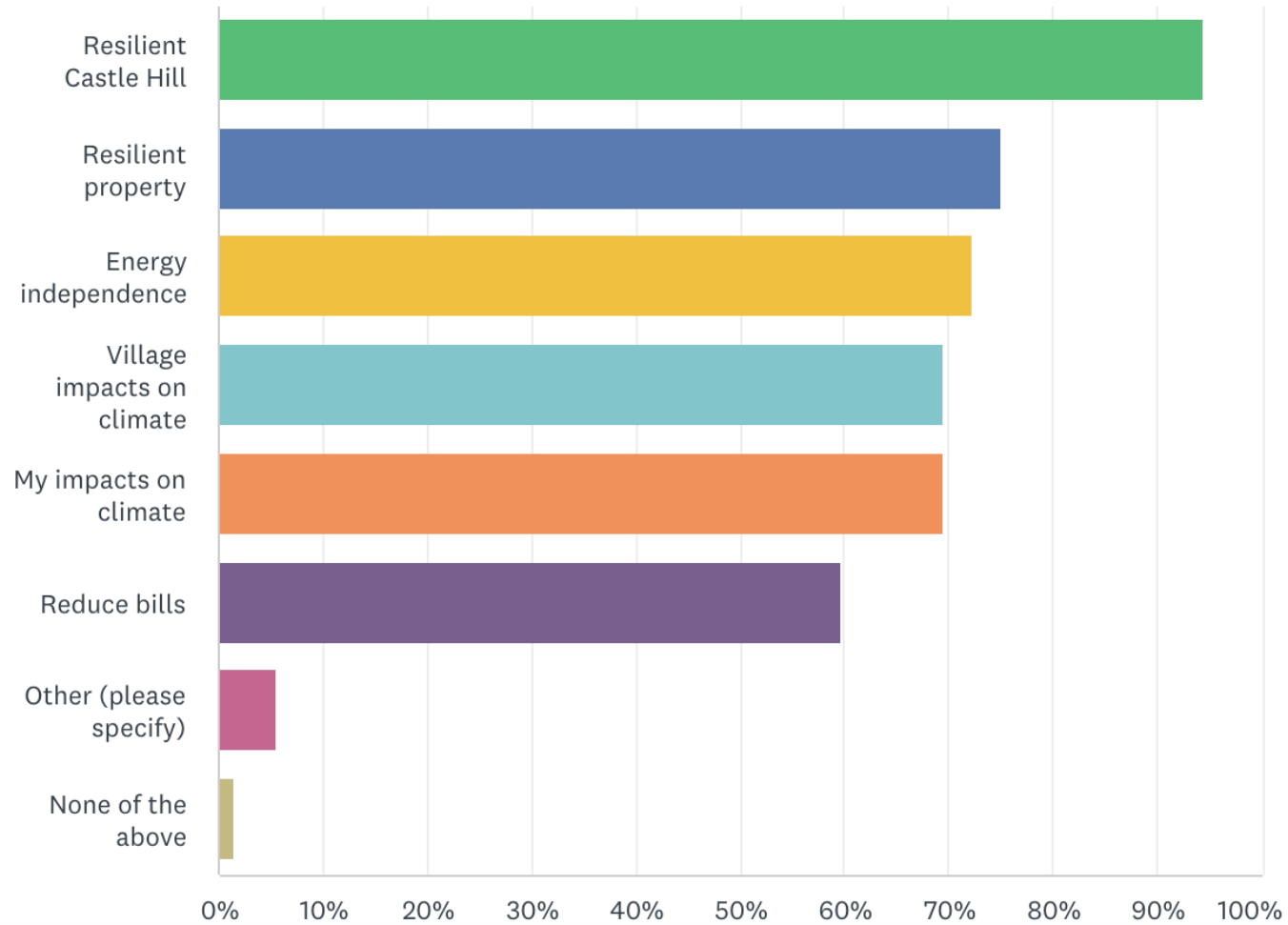


Castle Hill Community Energy Project

Homeowner Survey October 2024, n=72

What do you find interesting or motivational about this proposed project?

Answered: 72 Skipped: 1



What do you find interesting or motivational about this proposed project?

Answered: 72 Skipped: 1

Reponses to "Other"

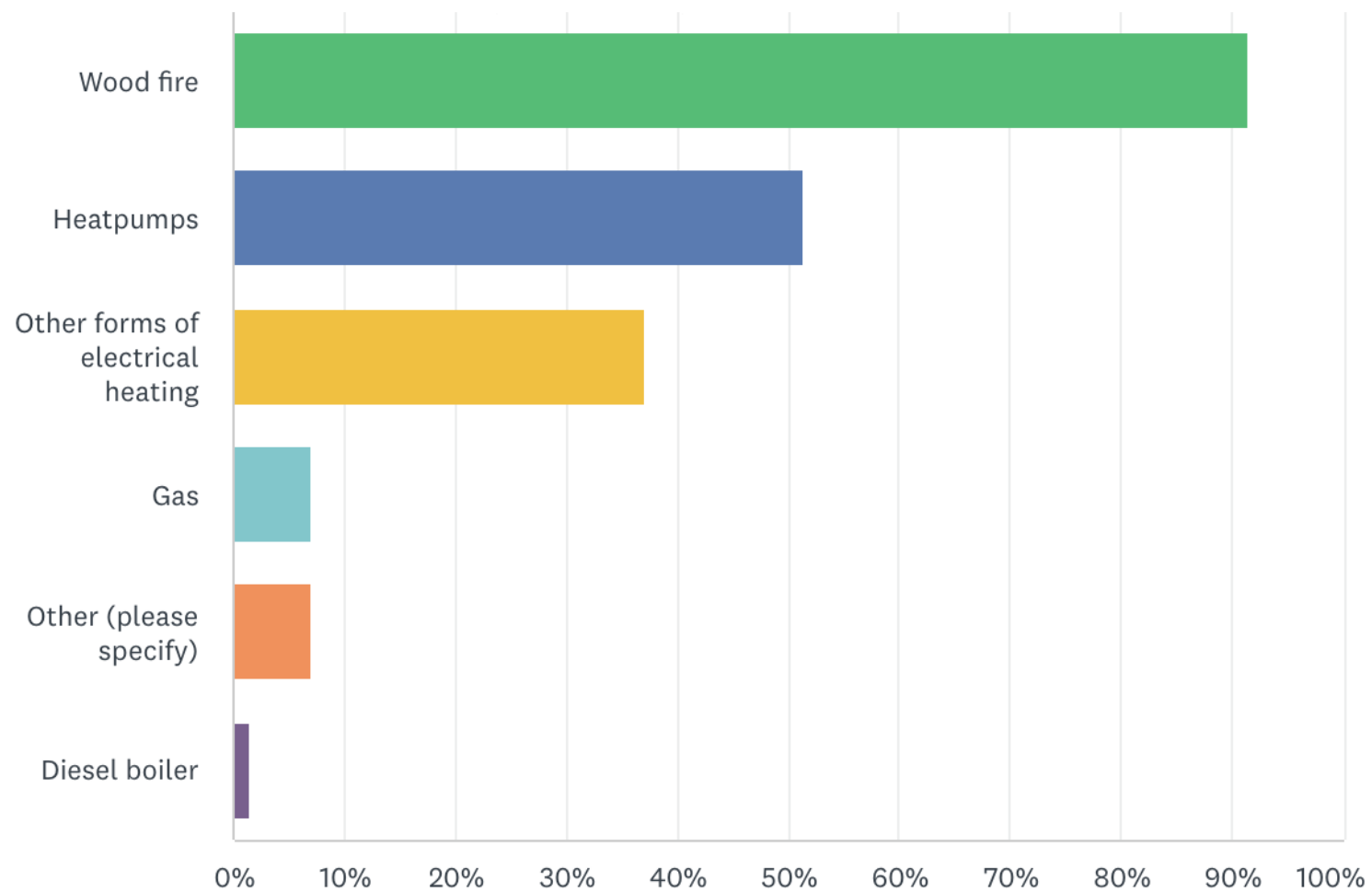
A good size community as a “pilot” for planning such infrastructure initiatives

I am keen to change the way electricity is managed in NZ and these projects may do that.

I am keen to help to reduce my contribution to environmental damage as a result of energy generation and transmission.

What forms of home heating do you use?

Answered: 70 Skipped: 3



What forms of home heating do you use?

Answered: 70 Skipped: 3

Responses to "Other"

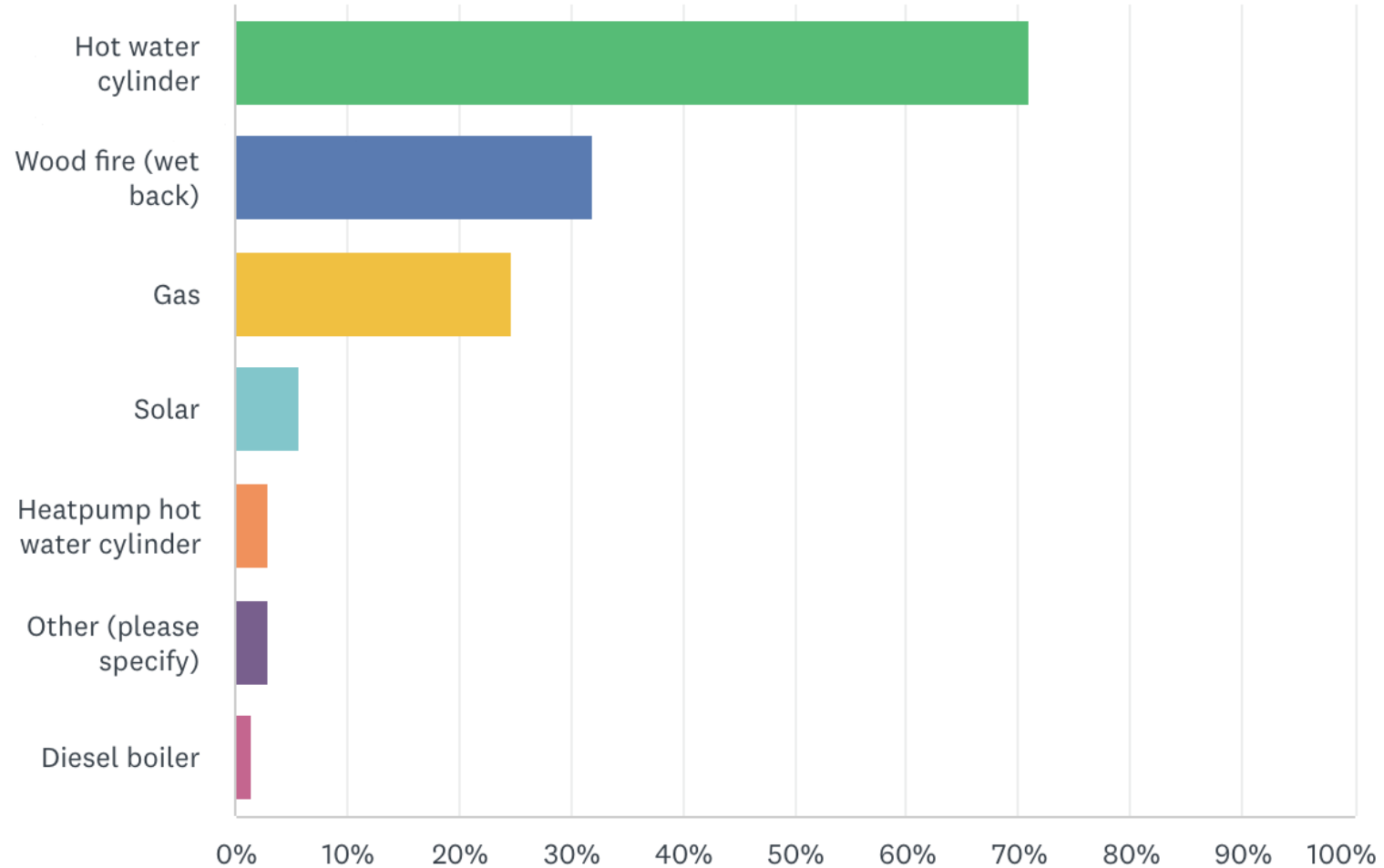
Balanced pressure heat exchange ventilation system.

Reasonable passive solar design and lots of thermal mass

Underfloor heating

What forms of water heating do you use?

Answered: 69 Skipped: 4



What forms of water heating do you use?

Answered: 69 Skipped: 4

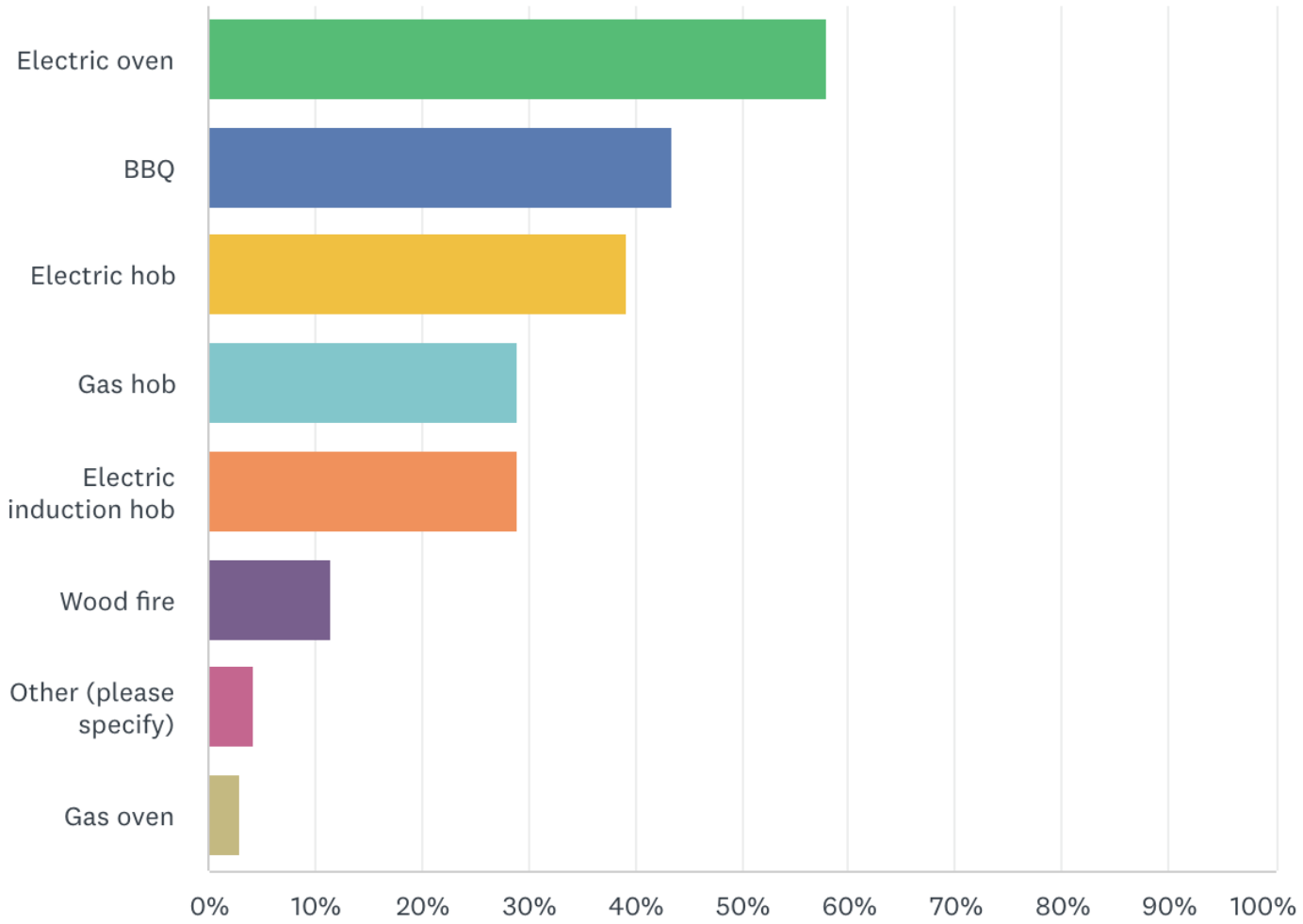
Responses to "Other"

Double element electric water cylinder

Solar powered and electrical when required

What form of cooking energy do you use?

Answered: 69 Skipped: 4



What form of cooking energy do you use?

Answered: 69 Skipped: 4

Responses to "Other"

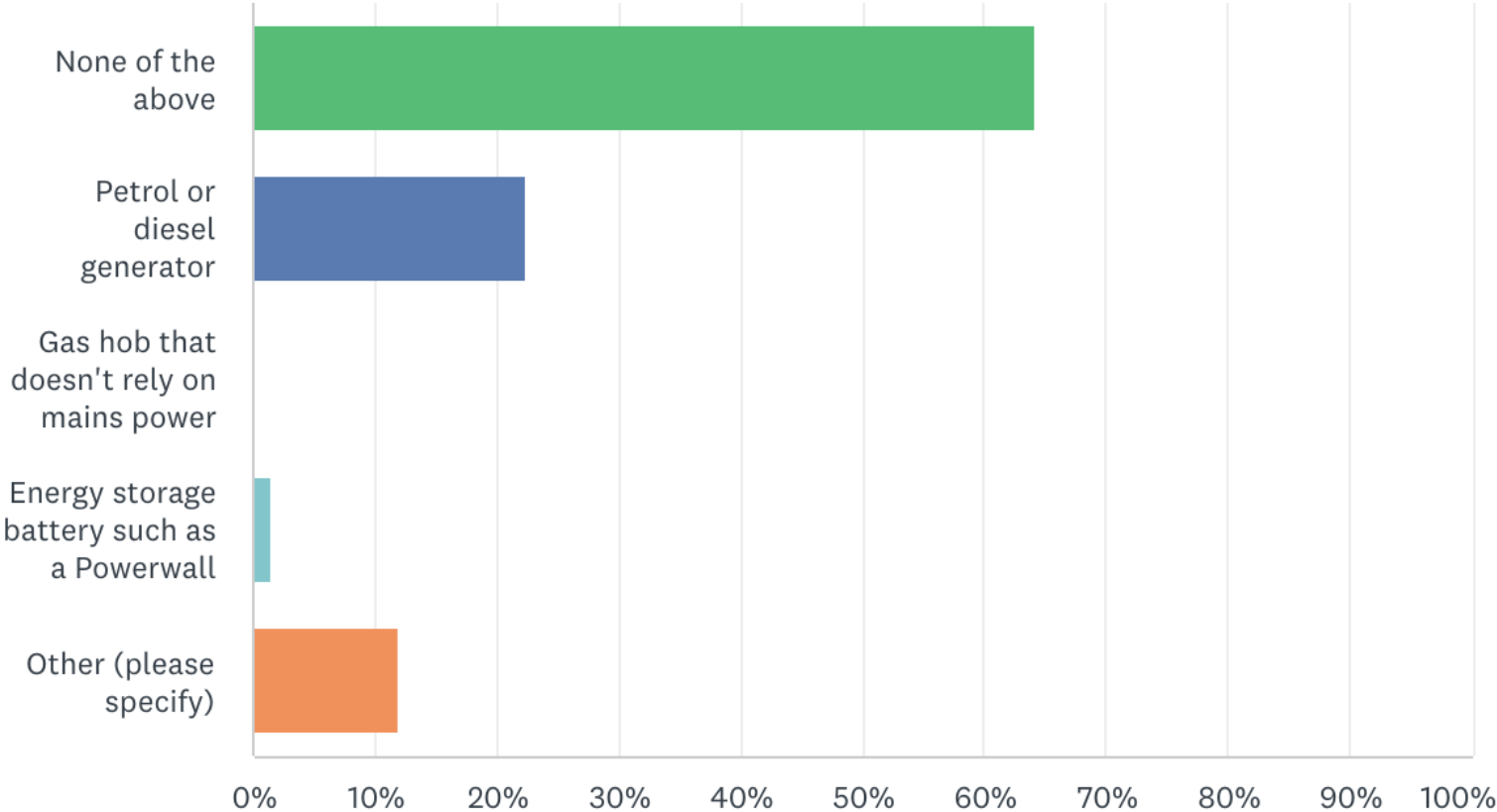
Outdoor fireplace

The use of the wood fire for cooking is only in emergencies

Microwave

Do you have any backup forms of energy generation if mains electricity has failed?

Answered: 67 Skipped: 6



Do you have any backup forms of energy generation if mains electricity has failed?

Answered: 67 Skipped: 6

Responses to "Other"

Wood burner and camping stove

BBQ

Just a camp cooker and BBQ

Wired for generator

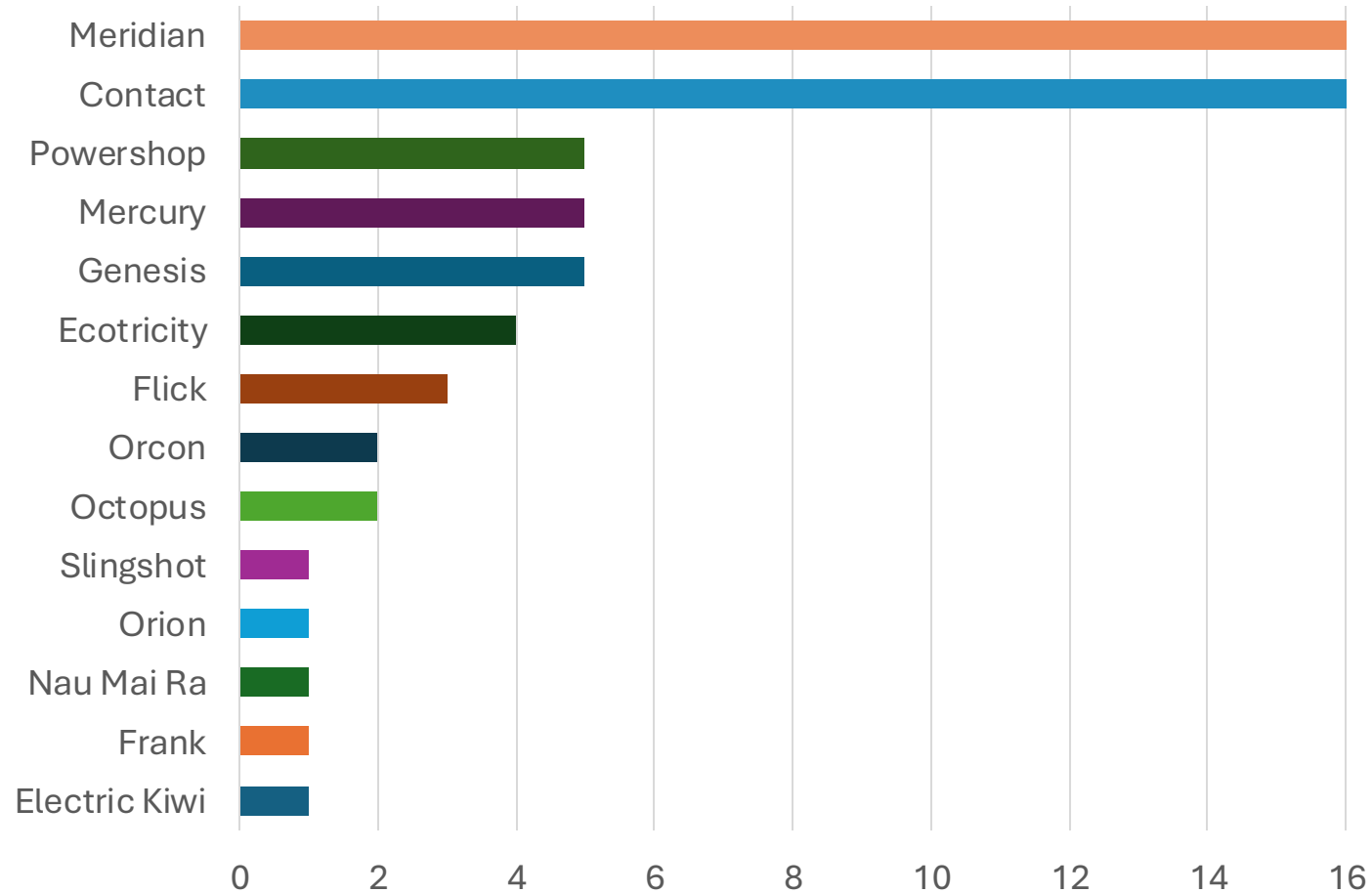
woodfire

Portable gas cooker, LED lights and batteries.

Solar truck and camper

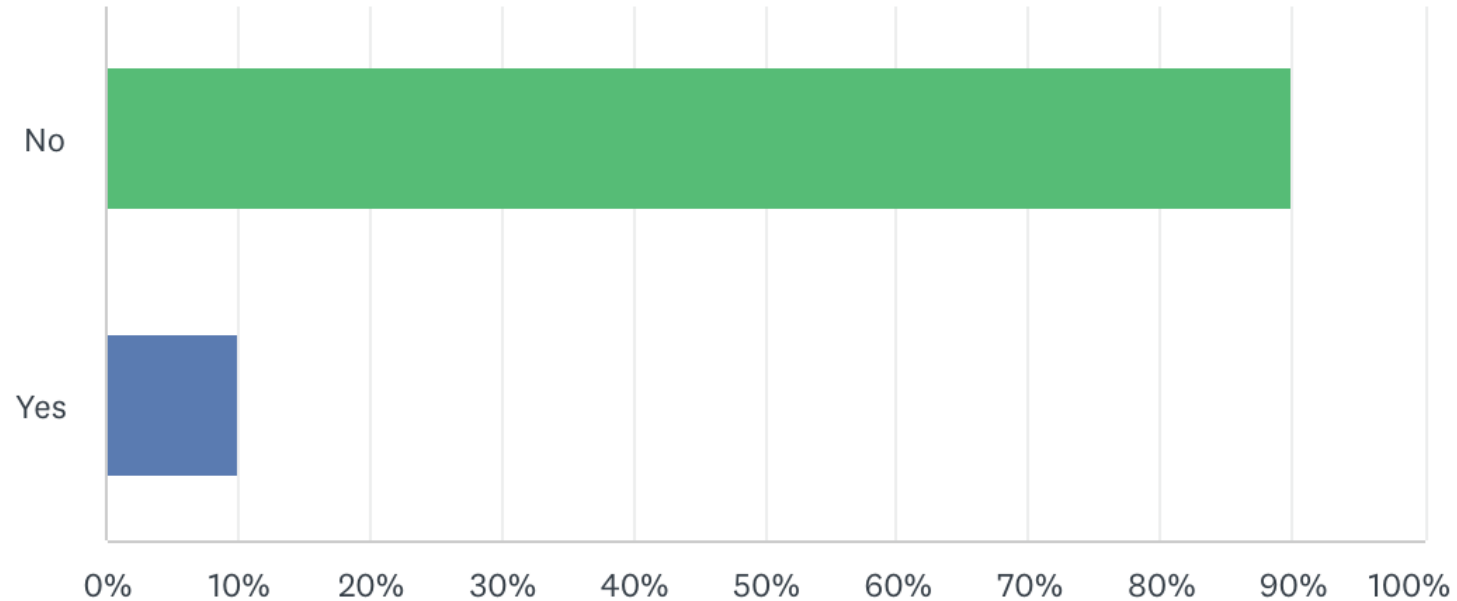
Which energy retailer do you use to access mains power at your Castle Hill property?

Answered: 64 Skipped: 9



Do you currently have solar panels installed at your Castle Hill home?

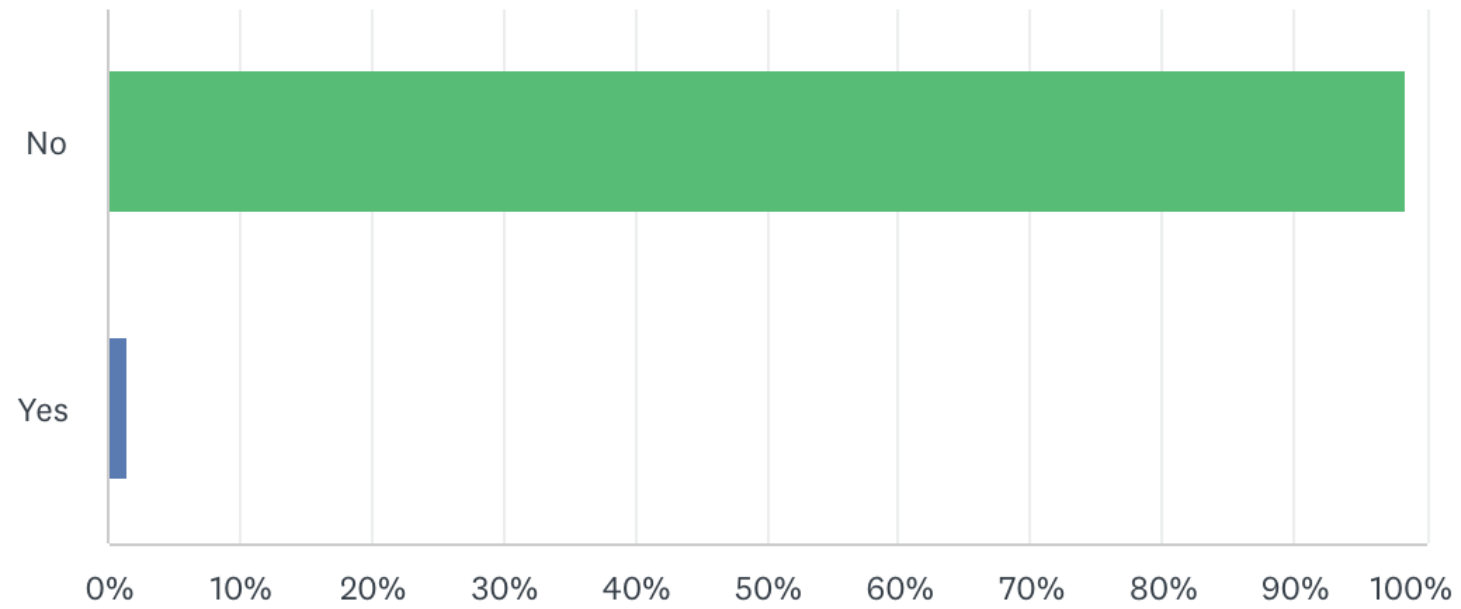
Answered: 70 Skipped: 3



Note added post survey: There are 82 solar PV panels installed across 5 properties and 2 properties with solar hot water panels.

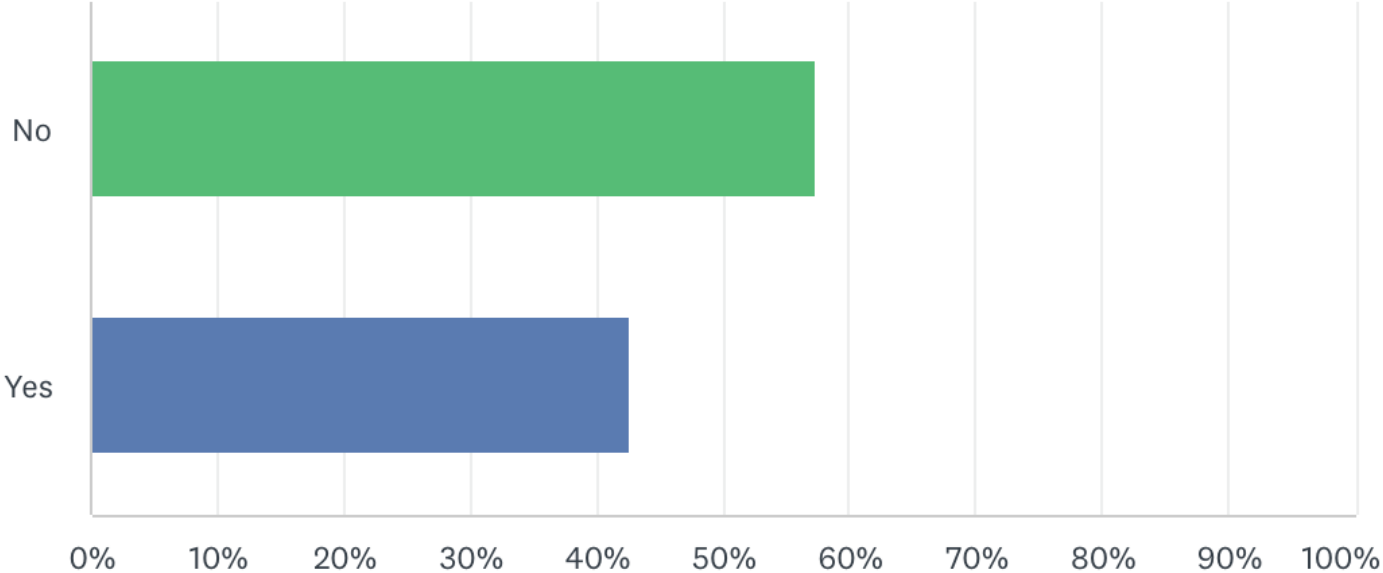
Do you currently have an energy storage battery or batteries such as Powerwall installed at your Castle Hill home?

Answered: 69 Skipped: 4



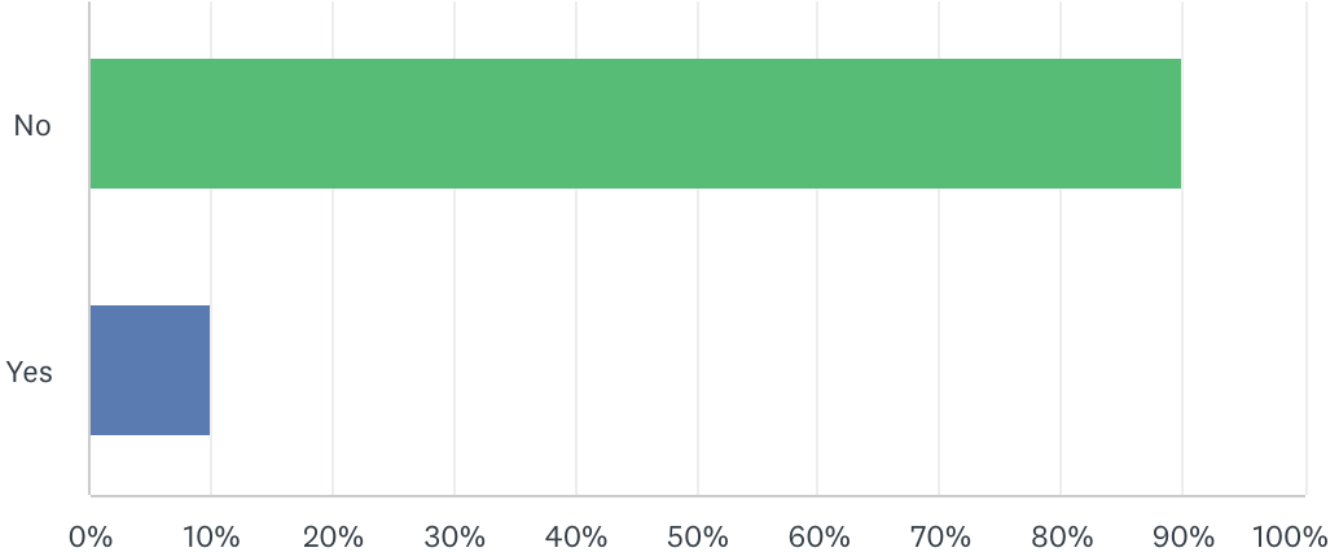
Do you currently own and use an EV or plugin hybrid vehicle to travel to Castle Hill?

Answered: 68 Skipped: 5



Do you currently have an EV smart charger installed in your Castle Hill home?

Answered: 70 Skipped: 3



Do you currently have an EV smart charger installed in your Castle Hill home?

Answered: 70 Skipped: 3

Further comments

The house is wired to facilitate installation of Solar Panels and an EV Smart Charger

Keen to look at solar panels

Wind generation should also be considered.

I have a caravan plug for charging

Slow charge from standard plug

End of 2025 will be purchasing an EV

We will install an EV charger- we have the wiring set up for one

Usually charge my EV at night rates

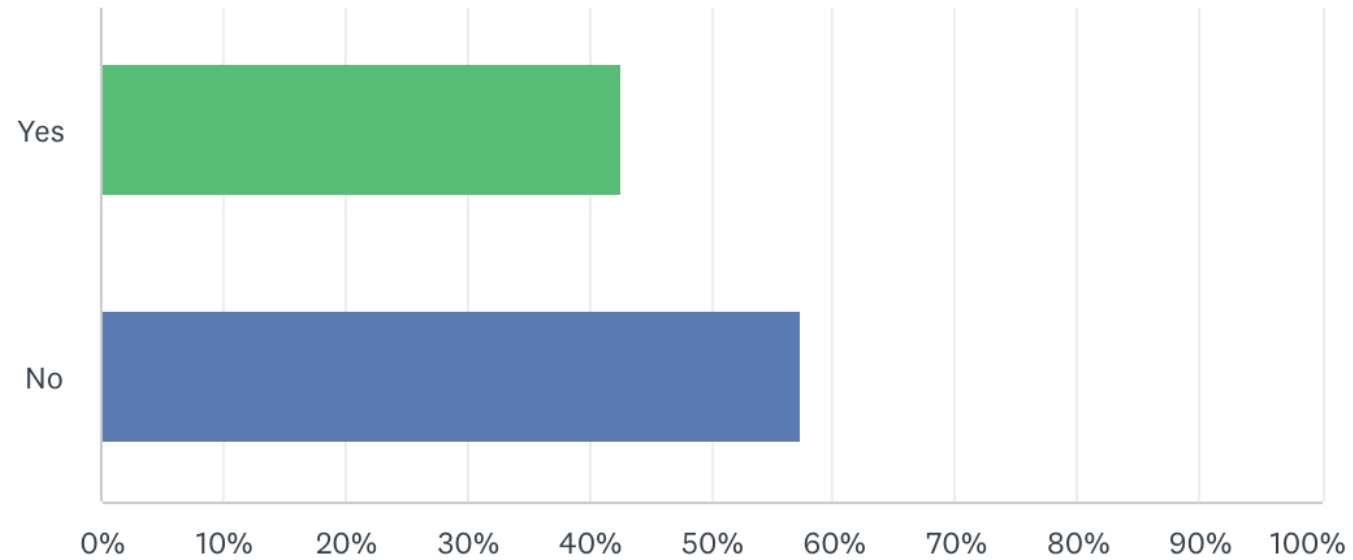
Happily use domestic power plug to trickle charge the EV overnight. Should I need fast charge, I go to the ChargeNet post - this latter is very rare for me

Had an EV but range wasn't suitable for commuting from and to Castle Hill (30 kW battery), so sold it.

Don't have PV panels, but have solar HW panels integrated in our roof since we built in 2010.

Are you thinking about installing solar panels +/- an energy storage battery at your Castle Hill home?

Answered: 68 Skipped: 5



If yes, how many panels or batteries are you hoping to install, or how much would you be prepared to spend?

Up to \$20000 (x 5)

Up to \$10,000

Up to \$6,000 (x 2)

12 panels no battery

No plans yet (x 8)

Not sure, need to understand consumption at peak hours first

As many Panels as needed and one battery

We have 17 solar panels . An 8 kw inverter

A roof full (70 metre long roof) ! No battery storage

Panels + battery Enough battery capacity to power essential needs in the home in a power failure

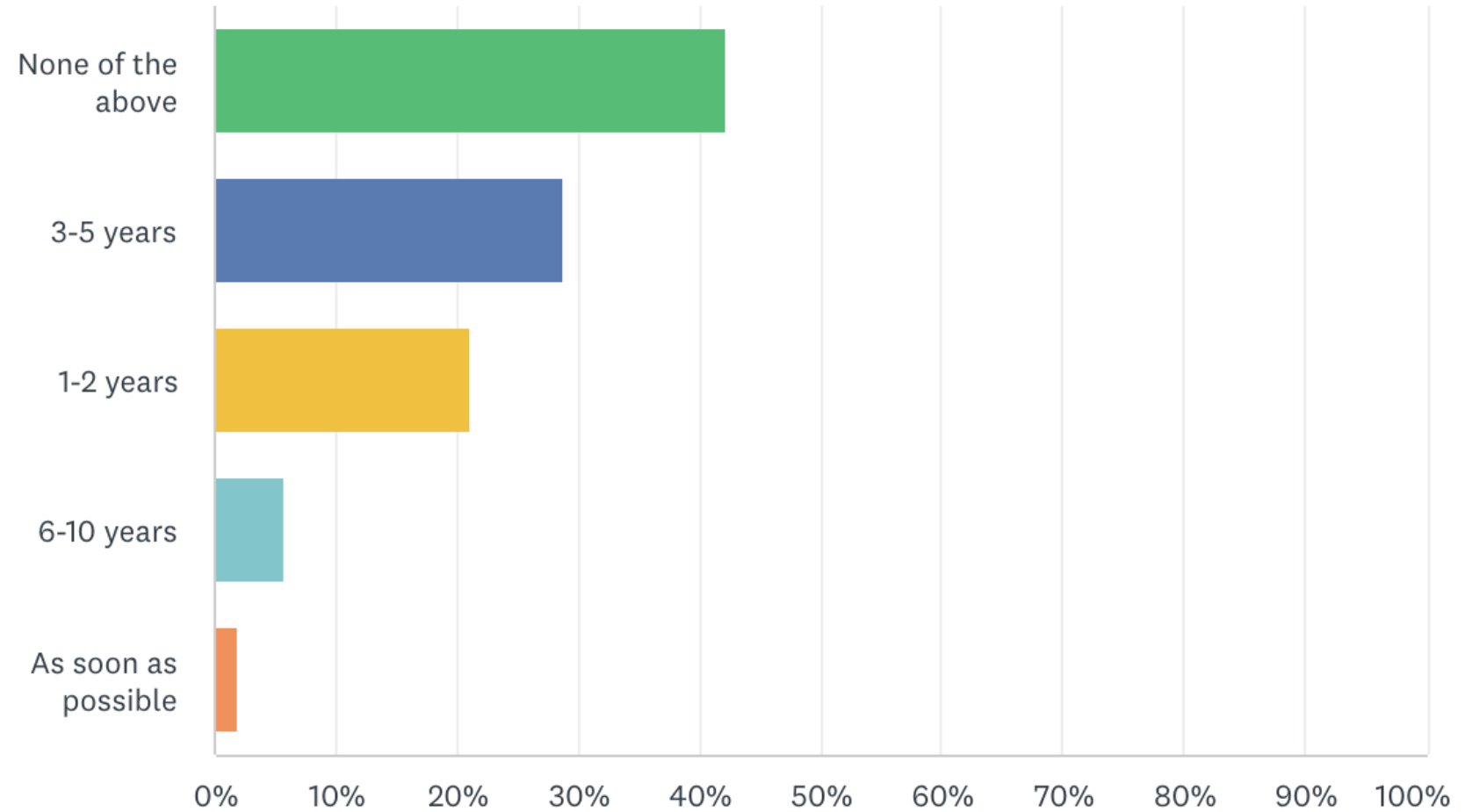
No firm plan. Not planning batteries, panels only, as we use electric heat pump to heat concrete pad and this would act as solar energy storage.

I evaluated it but our roof does not have sufficient contiguous areas to make it financially viable

Interested to maybe add batteries to current system along with hybrid inverter and emergency power sub-board but not entirely convinced that environmental effects of lithium mining are better than just burning a few litres of diesel in our generator on the odd occasion that grid power is lost.

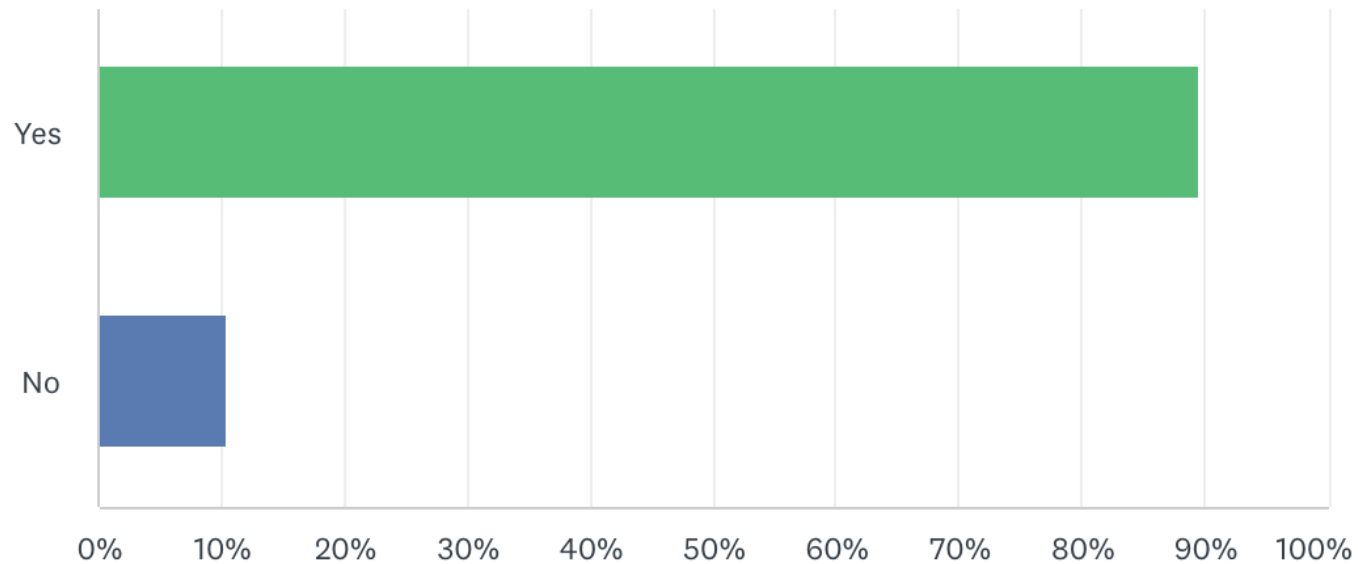
When are you thinking of making this investment?

Answered: 52 Skipped: 21



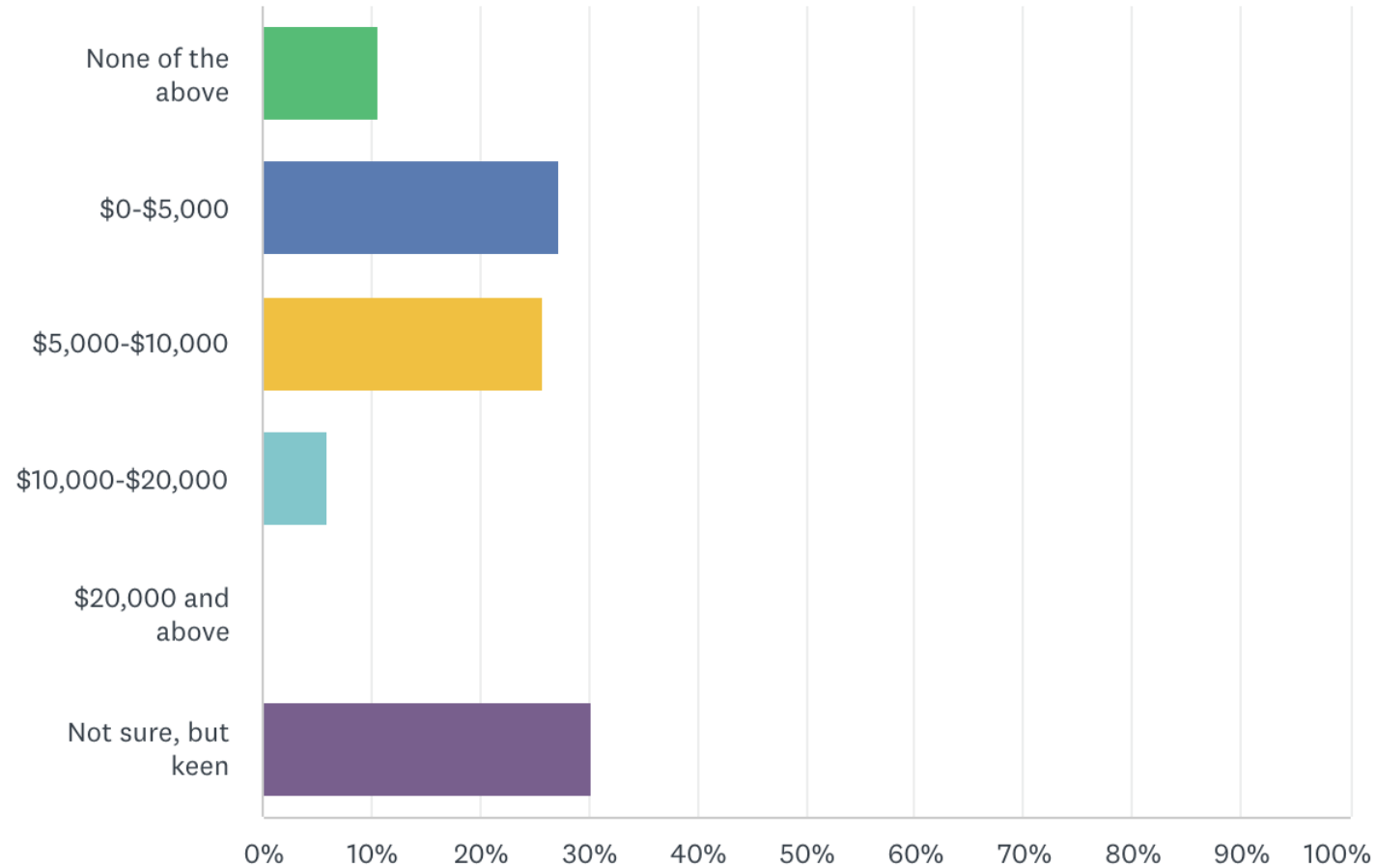
As a lower cost alternative, would you be interested in being part of a whole-of-community solar and battery installation that provided you access to lower cost power and increases the village's emergency resilience?

Answered: 67 Skipped: 6



How much would you be prepared to invest to be part of a community energy scheme?

Answered: 66 Skipped: 7



Any further comments?(Optional)

Answered: 26 Skipped: 47

A great initiative. Thanks for promoting this.

To compare apples with apples it would be good to talk to electricians who install solar about the various ways a home can be wired for solar. Batteries are the big ticket items

Thanks for this initiative

We could be interested in installation of solar panels if secure in a high wind zone and the price is right

For me, a decision about investing in solar on my property versus investing in a community scheme needs info for me on what it would cost to install on my house. So I would need to do some work to consider that before then considering the benefit of joining a community scheme.

I'm also the contact for St Andrew's College Outdoor Ed lodge ... we have backup generator and diesel boiler.

Keen for solar options, as long as the overall net gain/improvement is worth it at sustainable. Not interested in something that looks good and is just a gesture to be seen to be doing a good thing environmentally. Not keen on wind powered - have seen this in other regions I've lived and think it has more negative than positive effect on balance.

This is very early in my thought / consideration process and would not be in a position to financially consider for 3 years minimum. Thank you for initiating this

Already have solar hot water panels installed.

We don't use that much but I like the idea of community solar projects

It's great to see projects like these.

We have solar both at Castle Hill and in Christchurch. Recently installed. They are producing an income and charging our vehicles.

Given that we have no flat roof area facing north, solar will be a poor investment on our house.

Any further comments?(Optional)

Answered: 26 Skipped: 47

An investment decision would be based on scrutiny of the business case

Are you also considering the feasibility of "run of the river" hydro generation from Thomas River

Great work! Such an exciting initiative.

This is a great initiative

Had been considering panels/powerwall solution to provide backup in case of a power failure but anticipate fairly low use as not permanent residents.

We have answered no to current plans to install, that is something we are looking to revisit over the coming 12 months

Haven't thought hard about it however, as previously, because we have heat pump slab heating this lends itself to an individual solar solution without batteries and I'd be doubtful that a community project would be better value for me personally.

I suspect that the payback period for our house only is uneconomic

My answer to the question about being part of a community energy scene is "maybe" and it would depend on the details. I would be interested to see micro hydro considered as it can generate 24/7 and importantly at times when peak loads occur (breakfast & dinner times) and therefore can reduce battery storage needed. Noting though that generation capacity from micro hydro is not likely to power the village. The other part of my "maybe" is that we have already invested in solar PV and a backup generator, so additional personal investment has a lesser return for us. Would it be possible for existing PV installs like ours to export excess power to the community energy scheme? How would generation work in times of adverse weather when it's raining or snowing (experience says this is when unnotified national grid outages generally occur)? Solar and batteries may struggle at these times if there is very little pv generation.

Really pleased to see the community having these sort of conversations. Thank you for your efforts.

Was great to see this project get started. Keen to follow along and help if useful. Thanks

Thanks for taking the initiative to coordinate this commendable project.