RePower Alice Springs:
2017 Community Solar Survey
Executive summary

RePower Alice Springs community group conducted a survey of knowledge and opinions about solar energy of Alice Springs residents, as a tool for public education and advocacy. The survey ran from March to August 2017, and over 800 people responded either electronically or on paper.

Respondents lived in 12 suburbs of Alice Springs, and most had lived in Alice Springs over 10 years. They supported increases in solar power for many reasons, with reductions in carbon emissions being the most commonly identified (78%), followed by reducing electricity bills (65%) and promoting Alice Springs as a solar capital (61%). There was also strong support for the local benefits of solar, including local ownership, innovation and jobs, and self-reliance.

Respondents believe that barriers to increasing solar were governmental and bureaucratic rather than economic, and this was reflected in landlords feeling constrained from installing solar through lack of support.

Over 90% stated that they would choose a green energy option if it was available, many noting that they would be willing to pay more for such an option.

RePower Alice Springs can rely on strong support in advocating for solar energy to government and business on behalf of the community.
**Background**

Alice Springs was one of seven Solar Cities from 2008 to 2013 (Australian Government Solar Cities, 2013). However the Solar Cities initiative did not build sustainable community or solar industry capacity, and community spirit around solar energy diminished as soon as the trial was defunded. In March 2016 community members rapidly grouped as RePower Alice Springs in response to a government announcement that 10 new gas fired turbines would be installed at the Owen Springs Power Station, without transparent public tendering processes, public discussion of options or community consultation.

RePower Alice Springs was formed with the over-arching goal for Alice Springs to be 100% solar by 2030, including Hermannsburg and Santa Teresa which share the electricity grid.

An early priority of RePower Alice Springs was to better understand community knowledge, priorities, and concerns around solar energy. This understanding could enable the group to direct education, funding assistance and programs where most needed, demonstrate the level of demand for investment in solar by Alice Springs residents, advocate effectively to leaders on behalf of community concerns about solar energy, and to provide a baseline of data. Thus, the community survey initiative emerged.

**Methods**

The RePower Alice Springs Solar Survey was developed by members of the group, some of whom had previous involvement in development of community surveys on engagement and solar projects. The survey was aimed at residents of Alice Springs who either rented or owned property, and included questions on demographics, duration of residence in Alice Springs, housing tenure, solar installation, preferences for solar targets, and perceptions of the reasons for and barriers against solar energy. Targets of 500 to 1000 respondents were set based on what was realistic and feasible from a small group of volunteers in a politically relevant time frame, while enabling people who wanted to participate enough time and appearing representative.

The survey was entered to Survey Monkey, and promoted through newspaper and radio announcements, social media, fliers, Alice Springs show, ALEC website, EcoFair, cafes and shops, and the Todd Mall Sunday markets, where paper copies and iPads loaded with the survey were available. The survey was open from 1st March 2017 until 13th August 2017, to coincide with a final recruitment drive at the EcoFair. Surveys completed on paper were entered to Survey Monkey by members of RePower Alice Springs.
Results
Demographics

816 surveys were completed over the 5 months of the survey. Respondents lived in 12 different suburbs of Alice Springs, and over half had been in Alice Springs for more than 10 years. Location and duration in Alice Springs are shown in figure 1 and 2. 58% of respondents were female, 40% male, and 2% unstated.

Figure 1: What suburb do you live in (n=816)?

Figure 2: How long have you lived in Alice Springs (n=816)?
What are the reasons to increase solar power in Alice Springs?
Respondents provided a range of reasons to increase solar power in Alice Springs. The most frequent responses of the available options were to reduce carbon emissions, reduce electricity bills and promote Alice Springs as solar capital. Local ownership, innovation and jobs were also highly valued, and the local and self-reliant features of solar power were prominent in the comments on this question. Other comments noted that with the high levels of solar exposure in Alice Springs it should be self-evident that solar power should be increased: "ridiculous that A/S of all places isn't totally solar powered."

Figure 3: In your opinion, what are the main reasons to increase solar power in Alice Springs (n=816)?
Barriers to solar power in Alice Springs

In response to the question on barriers to solar power, survey respondents emphasised political and economic barriers at all levels, particularly lack of NT and Federal political will, lack of incentives, defunding of renewable energy agencies and influence of fossil fuel industry.

Comments on this question were very diverse, ranging from close-mindedness, denialism and self-interest, to “Only in our minds. We need to track solar power systems to 200% capacity.” Others noted the need for energy storage, high costs and lack of collaboration between business, government and community groups.

Figure 4: In your opinion, what are the barriers to increasing solar power in Alice Springs (n=816)?

Landlord and owner investments in solar

Reflecting the barriers to solar installation, only 17% of landlords (n=171) had solar installed, while a further 61% planned to install solar at some time in the future. In contrast, over 40% of owners already had solar installed, and a further 54% would like to or had plans to install solar on their properties. The difference in plans for solar installation between owners (n=606) and landlords (n=171) provides an opportunity for targeted programs to enable landlords to install solar to reduce bills for tenants. Data on renters’ and landlords’ preferences for solar are shown in figures 5 and 6.
Figure 5: If you rent a home in Alice Springs would you like to have solar power installed (n=171)?

Many of the comments in this section echoed the desire to install solar frustrated by bureaucratic and investment barriers (“I haven't been able to get onto a system that provides fair and equitable power...too much ownership and opportunism over something which should be free, except for the hardware.”)
Solar electricity target by 2030
Nearly half of respondents supported the target of 100% solar by 2030, while 95% supported at least the government’s target of 50% solar.
In the comments, respondents noted that Alice Springs could export its solar energy capacity, and be more than 100% solar.

Figure 7: By 2030 what percentage of Alice Springs electricity supply should be generated by solar power (n=816)?

Green energy option
92% of respondents would like a green energy option. Some comments in this question expressed concern that this could lead to unfair increases in cost, while others stated that they would like to pay more so they can access Green Energy.

Figure 8: If there was a green energy option in Alice Springs (energy from a renewable source) would you buy it (n=816)?
**Discussion**

Over 70% of survey respondents want more than 80% of Alice Springs’ power supply to be from renewable sources by 2030; 95% want an aim at least as high as the government’s target of 50%, and almost half believe the target should be 100%. Some believe we should aim higher again and export our solar energy.

92% want a green energy option, and many are willing to pay more for this.

The main barrier to more solar power is political, while a key reason to increase solar power is to reduce carbon emissions. RePower Alice Springs can amplify these concerns and enable community members to be heard.

Governments need to overcome economic and other barriers to landlords installing solar on rental properties to increase solar penetration. Some respondents proposed barriers to increasing solar that are technological (Limitations of solar technology (12.0%) and concerns about the grid (5.6%)). Repower Alice Springs can work with electricity generators to overcome these barriers and perceptions.

The survey has identified opportunities to provide community education about the opportunities for solar energy, and raise with Territory Generation and PowerWater the community’s desire for high levels of solar power.

It was a significant achievement for a small group of volunteers to achieve over 800 respondents to a survey. This represents about 4.4% of the adult population of Alice Springs (Australian Bureau of Statistics 2016). While not statistically representative, the responses provide a broad and clear voice of Alice Springs residents on the issue of solar power. There was no evidence of multiple responses nor misunderstandings of the questions.

**Conclusion**

Alice Springs community members are looking to government and business to support investment in solar energy, to reach 100% of energy needs by 2030, reducing carbon emissions and electricity bills and strengthening the local community.

**References**
