value for money represented above only captures the CPH outcomes that could be quantified and monetised as part of the program evaluation, using a light social return on investment approach. However, it is imperative to note that not all CPH outcomes and impacts were able to be monetised. Key quantifiable outcomes which currently have no appropriate financial measure (or proxy measure) include the value of:

- participants' sense of increased employability
- increased support for renewable energy development (to the state, local communities and renewable energy developers)
- future climate abatement from behaviour change and education impacts of CPH activities
- future likelihood to invest in community energy and renewable energy
- increasing the financial resilience of households and community organisations after reduced energy costs as a result of the CPH projects (flow-on value)
- increased links with and uptake of other government programs.

It is recommended that future evaluation efforts seek to find appropriate ways to measure these impacts and outcomes to convey a fuller picture of the program's social return on investment.

In addition, some CPH outcomes and impacts are qualitative in nature and could not be quantified and included as part of the value-for-money calculation. As covered above, these include:

- increased connections, relationships and networks
- the benefits of volunteering in terms of people's sense of confidence, achievement and purpose
- increase sense of community
- increased sense of being capable and empowered

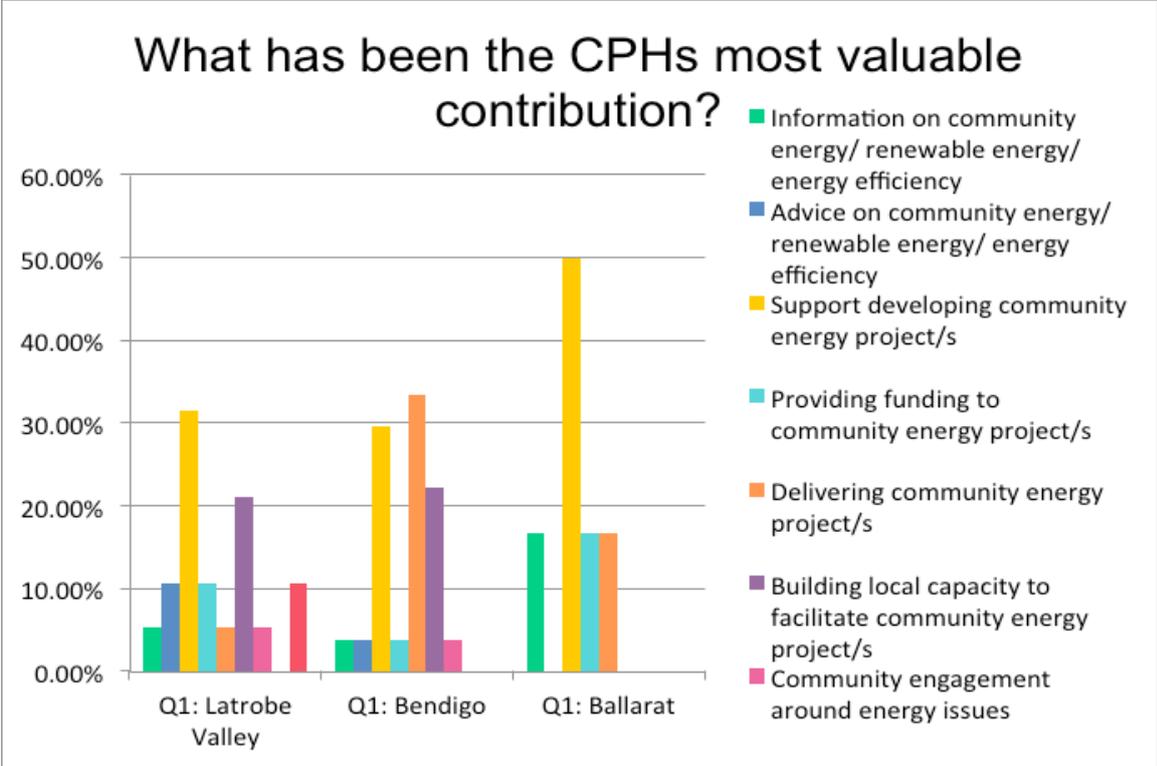
While the value-for-money figures above are indeed impressive, in reality the value derived from the CPHs is even greater when non-quantifiable outcomes and impacts are considered.

### 7.2. Community satisfaction

Survey results indicated extremely high levels of community satisfaction with the CPHs and what they achieved. Overall, 83 per cent (43) of survey respondents felt the CPH model was successful. This was reflected in interviews and the focus group, with participants reporting that the CPH model, structures and activities were effective.

A third of all respondents felt the CPH’s most valuable contribution was the support offered to help others in the community develop community energy projects, followed by the CPHs’ (in-house) delivery of projects (20 per cent) and the CPHs’ contribution to building local capacity to facilitate community energy projects (19 per cent) (Latrobe Valley and Bendigo only), as seen in Figure 13. Very few respondents felt the CPHs’ most valuable contribution had been around ‘community engagement around energy issues’ and ‘supporting collaboration for community energy.’

Figure 13: Survey respondents’ views on the CPHs’ most valuable contribution [Q.1 and Q.3]



Overall, 52 per cent of survey respondents were ‘very satisfied’ and 31 per cent were ‘satisfied’ from being involved with the CPH. Of the four people that were ‘neutral’ or ‘not satisfied,’ two were roundtable members and two were general community members.

The overarching feeling when thinking about the CPH pilot program was being ‘grateful’ (56 per cent), with community members, project hosts and project partners being particularly grateful. Just under half (41 per cent) of respondents were left feeling inspired and 28 per cent feeling excited. Notably, it is staff and consultants of the CPH who feel most excited about the program. Feeling ‘more connected to my community’ was also common (30 per cent). Only one person described their feelings as ‘burned out,’ with another one as ‘disappointed.’

## 8. Recommendations

A range of recommendations emerged from this evaluation, based on both the outcomes of the analysis and recommendations that emerged in the course of the interviews and focus groups. The recommendations included here collate key learnings about what worked well in this CPH pilot, as well as ways to address aspects that were challenging and could be improved. Recommendations are made with consideration for the future continuation and expansion of the CPH pilot program.

### 8.1. Expanding the CPH pilot program

Overall, there were high levels of support for continuing the CPH program from the full range of stakeholders who participated in the evaluation. This was particularly the case for Bendigo and the Latrobe Valley. From the CPH survey, 92 per cent of survey respondents think it would be beneficial or very beneficial for the CPH to continue beyond the two-year pilot, the remainder were neutral. In addition, 94 per cent of respondents would like to see similar CPHs rolled out in other regional communities across Australia. Staff from one CPH in particular were ambitious about their future plans, believing that: “There would be enormous benefit in it continuing, but [it] needs permanency to drive it.”

I think this project has been very successful and works very well. I don't see much that I wasn't happy with – the model really worked well, and we achieved what we wanted – solar panels on our roof.

I totally believe we need to be doing as much as possible for our environment. The more we can do, the better we can be off. This model needs to be fully supported and expanded. The CPH has been supporting us and Sustainability Victoria in turn has been supporting them to do this. Going forward, similar sorts of arrangements should be in place.

**Project site host organisation**

We'd love to see it extended, continued, expanded.

**CPH host organisation representative**

It needs to go on.

**Roundtable advisory group member**

Overall there was strong consensus via the various data inputs that continuing the role of SV staff was an essential CPH element to ensure a high quality of program delivery and to enable awareness of government policy changes, funding opportunities, community support and connections. Should any future CPH programs be federally funded, delivering them via a state agency could mean better contract management and a lower administration component than from a national scale. State government can also help release locally specific roadblocks, for example in the relationship with councils. Any federal expansion should work closely with the existing Victorian program to ensure alignment and efficiencies.

However, some interviewees and survey respondents felt the CPH should not proceed in its current form, due to an over-reliance on volunteers and community organisations' resources.

One roundtable advisory group member in particular felt burned out from the process, stating: “Most of the things that we wanted to do to start off with, would be better off done by people with resources, not by people whose main resource is other volunteers.”

SV staff also expressed that resourcing needed to be well planned to mitigate volunteer burnout. One regional representative stated: “We need to engage more resources for the existing Hubs. We’ve all seen a bit of burn out, whether it’s the Hub or the host organisation, there’s not a rush of people to help.”

There is also current interest from Barwon South West and the North West for their own CPH pilot program.

Extending the funding term is key. Two years of funding is extremely short and is placing stress on the CPHs. As one roundtable member commented: “I worry that after two years we would have established our brand and developed credibility only to pull up stumps and start again somewhere else. Sustainability of the program does keep me up at night.”

It was extremely challenging for the CPHs to deliver on the desired outcomes in the two-year timeframe. While it was originally hoped that the CPHs would progress towards financial self-sufficiency within the pilot period, this has proven impossible – particularly alongside the objective to deliver community energy projects. If funding is now continued, the good momentum gained and significant investment from government and communities will be lost.

## Scale

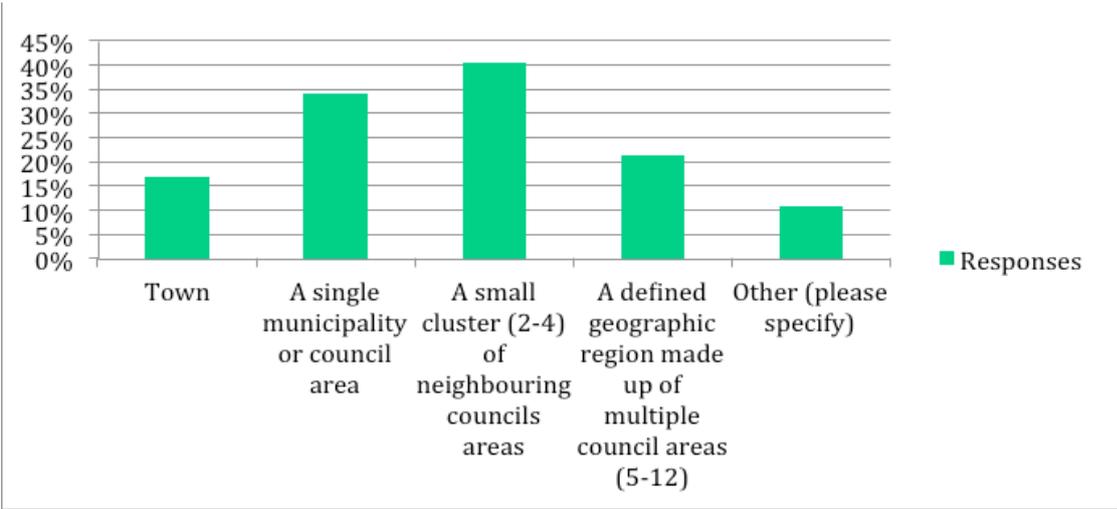
Scale needs to be well considered – a regional approach was put forward as a good catchment with the ability to support smaller communities who are less resourced and often more exposed to climate change impacts. One CPH recommended a regional approach in which there would be three host organisations working together as a single unified CPH. This model is appropriate to consider given the large geographic regions in Victoria and also the prominence of many potential host groups who would like to be better resourced.

In considering larger scale, there could be six CPHs across the state. Expanding the geographic reach was already happening through this CPH pilot program. For new CPHs, the geographical reach is to be well considered, especially for areas with significant land mass or significant populations.

A physical presence also needs to be considered and resourced where appropriate, as does the role of a good local online presence. In regard to a physical CPH location, the recommendations were mixed with some people thinking that people needed a place to engage in the program, and others thinking that office/shop rents are an inefficient use of funds.

CPH survey respondents felt mixed about what the ideal geographic scale was for the CPH (see Figure 14). Some think a single town or municipality is appropriate, where others think a larger regional approach would be effective. Respondents from Ballarat predominantly think that a town is the most appropriate scale for a CPH, whereas Latrobe and Bendigo respondents were more likely to think that a larger geographic scale would work well.

Figure 14: Survey respondents' views on which geographic scale is best suited to CPHs [Q.36]



In regard to continuing to grow local awareness, the findings of the Wallis Research indicated that community sentiment towards CPHs is largely positive, and that further promotion of the CPHs in each area would drive increased participation from the community. While there was not much increase in awareness about the CPH program itself, or the distinct community project sites, there was an uplift in the broader perception of community-owned renewable energy.

### Resourcing

Future CPH delivery will need to consider a lower reliance on voluntary labour and increased staffing levels. The financial resourcing of the CPHs was considered to be too low for the ambition and timeline of the program. In particular, to mitigate volunteer burnout, the administrative function is recommended to be a better resourced and paid role incorporating:

- responding to opportunities
- facilitation
- social media
- reporting internally and to SV
- meeting administration
- project information sharing
- coordinating roundtable, working groups and consultants
- communication with community groups.

There needs to be consideration of the 'ideal' CPH working model in regard to paid staff roles, consultant and contractor roles and volunteer capacity in relation to program objectives and expectations. It is recommended that CPHs employ staff to deliver project delivery, support and management, rather than the costlier consultant model. This will have a flow-on effect in regard to building CPH staff capacity, networks and relationships, as well as brand awareness of CPHs. It is also recommended that CPHs employ community engagement and communications staff.

If the program is expanded, it is recommended that SV clarify what makes a successful host organisation, based on current learnings. The capability, desire and readiness of community groups to deploy the program must be well vetted.

A focus on actively building local capacity and local procurement was also described in areas such as consulting work, technical, facilitation, social media, community development and installations. At the heart of this is that local people can translate opportunities into reality for local communities and can build up their own knowledge base.

The initial training of the CPHs is of significance – giving people access to the correct experts and studies, while building local capacity. Prioritising skills was also put forward as a recommendation.

One CPH host stated: “We definitely need community development skills in the Hubs; that is a special art that takes a lot of resources and time and is often overlooked.”

Other skills gaps were around the regulatory barriers; a lot more information needed to be available about this, including extensive and comprehensive training for CPH hosts, roundtable advisory group members and staff at the beginning of the program. Drawing on expertise and experience from existing CPH, as well as the broader community energy and renewable energy sectors would put CPHs on more of an even playing field.

Access to small amounts of the budget for use as seed funding for project capital costs is strongly recommended. Being able to access 5–10 per cent of the budget would position CPHs better and enable better financial leverage. In addition, the potential to broker low-interest loans and/or underwriting for projects that proceed to implementation would be a beneficial role for SV to play.

## Model

Acknowledging that this program was a pilot, going forward it is recommended that the timeline for CPHs should be four years to have a strong establishment phase, see more of the projects realised on the ground and enable more time for awareness raising.

In regard to governance, the project control group and roundtable advisory group model is an effective model to replicate. As is the host organisation model as a method to access what existing organisations already have: trust, networks, resources, knowledge.

In regard to project models and approaches, it is important to consider the role of small and large regional communities as well as urban and peri-urban contexts. Differing models can be applied in differing contexts. It will be key to also determine the focus or spectrum of models, such as ownership, donation, etc. Depending on their locations, CPHs should consider the role of participating with large renewable energy developments – as community investment initiatives or similar.

When considering scaling up the CPH model, in preparation, a collective approach is recommended to harvesting and making available the intellectual property created throughout the CPH pilot program. This is to ensure the legacy of the current program and enhance a coordinated approach to any future programs. Further, it would be key to empower current CPHs to support any future CPH development to ensure learnings are shared.

Where possible, it is recommended to have a more bespoke approach per CPH location that is locally appropriate, and then develop goals that push them to expand their skills. This could include:

- considering the need for profile raising and communications upfront and designing it in
- considering the evolution of distinct communities within CPHs that are working beyond renewables to be net zero emissions to help the state government achieve their broader and ambitious carbon reduction targets

- viewing community engagement as a valuable activity in its own right and not necessarily needing to be part of a specific project phase.

Community engagement for the sake of increasing relationships, trust, education, awareness and experiential learning is highly valuable in relation to achieving the social goals of the CPHs, as well as providing a key enabling path for achieving the economic and technical goals.

I absolutely recommend the Hub model.

**CPH host organisation representative**

I've found it really rewarding. It has led to other opportunities.

**Roundtable advisory group member**

## Summary of Recommendations

### **1. It is recommended that the CPH program be continued, including continuing to support the three existing CPHs.**

The model was found to be highly effective in delivering the desired objectives and outcomes within the short pilot period. The model represents excellent value for money, as part of the suite of policies to support renewable energy development in a way that engages and benefits local communities.

The model as it stands has many strengths that enable fast and effective establishment of CPHs and the capacity to facilitate community energy, through a collaborative approach with local stakeholders. It has proven effective at supporting local community energy development and community energy partnerships, and at attracting community volunteering, in-kind and financial contributions. The model demonstrates an effective means of delivering a government program, with a highly effective role for SV in program management and oversight.

However, there are aspects to the model that can be improved, to increase its effectiveness going forward, and in transitioning from the pilot phase into a more permanent form.

### **2. To improve the performance of the existing CPH program, it is recommended that:**

GOVERNMENT:

- allocate additional funding to the CPH pilot program over a longer timeframe – as with the existing program, funding (cash and in-kind) should be provided to each CPH, as well as to overall program support
- seeks to understand and address regulatory, policy and market barriers that currently limit community energy project development and business model innovation.

While this was beyond the scope of this evaluation, regulatory, policy and market barriers to community energy remain. A systematic approach to working with the CPHs to address these is recommended.

CPHs:

- resource admin and project management roles as paid roles

- consider or continue to employ staff in communications/community engagement and project development roles, to facilitate in-house CPH capacity building and knowledge retention
- increase the focus on community investment models of community energy going forward
- consider the option of partnering with large renewable energy developments, for example, in community co-investment initiatives or similar
- focus on community engagement and awareness-raising activities, alongside project-level activities
- expand communications and community engagement activities to reach out to the general public, beyond the focus on communications and community engagement that are project specific
- consider the role of small and large regional communities and what models may work differently in smaller communities compared to larger towns.

SV:

- keep milestones negotiable and flexible to enable responsiveness to local context, while delivering on program objectives
- support and resource community engagement and awareness-raising activities, for example, by building additional capacity for CPHs in this area
- facilitate a collective approach to harvesting and making available the intellectual property, resources and templates created through the CPH pilot program – both to ensure the legacy of the current program and to enhance a coordinated approach to any future programs
- develop ways to capture and share the knowledge and resources developed by each CPH with other CPHs and the broader community energy sector
- increase links with the broader community energy sector to help ensure learning and resources from other states are captured and applied in Victoria
- continue to support CPH staff and volunteers to build their capacity to deliver a range of community energy models and activities, including attention to the soft skills elements
- consider the potential to broker low-interest loans and/or underwriting for projects that proceed to implementation
- refine the CPH reporting methodology, in terms of what data is captured and how
- consider establishing a collective impact framework, with social return on investment indicators developed as part of this evaluation.

### **3. It is recommended that the CPH model be rolled out across other regions of Victoria.**

To facilitate comprehensive coverage across the state, it is recommended more CPHs are established, along with the coordination and resources needed to support them. Specifically:

- implement a minimum funding timeline for future CPHs of four years.
- continue to apply the collaborative governance model developed, including having a local host organisation and a roundtable advisory group. Continue to use the host organisation as a way to access local reputation, trust, networks, resources and knowledge.
- increase the level of funding provided to each CPH, as the financial resourcing of the pilot CPHs was considered to be too low for the ambition of the program and needed an unsustainable over-reliance on voluntary labour.

- to mitigate volunteer burnout, encourage CPHs to hire staff to fulfil administrative functions, communications/community engagement and community energy project support/development roles.
- make 5–10 per cent of CPH budget able to be used as seed funding for capital costs, as this would position CPHs to progress projects more rapidly, and enable better leverage to attract other sources of funding.
- consider expanding the number of CPHs to at least six across the state. The desired scale and reach of each CPH needs to be well considered. A regional approach (in contrast to a town-based approach) was put forward as a good catchment with the ability to support multiple smaller communities, which are less resourced and often more exposed to climate change impacts. However, if each CPH is to have a wider catchment, the budget allocated should increase commensurately.
- enable milestone and reporting negotiation and flexibility, to allow for a bespoke approach for each CPH location. Balance the need to ensure the CPH and its goals are locally appropriate, with goals that push the CPH to expand their skills, while also delivering on program objectives.
- include a focus on communications, community engagement and community development from the outset, alongside the focus on supporting community energy project development.
- facilitate a CPH support program to support capacity building, collaboration and peer-to-peer mentoring. This could be an expansion of SV's current role, drawing in other expertise from the broader community energy and renewable energy sectors. This program would:
  - empower current CPHs to support newly established CPHs to ensure learning is shared and networks are built among the CPHs
  - build the capacity of CPH staff and volunteers from the outset
  - facilitate ongoing knowledge and resource sharing
- Include extensive and comprehensive training for CPH hosts, roundtable advisory group members and staff at the beginning of the program, drawing on expertise and experience from existing CPHs, as well as the broader community energy and renewable energy sectors. The initial training of the CPHs is of utmost importance to give people access to the correct experts and studies, while building local capacity. While CPH host organisations are likely to have some relevant experience with community energy, a wide range of knowledge and skills are required to effectively deliver the CPH objectives.
- support a spectrum of models to be deployed, such as ownership, investment, donation, etc.
- consider ways to support the evolution of community energy within the communities that the CPHs support, especially those who are working beyond renewable energy towards net zero emissions. These initiatives will help the Victorian Government achieve its broader and ambitious emissions reduction targets.
- consider the potential to broker low-interest loans and/or underwriting for projects that proceed to implementation.

# Appendix: Survey, focus group and interview questions

## Survey questions

### PERSONAL DETAILS/ CONTEXT

1. Please select your affiliation with the Hub.

### OVERALL

2. What has been the Hubs most valuable contribution?
3. What has been the Hub's biggest challenge?
4. Overall, do you think the Hub model has been successful?
5. How satisfied are you from being involved in the Hub program?
6. Do any of these words describe your feelings towards the pilot?

### GENERAL SUPPORT AND INFORMATION ROLE

7. Do you think the Hub's community engagement activities were effective?
8. Do you think the Hub's communications methods were effective?
9. What kind of general community energy related information and support has been made available through the Hub?
10. How did you access it?
11. How relevant and useful was it?
12. What was missing in the way the Hubs went about communications and community engagement?

### HUB PARTNERSHIPS AND IN-KIND CONTRIBUTIONS

13. Who does the Hub regularly collaborate with?
14. Which of the following has been made available to the community and community energy projects through the Hub's networks, partnerships and collaborations?
15. Can you provide one example and estimate a dollar figure for such a contribution by a Hub partner?
16. How valuable and enabling has networking, partnership and collaboration been for the Hub and Hub projects?

### PROJECT SUPPORT ROLE

17. Have you been directly involved in initiating, planning or delivering a renewable energy project with Hub support? What was your role?
18. In what ways has the Hub assisted the project?
19. How important do you feel the support from the Hub was to realising this project?

### INDIVIDUAL LEVEL OUTCOMES

20. Before being involved in the Hub, what was your attitude to renewable energy development in your local area? After being involved in the Hub, what was your attitude to renewable energy development in your local area?
21. Before being involved with the Hub, how confident did you feel to pursue a community energy project? After being involved with the Hub, how confident did you feel to pursue a community energy project?

22. Has being involved in the Hub led you to think about what else you can do to reduce your greenhouse gas emissions?
23. Do you feel any of the skills, knowledge or networks you have developed through the Hub will aid you in future employment opportunities?
24. Has your involvement with the Hub enabled you to become aware of or access other Sustainability Victoria or State Government initiatives?

#### ORGANISATION LEVEL OUTCOMES

25. Do you think that knowledge of community energy has increased in your organisation/group?
26. Do you feel that the Hubs have increased local support and understanding for renewable energy generally?
27. Sustainability Victoria played a hands-on role in the Hub pilot, if you engaged with SV staff through this process please rate the importance of their role.
28. What was most beneficial about the role that Sustainability Victoria has played in the Hubs?

#### FUTURE

29. Do you think it would be beneficial for the Hub to continue?
30. Would you like to see similar Hubs rolled out in other regional Australian communities?
31. What would you do the same next time?
32. What would you do differently?

## Focus group questions

### a. To what extent are the program objectives being achieved?

#### a.1 Test and refine the Hub model for any future wider rollout in Victoria

- Overall how appropriate, effective and efficient would you say the Hub program design is?
- What are the governance structures that contribute to success of CPH?
- How have the governance and activities of the Hub matured or changed over the two years? What is working well and not so well?
- Have the project milestones been achievable to meet within the timeframe?
- What has been beneficial in the relationship with SV and the Hubs? What has been challenging?
- How would you rate the SV regional rep role in terms of importance? What lessons have you learned in that role?

#### a.2 Facilitate the delivery of at least one local community energy project in each Hub area within the timeframe of the pilot Hub project.

- How could the support offered by the Hub be improved to deliver more or better quality projects?
- How have the CPH performed against initial expectations in relation to getting projects happening?

#### a.3 Facilitate the development of a pipeline of local community projects

- What has slowed down or sped up projects progressing through the stages of development?

- What does the project pipeline look like two years in? Is it what you expected? Why/ why not?

a.4 Increase local capacity and capability to facilitate community energy.

- Have you noticed a change in the capacity of local community actors to engage with and facilitate community energy?

a.5 Increase local access to information and support to facilitate the delivery of community energy.

- Do you feel the types of information and the ways these were made available through the Hubs have been effective? What worked well? What was missing both in terms of type of information and method of delivery?

b. To what extent are the program outcomes being achieved?

b.1 Support other relevant Victorian Government energy priorities and initiatives

- Did the Hubs dovetail in with any other SV or State Government programs? How are these linkages happening?

b.2 Boost the renewable energy industry in Victoria

- In what ways do you think the Hubs have influence local attitudes to renewable energy?
- In what way have the work and resources developed in the CPH been used by others?

c. To what extent has the Hub engaged with the three communities and stakeholders?

- Did the Hub's community engagement and communications activities deliver on your expectations? How could they have been improved?

d. To what extent have the Hubs provided financial, social and environmental value for the three communities and state government?

d.1 Social value in the community

- What do you consider to be the most valuable role the Hubs have played in their communities?
- What social impacts are you seeing the Hubs have?

d.2 Economic value in the community

- What do you think the main economic outcomes from the Hub's activities have been in the community?

d.3 Environmental value in the community

- What do you think the environmental outcomes from the Hub's activities have been in the community? Anything beyond the direct greenhouse gas emissions reductions?

e. To what extent have the Hubs improved collaboration and access to funding for community energy projects?

- Are there connections and networks you feel you could have been better built? What made it hard to achieve this?
- How has networking and sharing of resources between the Hubs occurred? Has it increased or decreased over time?

#### f. Recommendations for next steps

- What long-term impacts are you interested to monitor from the Hubs?
- What are the key data/ knowledge gaps that are preventing us from understanding the full impact of the Hubs at present?
- What are some of the shared learnings common to all three Hubs?
- If the Hub program was to be extended for the three pilot communities, how would you like to see it evolve?
- If the Hub program was to extend to other communities, what recommendations would you have to make it more appropriate, effective, efficient?
- What should be the role of government agency staff if this program should expand?
- How would you like to see the Hub program extended if the federal government has their own CPH program in the coming year?

## Interview questions

#### a. To what extent are the program objectives being achieved?

##### a.1 Test and refine the Hub model for any future wider rollout in Victoria

All

- Overall how appropriate, effective and efficient would you say the Hub program design is?
- What has been the role of the SV regional coordinator in the pilot. How would you rate that role in terms of importance?

Host

- How have the governance and activities of the Hub matured or changed over the two years? What is working well and not so well?
- What has been beneficial in the relationship with SV and the Hubs? What has been challenging?
- Have the project milestones been achievable to meet within the timeframe?

##### a.2 Facilitate the delivery of at least one local community energy project in each Hub area within the timeframe of the pilot Hub project.

All

- Are you satisfied with the projects the Hub has delivered?
- What role has the Hub played in delivering this project/s?
- Who else was involved and in what ways?
- How could the support offered by the Hub be improved to deliver more or better quality projects?
- How innovative have the projects been?

##### a.3 Facilitate the development of a pipeline of local community projects

All

- What does the future potential of the project pipeline hold? How will it be carried forward? What is needed to deliver the projects currently in the pipeline?

- Have you noticed any trends in the types of support and length of time required to develop project ideas, attract partners and get projects started? Has this changed over time?

a.4 Increase local capacity and capability to facilitate community energy.

All

- What skills and knowledge have you learned through this process? How have you applied the skills, knowledge and/or networks developed through your involvement with the Hub?
- Can you share a significant change story/anecdote around increased local community capacity and capability in community energy?

Host

- Have you noticed any changes in the number and types of enquiries or proposals the Hub receives?

a.5 Increase local access to information and support to facilitate the delivery of community energy

All

- Can you share a significant change story/anecdote around increased local access to information and support to facilitate community energy?

Host

- Give us an example of how you have served as an information Hub to support a community energy project?
- Do you feel there were any gaps in the information you had at hand or in the ways that information was shared?

b. To what extent are the Program outcomes being achieved?

b.1 Reduce greenhouse gases.

All

- Have you come across any stories or anecdotal evidence that being involved in the Hub led people in the community to think about what else they can do to reduce their greenhouse gas emissions?

b.2 Support other relevant Victorian Government energy priorities and initiatives

Host

- Are you dovetailing in with any other SV or State Government programs for your Hub deliverables? How are these linkages happening?

b.4 Boost the renewable energy industry in Victoria

All

- In what ways do you think the Hubs have influenced local attitudes to RE?
- Can you give an example of a change in social attitudes to renewable energy that you have witnessed through your involvement with the Hub?

Host

- Have you been involved with or had any contact with commercial/corporate renewable energy developments/ industry through the Hubs work? Did this lead to any particular outcomes?
- In what way have the work and resources you have developed in the CPH been used by others?

c. To what extent has the Hub engaged with the three communities and stakeholders?

All

- What role did community engagement and communications play in the Hub? How could it be improved?

Host

- Why did you do engagement? Who did you seek to engage?
- What forms of engagement worked best and why?
- How did you advertise your events/ opportunities?
- Were there challenges or gaps? Any stakeholders you wanted to reach but couldn't?

d. To what extent have the Hubs provided financial, social and environmental value for the three communities and state government?

d.1 Social value in the community

All

- What do you consider to be the most valuable role the Hubs have play in your community?
- Are there social groups that are missing out?
- 

Host

- What other social impacts are you seeing the Hubs have?

d.2 Economic value in the community

All

- What do you think the main economic outcomes from the Hub's activities have been in the community?

Host

- Can you please clarify what is included in your reporting on volunteer hours and in-kind contributions reporting – Hub only? Roundtable? Project partners?

d.3 Environmental value in the community

All

- What do you think the environmental outcomes from the Hub's activities have been in the community? Anything beyond the direct greenhouse gases emissions reductions?

e. To what extent have the Hubs improved collaboration and access to funding for community energy projects?

All

- How have you been able to leverage host and partner existing knowledge, reputation, relationships?
- Can you share some examples of how you have catalysed connections to benefit community energy projects?
- Apart from volunteer hours, what other in-kind contributions have you leveraged from project partners? How valuable has this been to the Hub's success?

Host

- Are there connections and networks you feel you could have better built? What made it hard to achieve this?
- How has networking and sharing of resources between the Hubs occurred? Has it increased or decreased over time?
- Apart from volunteer hours, what other in-kind contributions have you leveraged from project partners? How valuable has this been to the Hub's success?

#### f. Recommendations for next steps

All

- What long-term impacts are you interested to monitor from the Hubs?
- If the Hub program was to be extended for the three pilot communities, how would you like to see it evolve?
- What would you like to see the Hub program extended if the federal government has their own CPH program in the coming year?

Host

- What are the key data/ knowledge gaps that are preventing us from understanding the full impact of the Hubs at present?
- What are some of the shared learnings common to all three Hubs?
- If the Hub program was to extend to other communities, what recommendations would you have to make it more appropriate, effective, efficient?
- What should be the role of government agency staff if this program should expand?