



SURVEY REPORT

Electricity Procurement and Management in the Victorian Local Government Sector

January 2018

Introduction

Background

This report provides a summary of the results from a survey of Victorian councils, conducted October – December 2017. The intent of the survey is to:

- quantify electricity consumption by contract type across all Victorian councils.
- determine the extent to which Victorian councils have installed solar PV on their own facilities to inform future bulk buy initiatives.
- collect information on the preferences of councils for developing new retail electricity procurement, investment and contracting models.

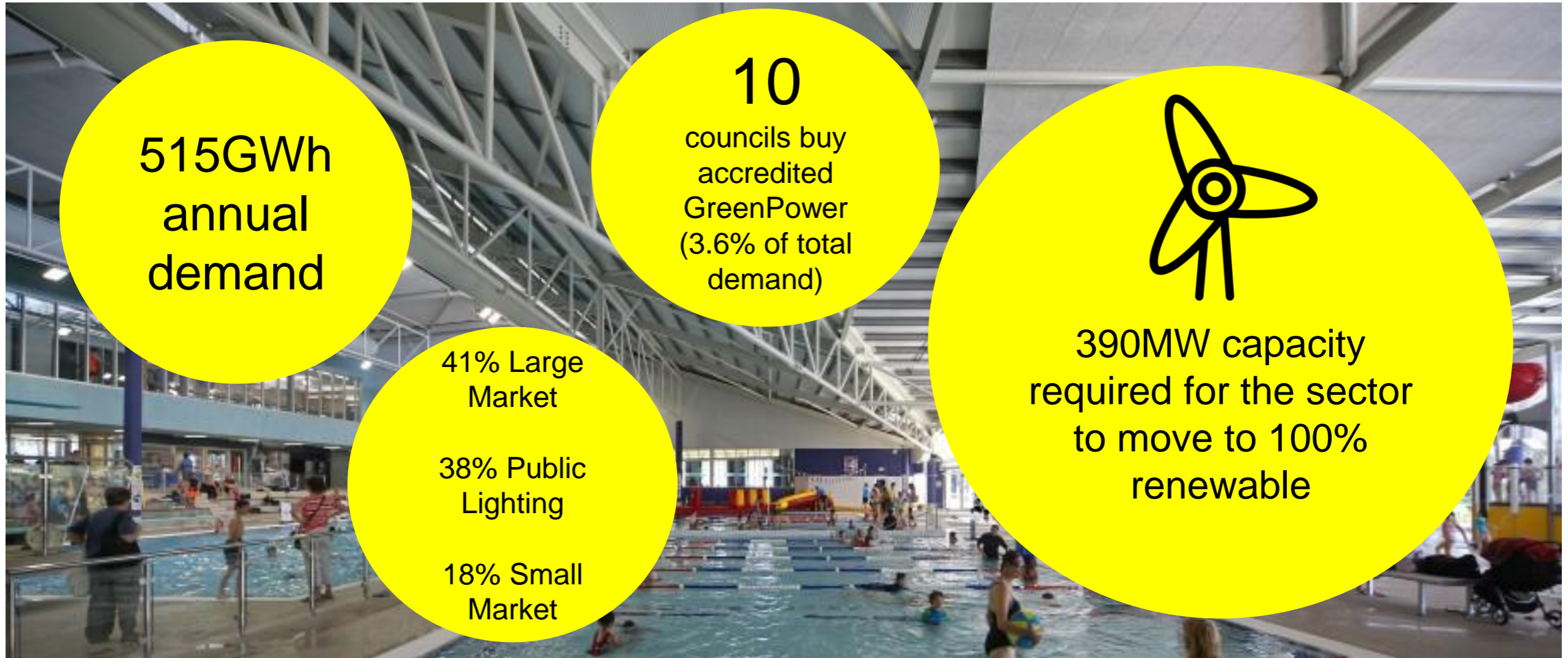
Question 1

Council name – 52 of 79 councils responded to the survey

Ararat	Darebin	Maroondah	Swan Hill
Ballarat	Frankston	Melton	Wangaratta
Banyule	Gannawarra	Mildura	Whitehorse
Bass Coast	Glen Eira	Moira	Whittlesea
Baw Baw	Glenelg	Monash	Wodonga
Bayside	Greater Geelong	Moonee Valley	Wyndham
Benalla	Hobsons Bay	Moreland	Yarra Ranges
Bendigo	Hume	Mount Alexander	
Boroondara	Kingston	Murrindindi	
Brimbank	Knox	Port Phillip	
Buloke	Latrobe	Pyrenees	
Campaspe	Macedon Ranges	Shepparton	
Cardinia	Manningham	South Gippsland	
Casey	Mansfield	Sthn Gramps	
Dandenong	Maribyrnong	Stonnington	

Question 2

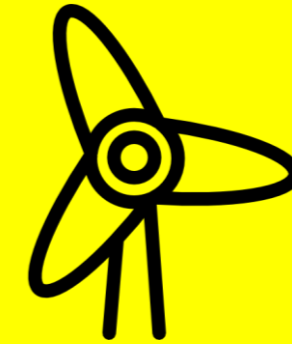
Annual electricity consumption – sector wide



515GWh
annual
demand

10

councils buy
accredited
GreenPower
(3.6% of total
demand)



390MW capacity
required for the sector
to move to 100%
renewable

41% Large
Market

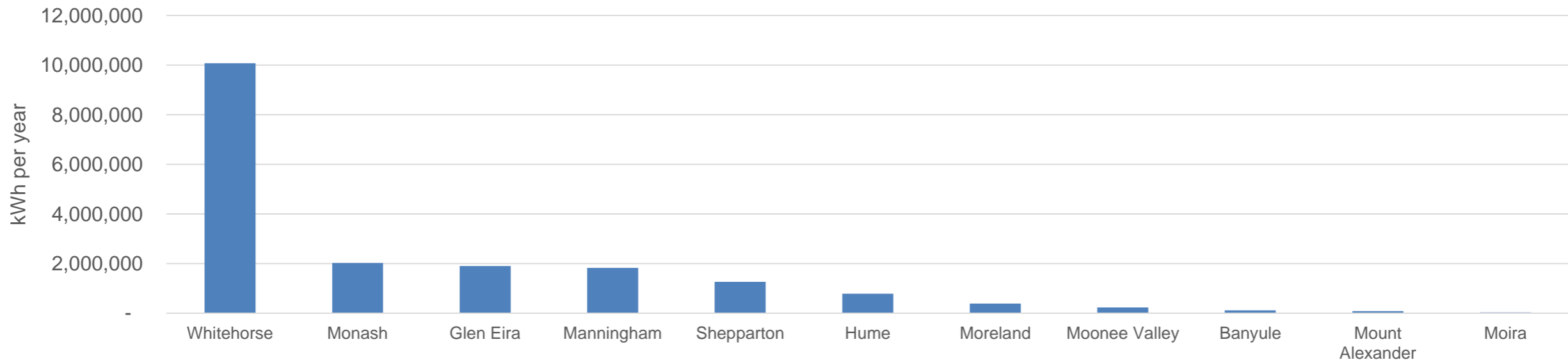
38% Public
Lighting

18% Small
Market

Question 3

Does your council currently purchase GreenPower?

- Over time, councils have redirected their spending from GreenPower to energy efficiency and on-site solar.
- GreenPower costs have now doubled. Councils could secure a better price by purchasing renewable energy certificates (LGCs) through a long term off take agreement.



Question 4

Does your council have a renewable energy target?

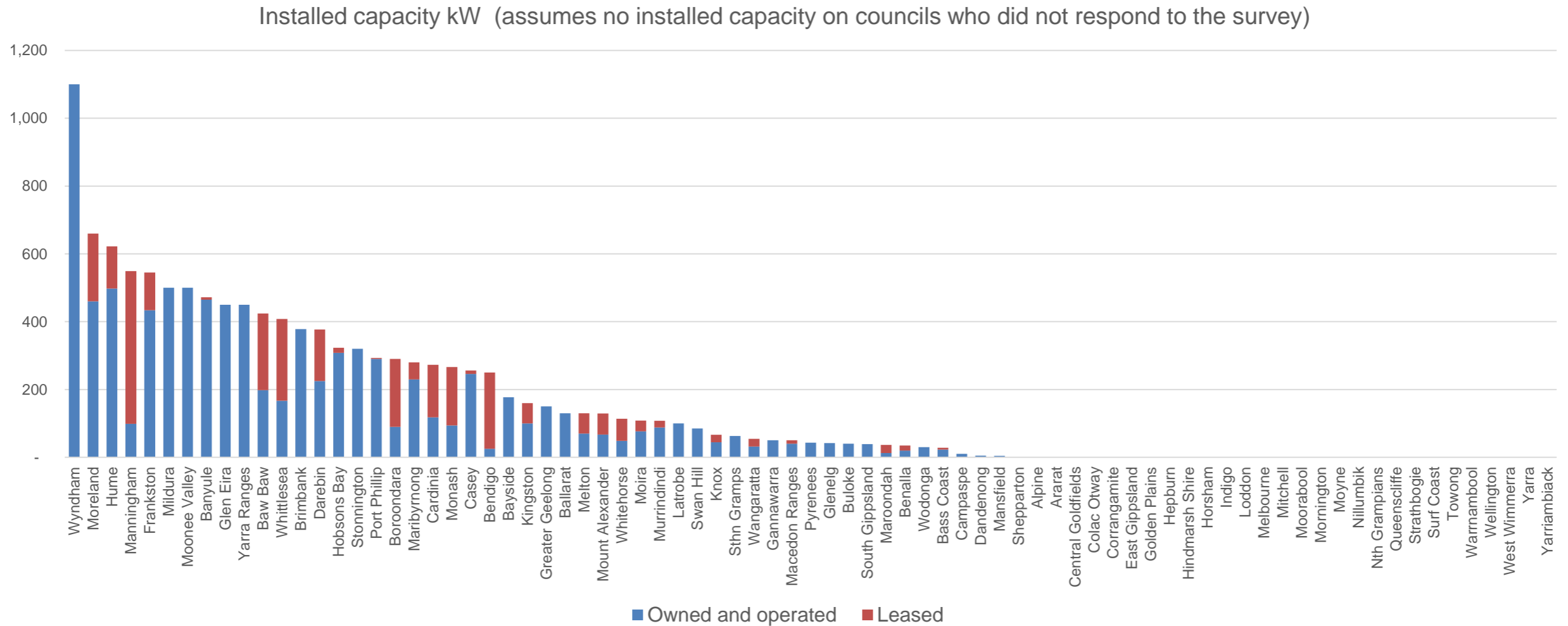
Just eight councils have explicit targets for renewable energy generation or consumption.



Most councils have emissions reduction targets, some of which refer to renewable energy.

Question 5 and 6

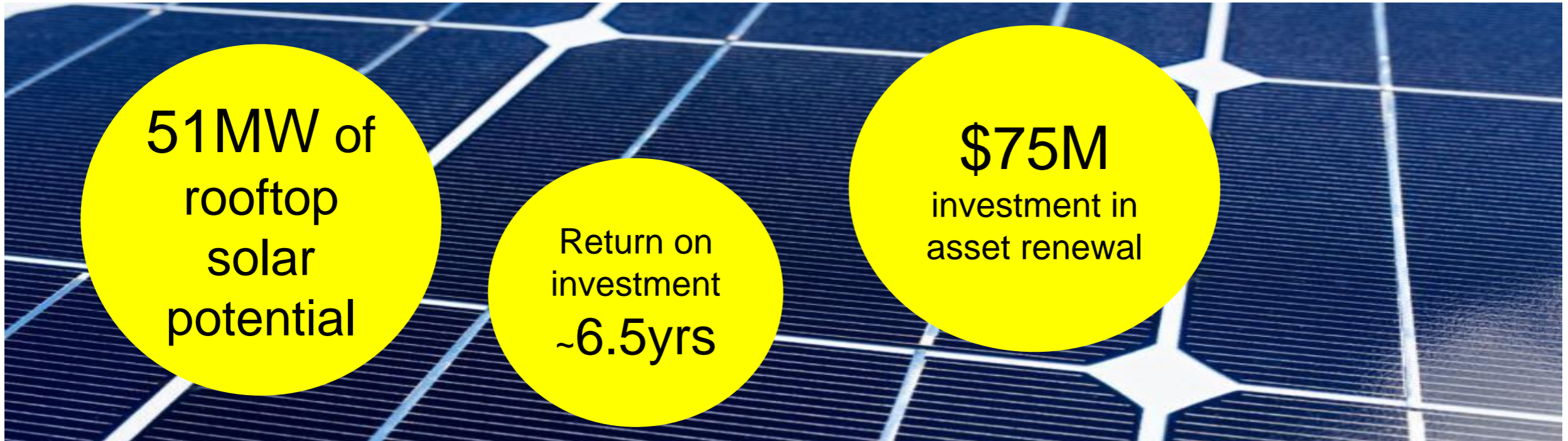
What is the total installed capacity (kW) of solar PV systems on council facilities?



Question 5 and 6

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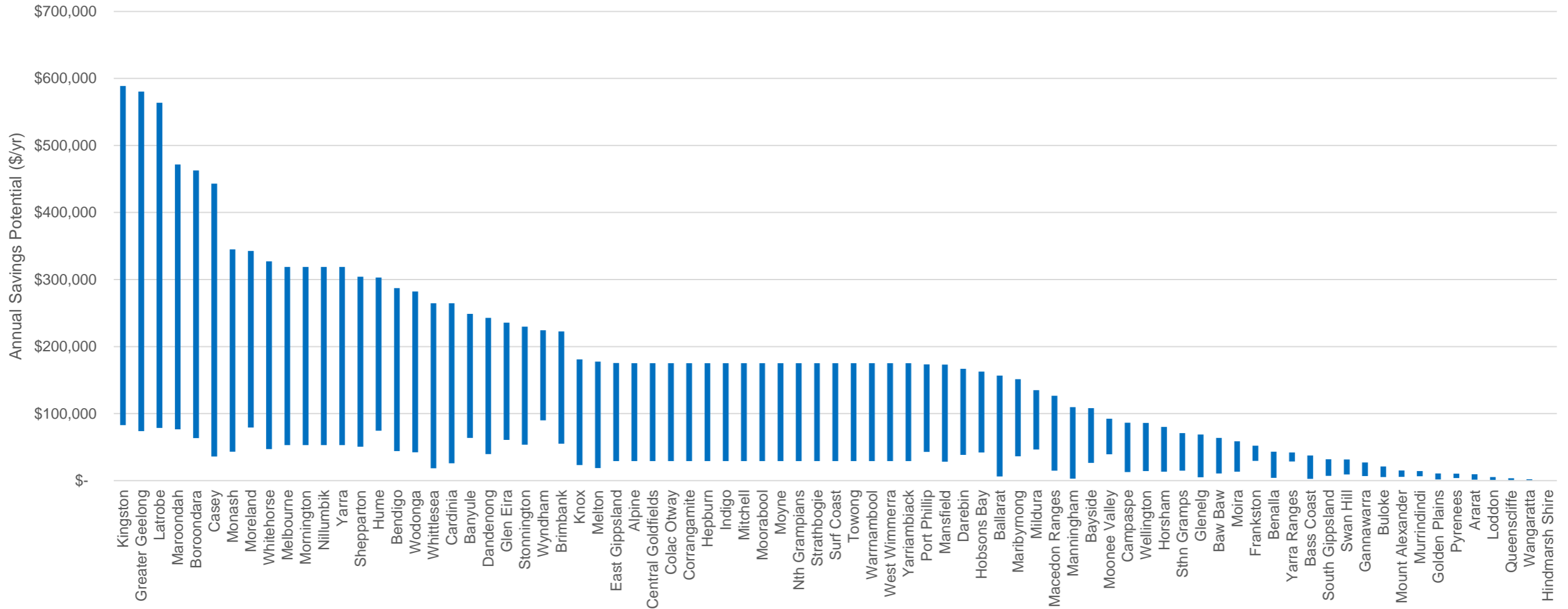
- Victorian councils generate ~2.4% of their annual electricity needs with on-site solar
- Covering all suitable roof space with solar could increase this to 25% and save councils a total of \$11.7M per year in avoided electricity costs



Question 5 and 6

What is the total installed capacity (kW) of solar PV systems on council facilities?

Range of annual savings potentials through on site generation (\$/yr)



Question 7

Is your council seeking to change the way it currently procures retail electricity for cost or other reasons?

Yes - 49%

Banyule	Pyrenees
Bayside	Shepparton
Bendigo	South Gippsland
Boroondara	Stonnington
Brimbank	Swan Hill
Buloke	Whitehorse
Casey	Yarra Ranges
Glen Eira	
Glenelg	
Hume	
Knox	
Mansfield	
Maroondah	
Moira	
Moonee Valley	
Moreland	
Mount Alexander	
Port Phillip	

No - 15%

Ararat
Baw Baw
Benalla
Gannawarra
Kingston
Melton
Monash
Wodonga

Unsure - 36%

Ballarat
Bass Coast
Campaspe
Cardinia
Dandenong
Darebin
Frankston
Greater Geelong
Hobsons Bay
Latrobe
Macedon Ranges
Manningham
Maribyrnong
Mildura
Murrindindi
Sthn Gramps
Wangaratta
Whittlesea
Wyndham

Question 8

What is your preferred economic structure?

**Buy & invest
- 42%**

Banyule	Mount Alexander
Bass Coast	Shepparton
Benalla	South Gippsland
Bendigo	Stonnington
Boroondara	Whitehorse
Cardinia	
Casey	
Glen Eira	
Glenelg	
Hobsons Bay	
Knox	
Latrobe	
Maroondah	
Moira	
Moonee Valley	

Buy - 17%

Bayside
Darebin
Frankston
Mansfield
Moreland
Sthn Gramps
Wyndham

Invest - 2%

Yarra Ranges

Unsure - 38%

Ararat
Ballarat
Brimbank
Buloke
Campaspe
Dandenong
Greater Geelong
Hume
Kingston
Macedon Ranges
Manningham
Maribyrnong
Mildura
Murrindindi
Pyrenees
Swan Hill
Wangaratta
Whittlesea

Question 9

Does the arrangement need to reduce emissions?

Yes – 64%

Ararat	Maribyrnong
Ballarat	Moira
Banyule	Moonee Valley
Bass Coast	Moreland
Bayside	Mount Alexander
Benalla	Murrindindi
Bendigo	Port Phillip
Brimbank	Pyrenees
Buloke	Shepparton
Cardinia	South Gippsland
Casey	Sthn Gramps
Darebin	Wangaratta
Hobsons Bay	Whitehorse
Kingston	Whittlesea
Macedon Ranges	

No – 11%

Greater Geelong
Latrobe
Mansfield
Swan Hill
Yarra Ranges

Partly – 15%

Boroondara
Dandenong
Frankston
Glen Eira
Glenelg
Mildura
Stonnington

Unsure - 10%

Campaspe
Hume
Knox
Manningham
Maroondah

Question 10

Does the generation source need to be new or existing?

New - 25%

Ararat
Banyule
Bayside
Benalla
Bendigo
Boroondara
Brimbank
Moonee Valley
Moreland
Mount Alexander
Port Phillip

Existing - 0%

No pref 36%

Bass Coast
Campaspe
Cardinia
Casey
Glenelg
Greater Geelong
Hobsons Bay
Knox
Mansfield
Maribyrnong
Mildura
Moir
Murrindindi
Pyrenees
South Gippsland
Stn Gramps
Swan Hill

Unsure - 38%

Ballarat
Buloke
Dandenong
Darebin
Frankston
Glen Eira
Hume
Kingston
Latrobe
Macedon Ranges
Manningham
Maroondah
Shepparton
Stonnington
Wangaratta
Whitehorse
Whittlesea
Wyndham

Question 11

Does the project need to deliver local economic development outcomes?

Yes – 25%

Ararat
Bass Coast
Bendigo
Darebin
Latrobe
Mount Alexander
Port Phillip
Shepparton
South Gippsland
Swan Hill
Yarra Ranges

Nice to have
– 72%

Ballarat	Knox
Banyule	Macedon Ranges
Bayside	Mansfield
Benalla	Maribyrnong
Boroondara	Maroondah
Brimbank	Mildura
Buloke	Moira
Campaspe	Moonee Valley
Cardinia	Moreland
Casey	Murrindindi
Dandenong	Pyrenees
Frankston	Sthn Gramps
Glen Eira	Stonnington
Glenelg	Wangaratta
Greater Geelong	Whitehorse
Hobsons Bay	Whittlesea
Hume	Wyndham

Not important
– 2%

Manningham

No pref - 0%

Question 12

Would you be willing to participate in a local government energy contract working group, meeting quarterly over the next 18 months?

Yes – 25%

Banyule	Moonee Valley
Bass Coast	Mount Alexander
Bendigo	Port Phillip
Boroondara	Shepparton
Brimbank	Sthn Gramps
Cardinia	Swan Hill
Darebin	Whitehorse
Frankston	Whittlesea
Glen Eira	Yarra Ranges
Hobsons Bay	
Hume	
Manningham	
Maroondah	
Mildura	
Moira	

**Informed
72%**

Ararat	Melton
Baw Baw	Monash
Bayside	Moreland
Benalla	Murrindindi
Buloke	Pyrenees
Campaspe	South Gippsland
Dandenong	Stonnington
Glenelg	Wangaratta
Greater Geelong	Wyndham
Kingston	
Knox	
Latrobe	
Macedon Ranges	
Mansfield	
Maribyrnong	
Melton	

No – 2%

Casey
Gannawarra
Wodonga

Recommendations

Immediate

- Many councils are still 'unsure' of their preferences for procuring and managing their electricity needs. One of the goals of the working group should be to assist these councils to confirm their preferences and adopt appropriate response initiatives.
- The working group should provide a forum for councils with similar preferences to collaborate on projects, and capture economies of scale and implementation efficiencies.



Recommendations

Short term

- Councils already committed to purchasing on-bill GreenPower should pursue a separate procurement process to establish a long term offtake agreement with an existing generator from July 2018.
- Preliminary market engagement indicates that councils could secure certificates for ~\$30, instead of the \$90-\$65 range provided by retailers through current retail arrangements.
- There are a number of new renewable energy generators in Victoria with uncontracted loads, which could provide certificates from tangible projects for which councils can clearly communicate their support.

Recommendations

Short to medium term

- There are clear collaborative procurement opportunities for scaling up behind-the-meter solar on council facilities, particularly on large market sites.
- The working group should map and align the respective asset renewal and capital works budgets of relevant councils, and develop coordinated procurement and implementation plans.
- Councils should consider approaching the Municipal Association of Victoria (MAV) to manage the procurement process. This should be conducted in tranches to ensure the solar PV sector has capacity to respond appropriately.

Recommendations

Medium to long term

- There are 9 mid-large scale offsite solar projects being scoped by councils across the state, including Yarra Ranges, South Gippsland, Geelong, Kingston, Baw Baw, Bass Coast, Wodonga, Brimbank and Nillumbik.
- The working group should undertake a 'stocktake' of these projects, map out their generation capacity and assess the ability of other councils to co-invest in (or buy from) these projects.
- This work could also be supported by New Energy Jobs Fund grant, which could assist in identifying additional sites for mid-large scale generation projects
- Councils should consider undertaking joint procurement when selecting suppliers for council owned solar farms to capture benefits of scale.

Recommendations

Longer term

- Councils should begin working now to establish a long term PPA from 2020/21, to coincide with the end of existing retail arrangements.
- This time line is consistent with the experience of the Melbourne Renewable Energy Project (MREP) which was developed over multiple years.
- Councils can leverage the learnings and contractual arrangements from MREP to fast track the next joint PPA procurement process.



Assumptions & Limitations

- Quantitative estimates for total electricity demand across the sector are extrapolated from the 52 responses received. Average figures for metro and rural councils are applied to councils who did not respond.
- On site solar potential is estimated using 3.6 sun hrs/day, installations costs \$1.49/MW, savings of \$0.175/kWh derived from blended large market and small market tariff and existing penetration rate.
- Maximum rooftop potential ranges between 5%-25%, based on the findings of current and planned projects across three councils utilising all available roof space. This range is consistent with the diversity in building stock portfolios across the sector, particularly between rural and metro councils.