



RENEWABLE ENERGY FOR
BUSINESS, SIMPLIFIED

ACCELERATING LARGE-SCALE RENEWABLE ENERGY
USE ACROSS AUSTRALIA

Chris Briggs, Technical Director
Business Renewables Centre - Australia

Supporting Industry to Reduce Emission, ARENA Insights, November 21st 2019

Who we are...

Project partners



Funding partners



Corporate PPAs so far

**58
Projects**

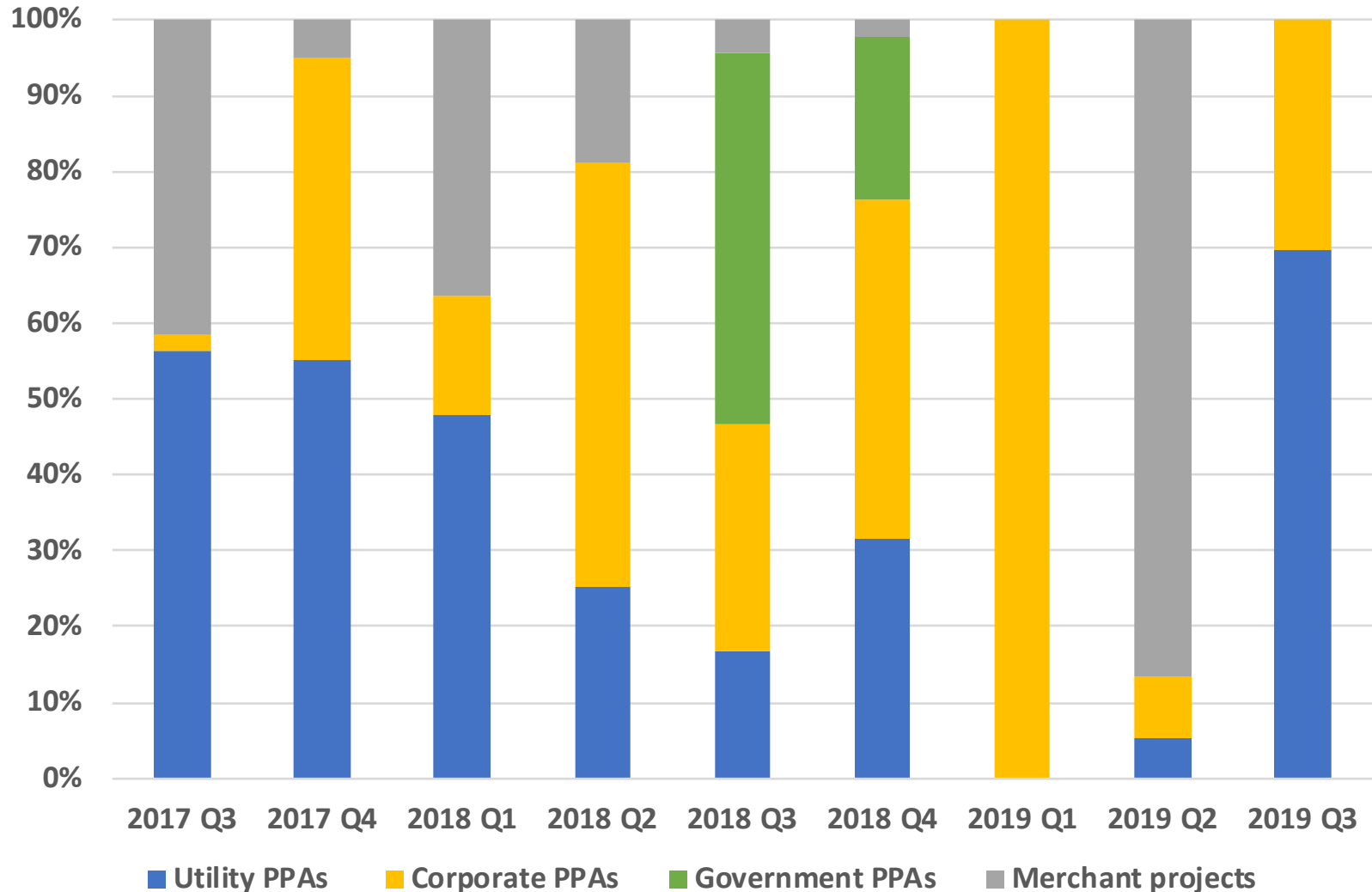
**2260 MW
Contracted**

**5200 MW
Projects
Supported**

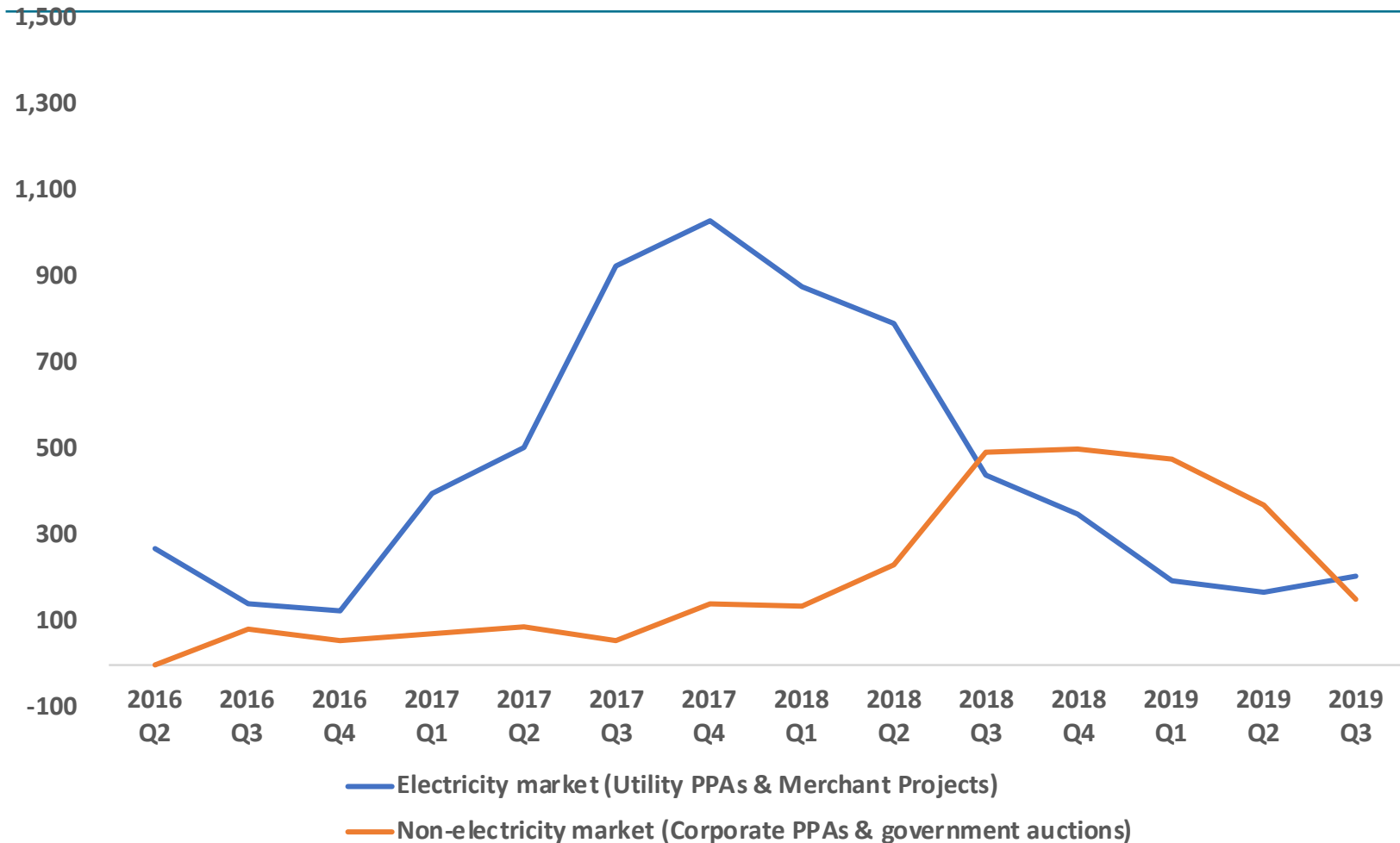
Why a Renewable Energy PPA?

	1. Sustainability ✓	2. Hedge Value ✓	3. Cost Saving ?
Why	<ul style="list-style-type: none"> Enhance brand Meet green targets Sustain business value 	<ul style="list-style-type: none"> 'Lock-in' acceptable electricity prices for portion load to support operations and planning 	<ul style="list-style-type: none"> Use a renewable energy PPA to save money Often catalyst for considering PPA amidst high/rising prices
Key point	<ul style="list-style-type: none"> Strongest case where organisation has targets Emissions reductions from on-site options often have limits PPA's can achieve targets quickly 	<ul style="list-style-type: none"> Doing nothing leaves an organisation exposed to wholesale electricity market volatility Exposure to wholesale market risk can be balanced 	<ul style="list-style-type: none"> Expect lots of scenario modelling to test outcomes Energy bill savings can be achieved - but cost reduction for long-term PPA cannot be 'proven' Always an important part of discussion but risky to make sole or primary rationale

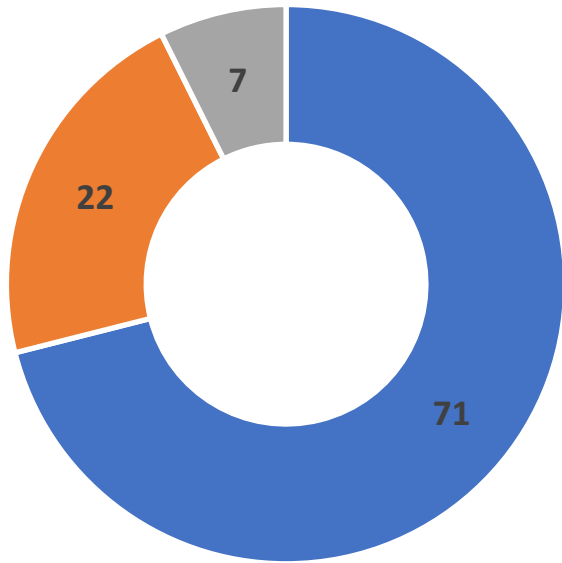
Corporate PPAs are an important segment in diversified market



Corporate PPAs & Energy Transition

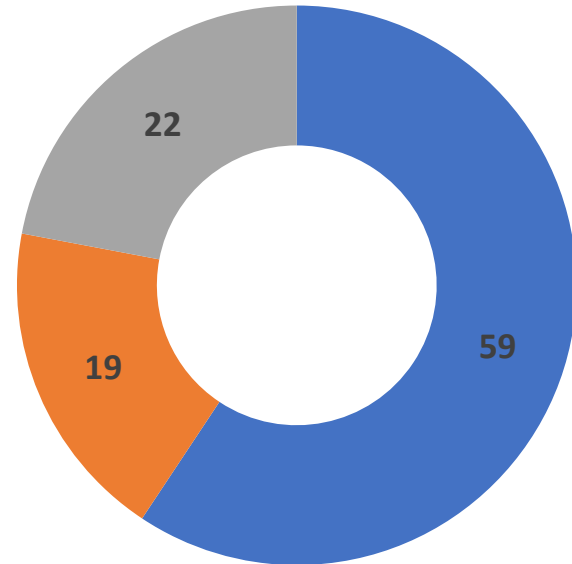


Mostly supporting new deals



■ New Project ■ Confirmed Project ■ Operating

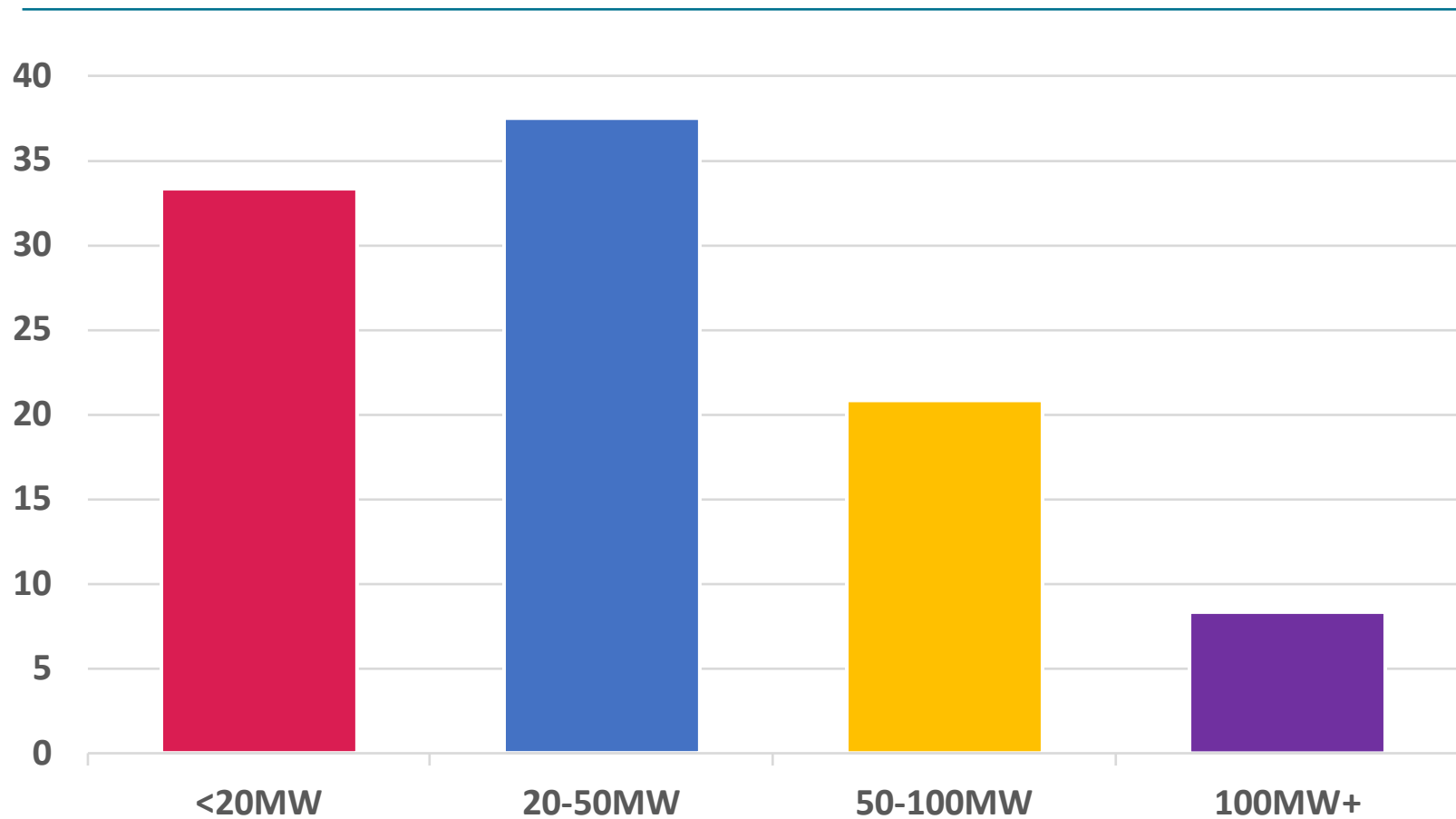
Capacity contracted through PPAs (% , MW)



■ New Project ■ Confirmed Project ■ Operating

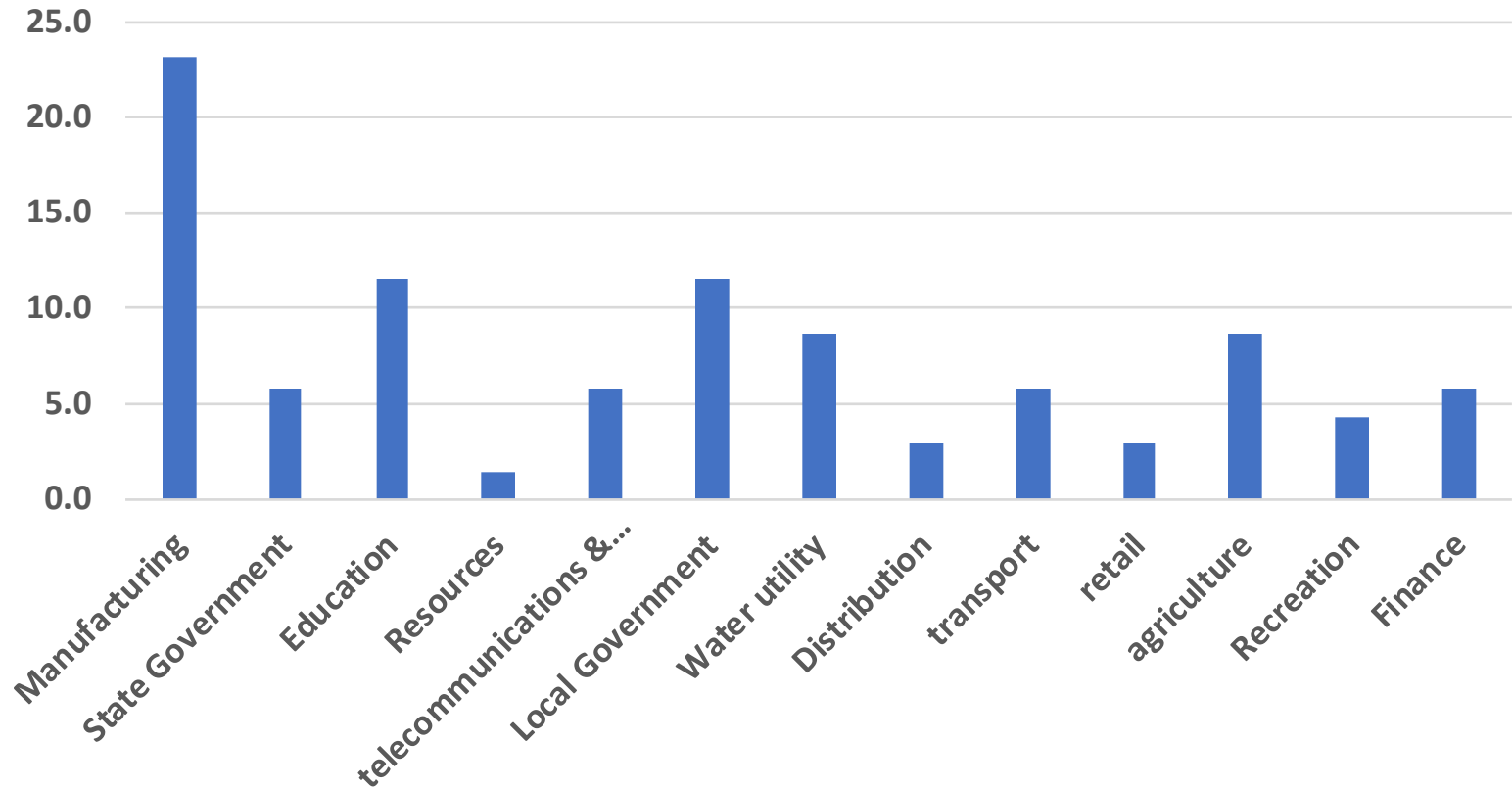
Number of PPAs (%)

Growing diversity in deal size

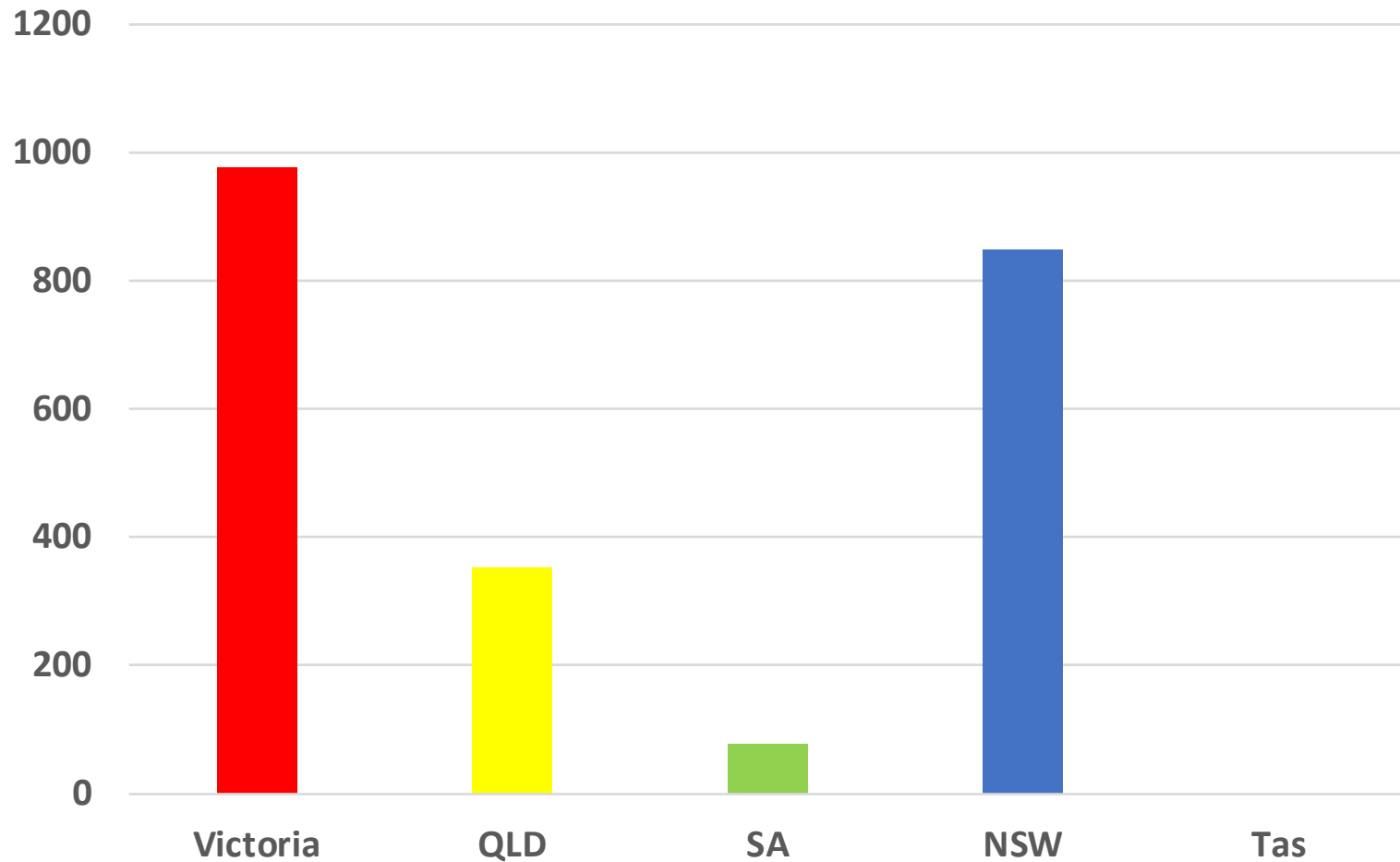


Average size (44 MW) and Median (30 MW) falling as smaller Retail PPAs become more common

Where are the Deals?



Victoria is the leading State

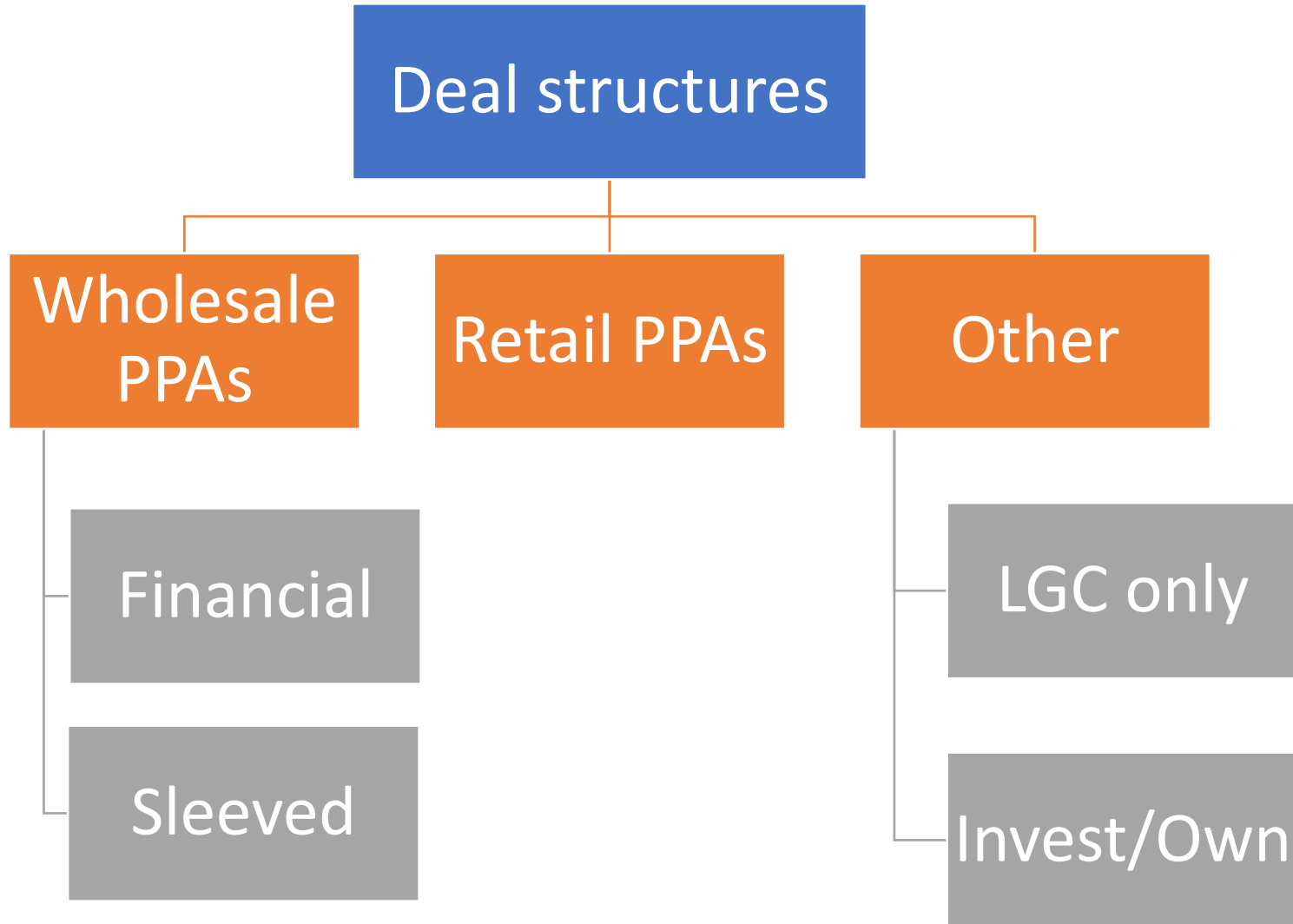


Three key trends in the Corporate PPA sector

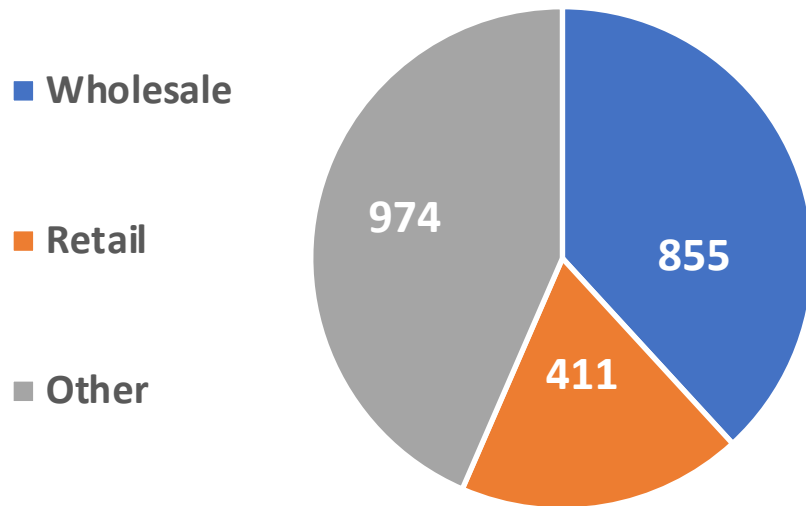
- The large deals are mostly Wholesale PPAs
- The Australian Market is rapidly diversifying into Retail PPAs & mid-sized buyers
- Market Consolidation



Types of deals



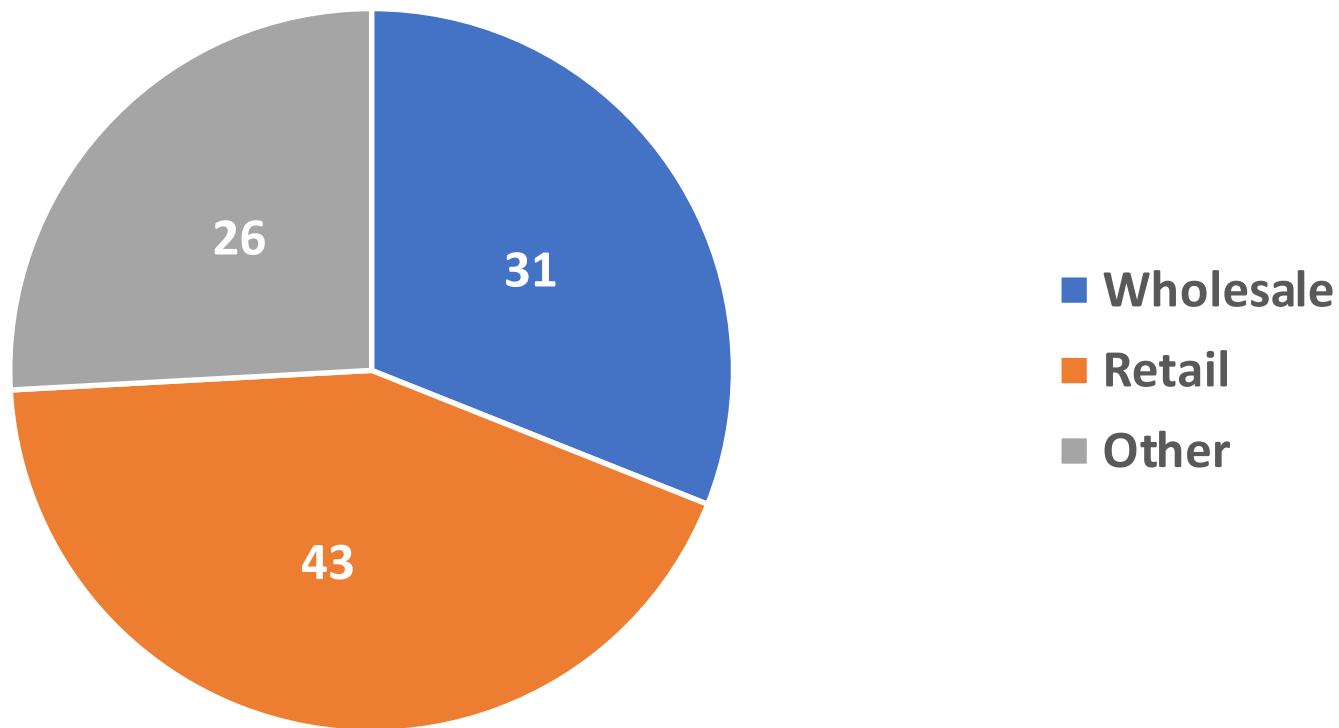
Most big deals are Wholesale PPAs



- Big users likely to continue to prefer wholesale PPAs
 - Greater competition
 - Price transparency
 - Simplicity and flexibility (no interaction with retail agreements)
 - In-house expertise

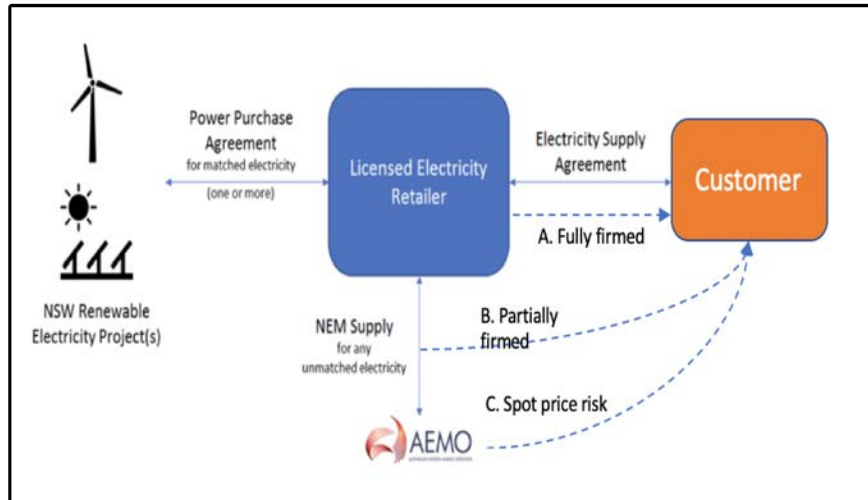
Market Share, by Deal Type (MW)

Growth in Retail PPAs and mid-scale buyers



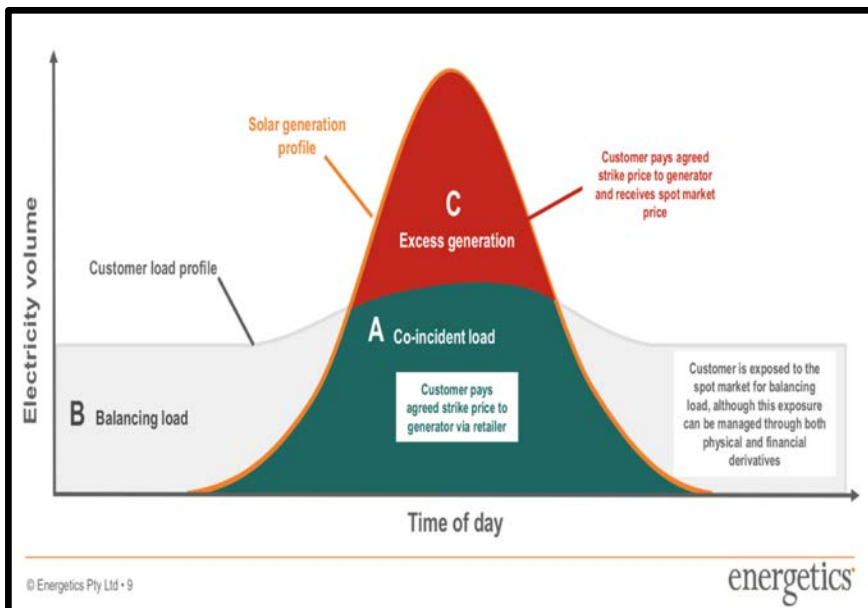
Market Share, Number of PPAs by Deal Type (%)

Retail PPAs



Different models emerging

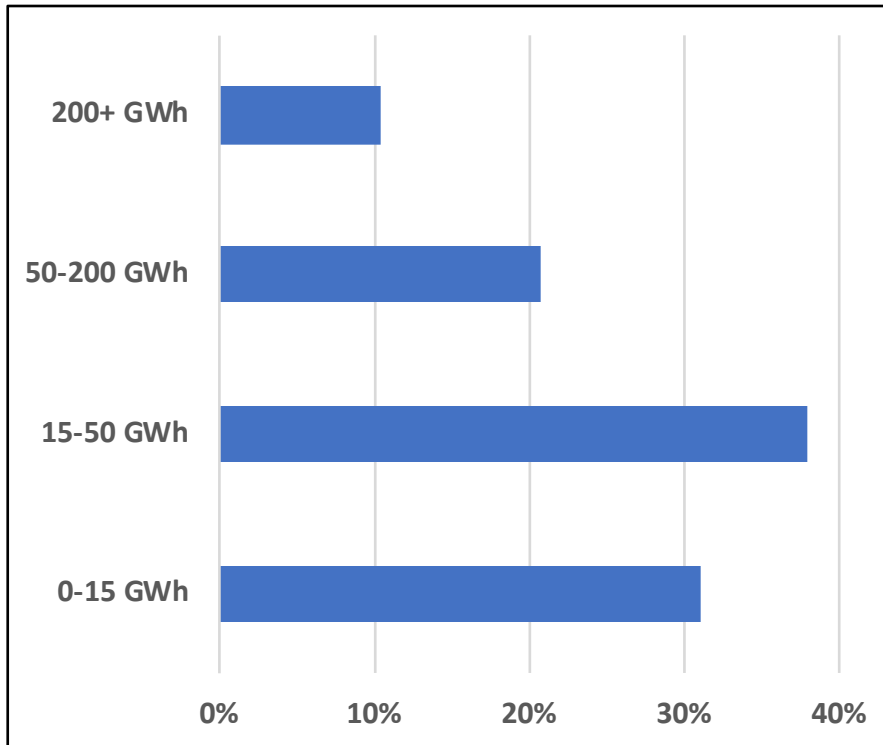
- **Term:**
 - more diversity
 - short-term PPAs (3, 5 & 7 yrs)
 - longer-term renewable energy supply agreement
- **Size**
 - some offers down to 200,000 MWh – but in general 5 GWh+
- **New projects:**
 - retailer on-sells
 - retailer aggregates buyers for deal with new projects
 - Sleeving
- **Pricing:**
 - wholesale pass-through
 - partial & full firming



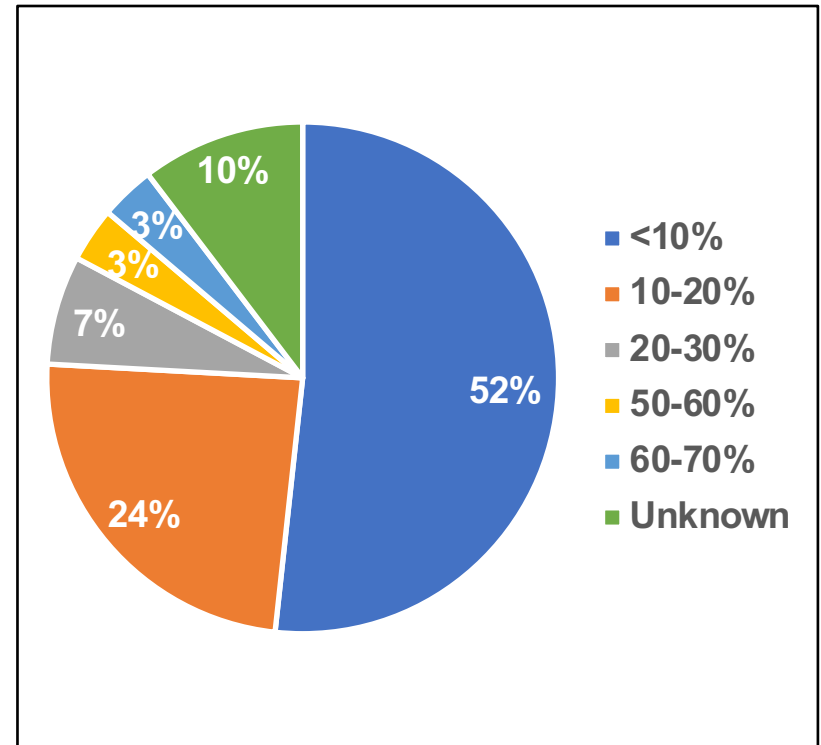
Market Consolidation

- Slowdown in agreements in first half
 - General factors e.g. industry slow-down
 - Less experienced buyers entering market
 - Buyers, retailers and developers refining models in a very challenging environment
- High levels of underlying activity and deals (e.g. Energetics estimates Corporate PPA pipeline at 500 MW)

BRC-A Members

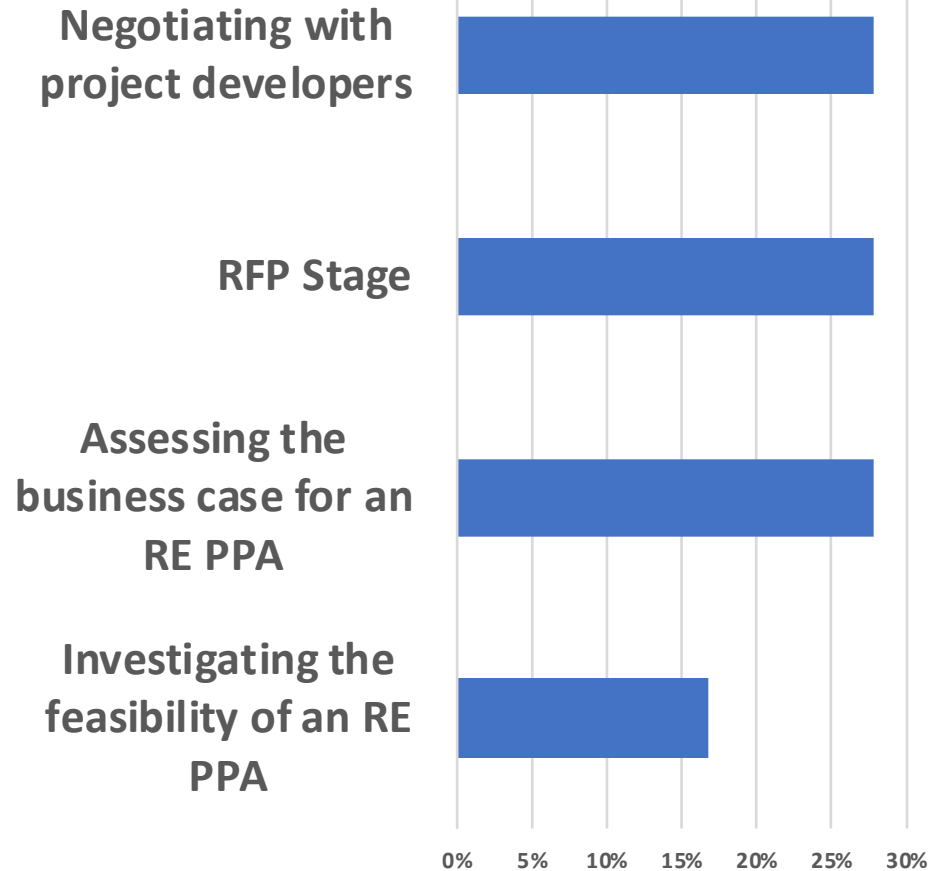
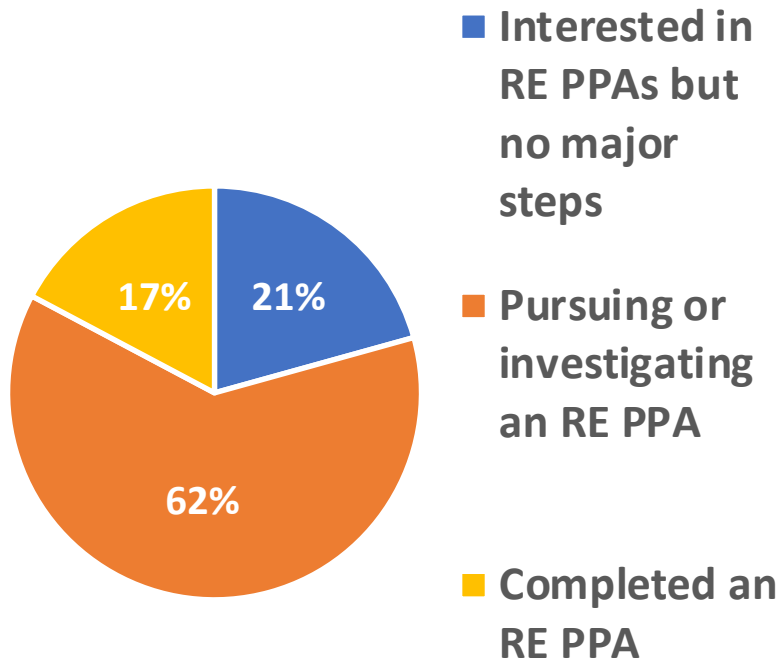


Load size of buyer members

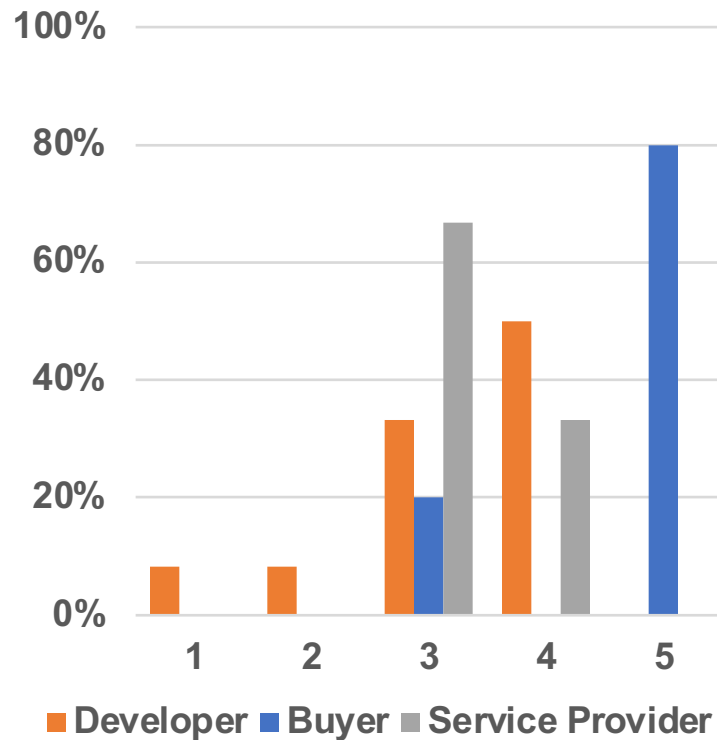


Current percentage of renewables

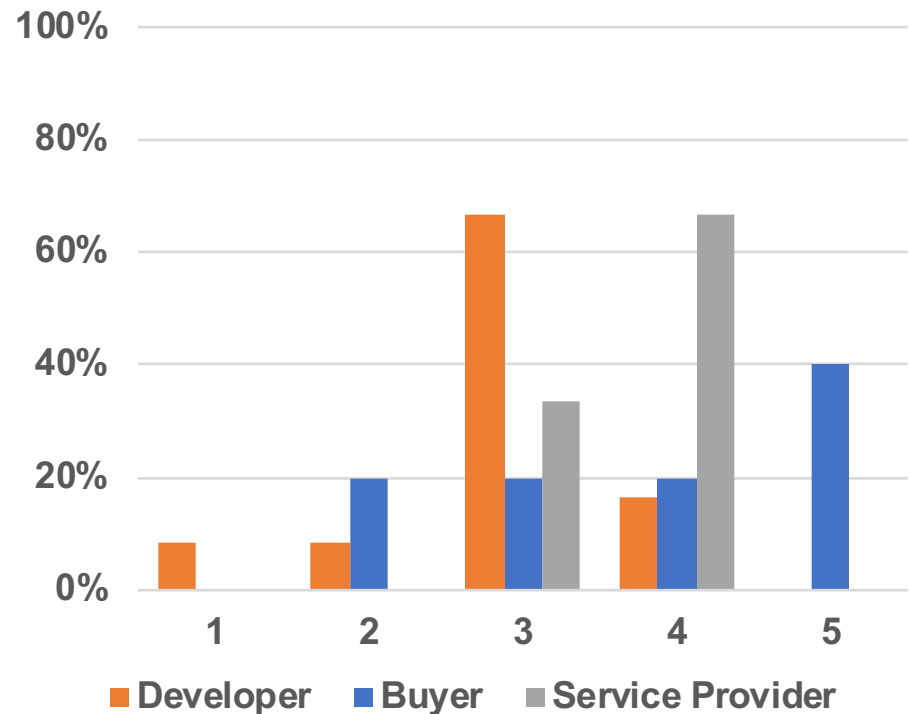
High levels of buyer interest in PPAs



But parties find PPAs difficult



On a scale of 1 -5, how hard was it to do a PPA?

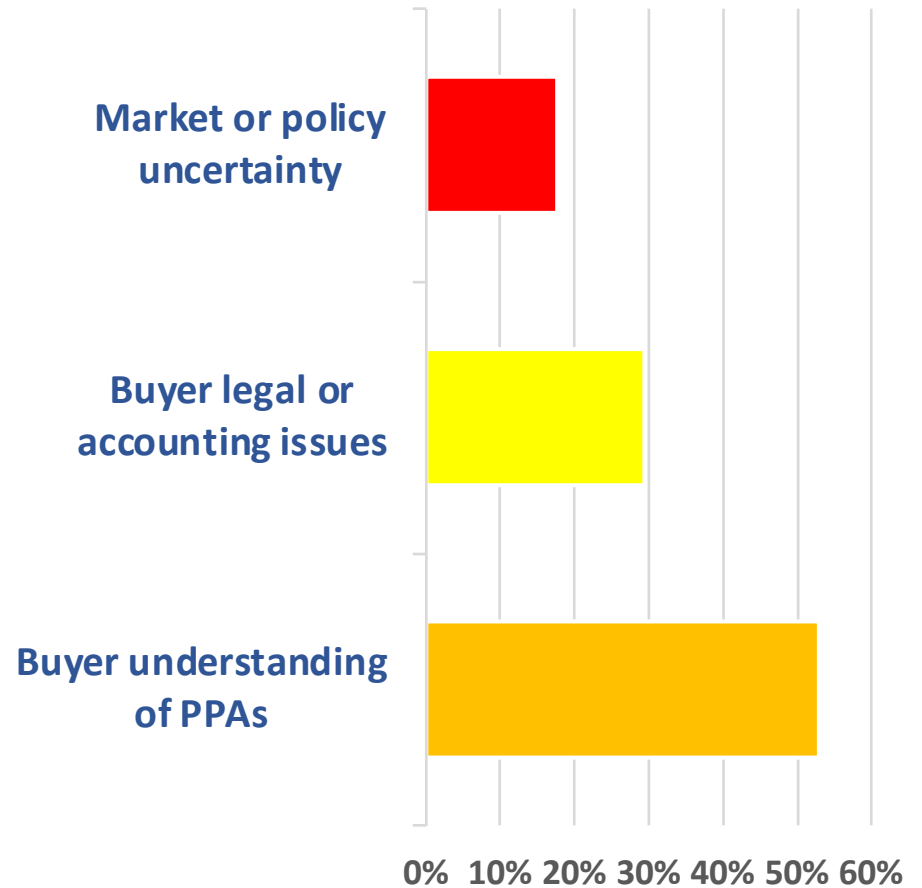


On a scale of 1 -5, how would you rate the transaction costs?

Key Barriers

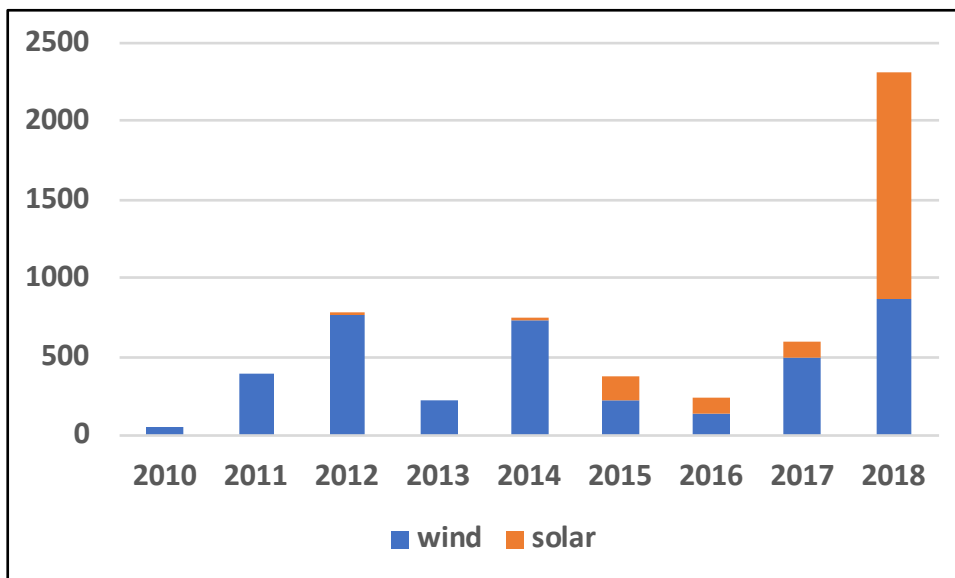
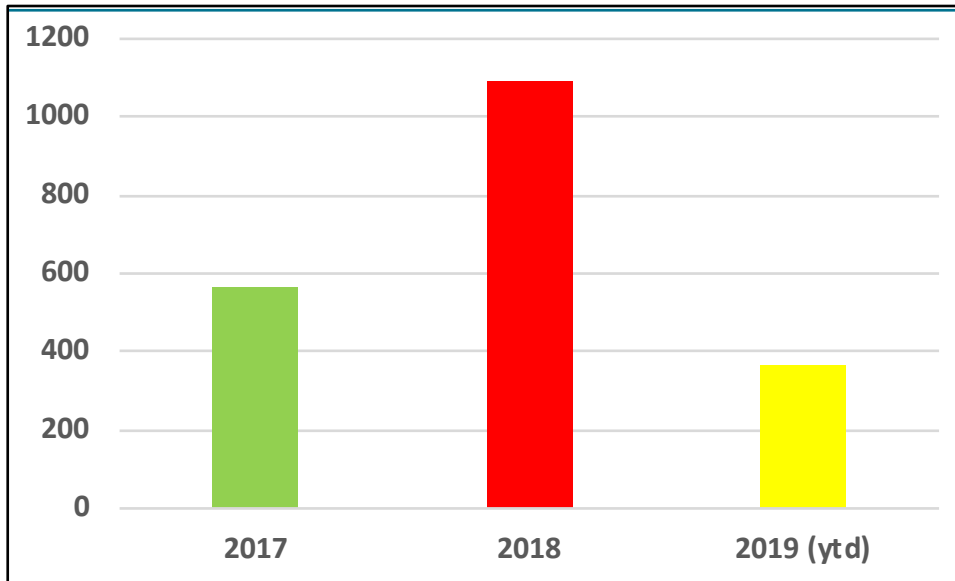


Buyers



Developers

Can RE PPAs sustain the sector?



- Range of 370MW – 1100MW
- Challenging to forecast
 - big data gaps
 - Many deal processes are negotiated privately through brokers
- Corporate PPAs put a floor under RE demand
 - at a minimum avoid slumps of the ‘bad years’
 - comparable to ‘good years’ pre-2018 boom

More information...

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