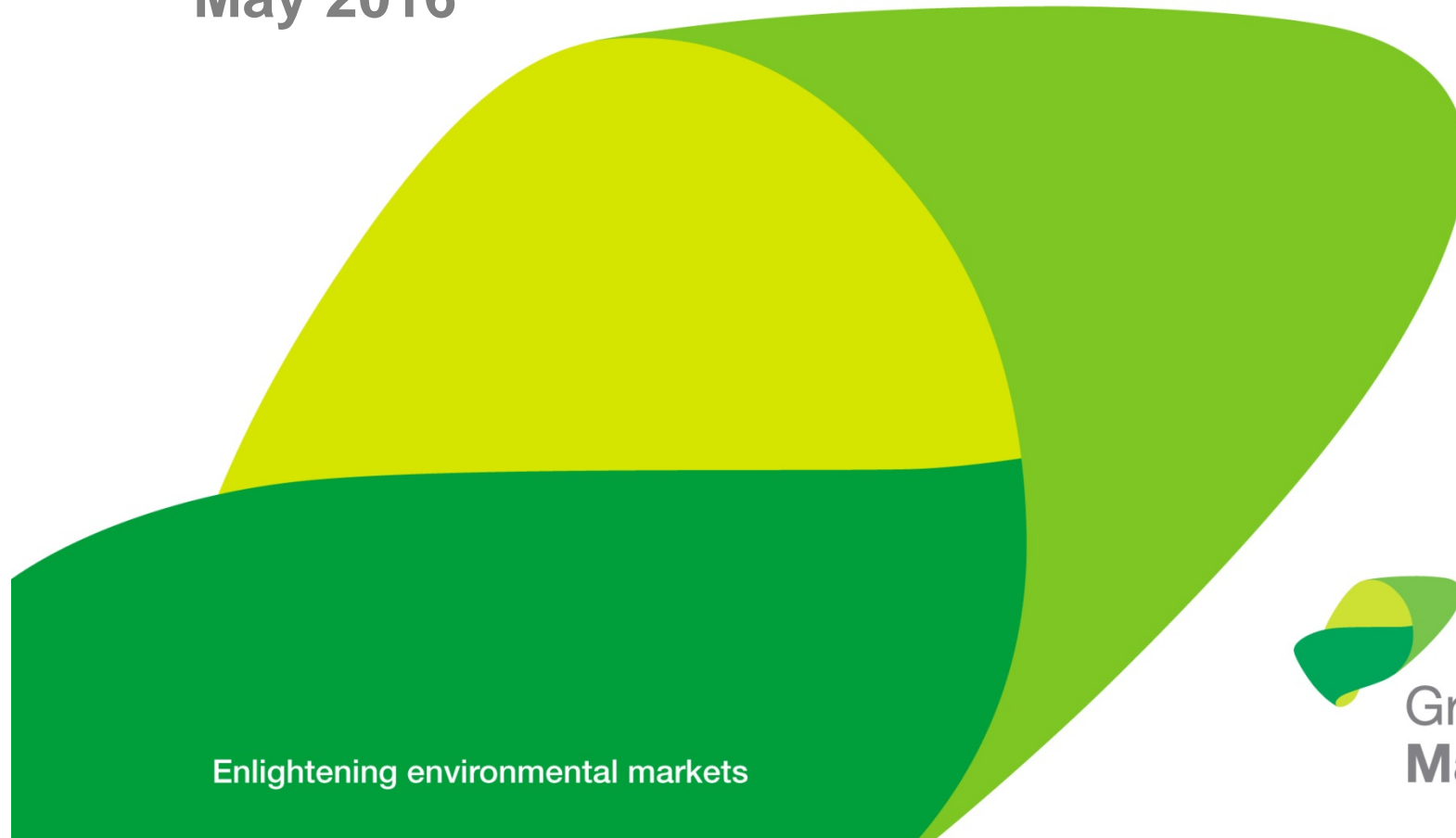


Going big - The risks and opportunities of LGCs

May 2016



Enlightening environmental markets



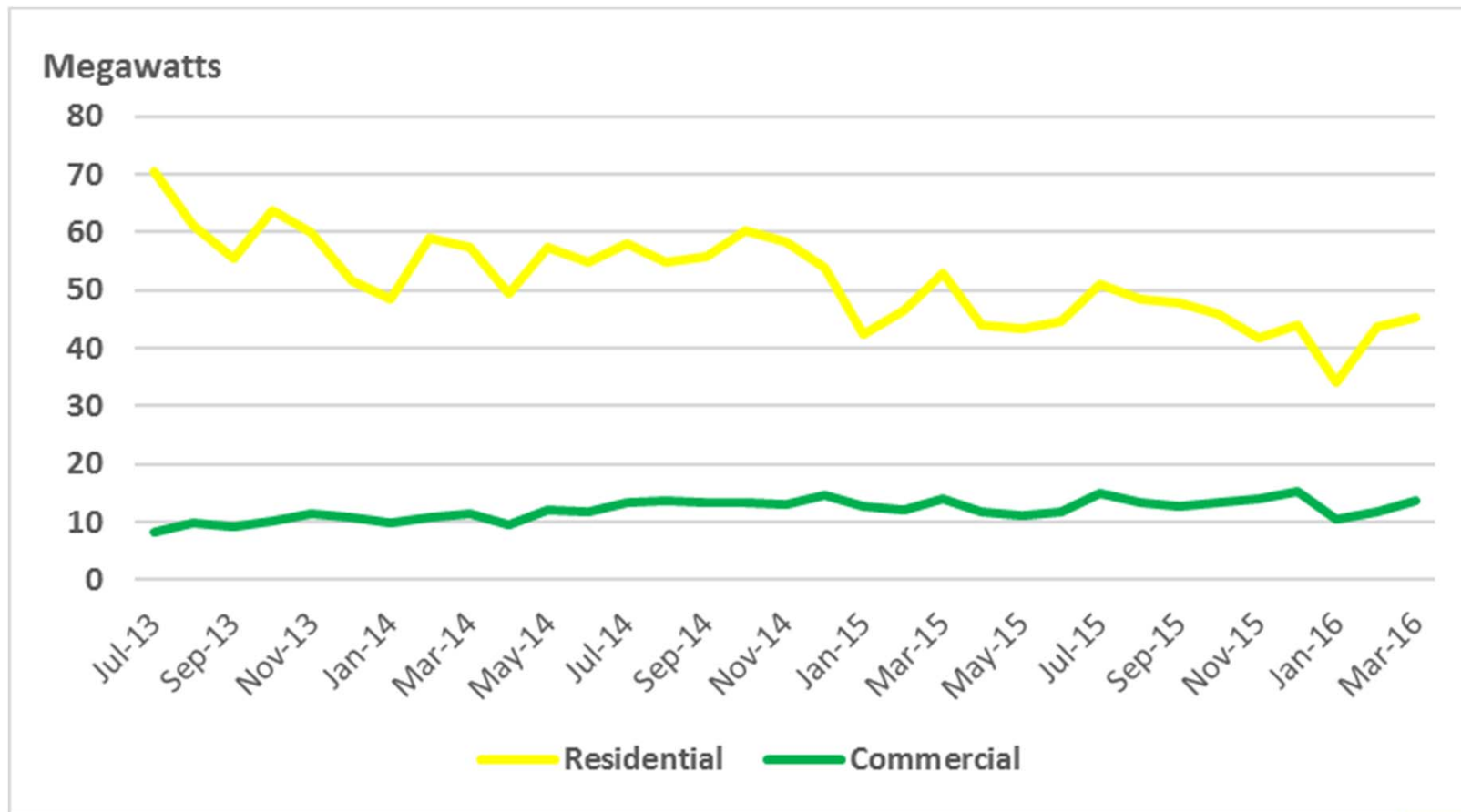
Green Energy
Markets

Overview

1. Why go big – outlook improving
2. Why you need to be wary
3. What's the future hold for LGCs
4. How we can help

Why go big?

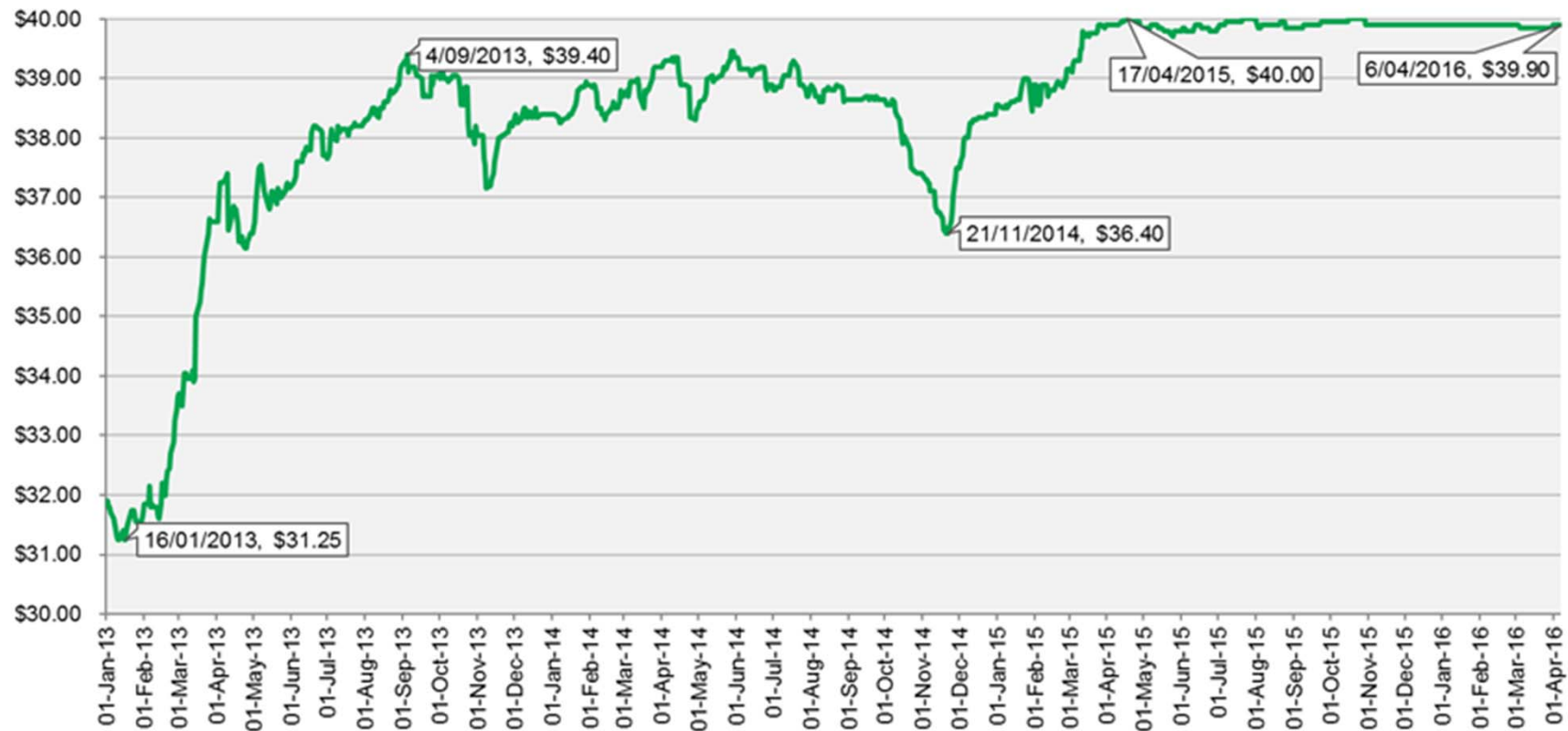
- Residential solar is in decline



Why go big?

- The level of government support has capped out

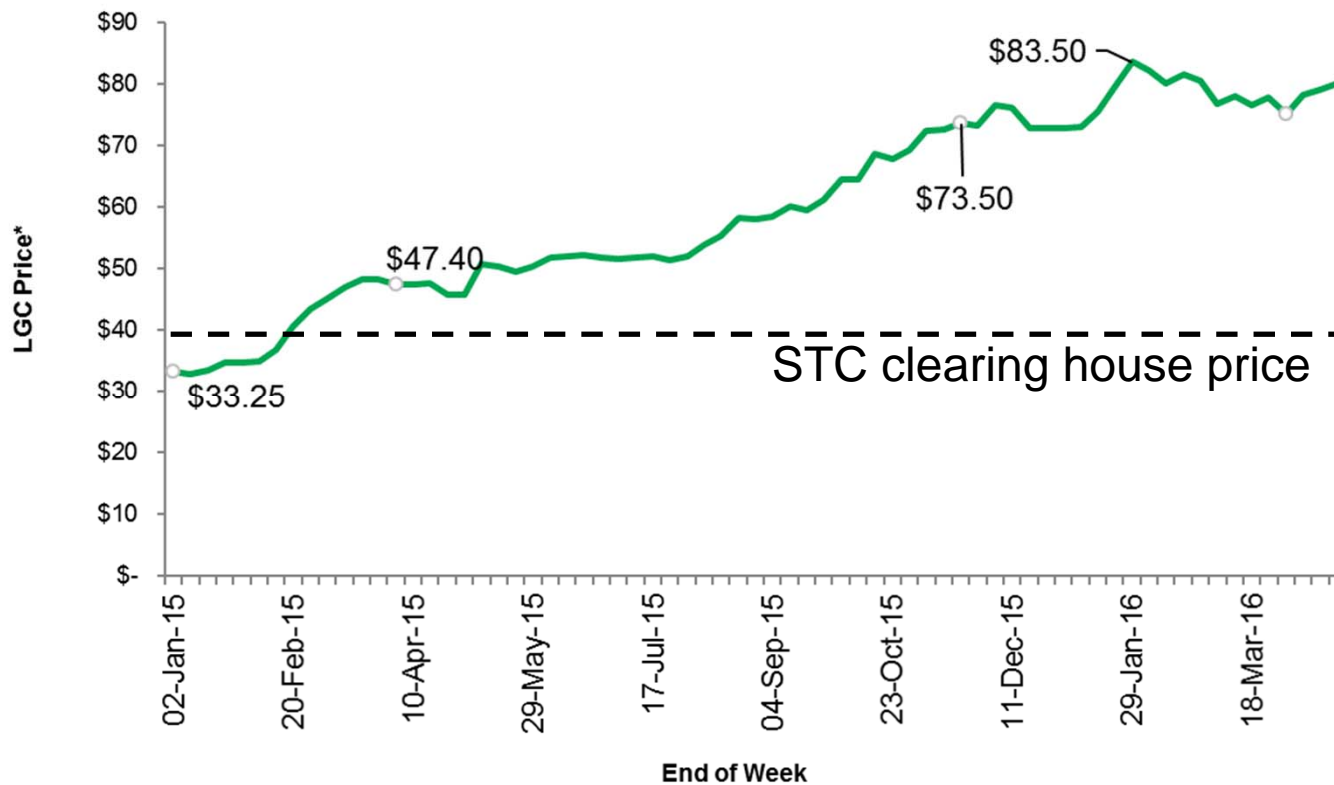
STC spot price Jan 2013 – April 2016



Why go big?

- Meanwhile in the market above 100kW

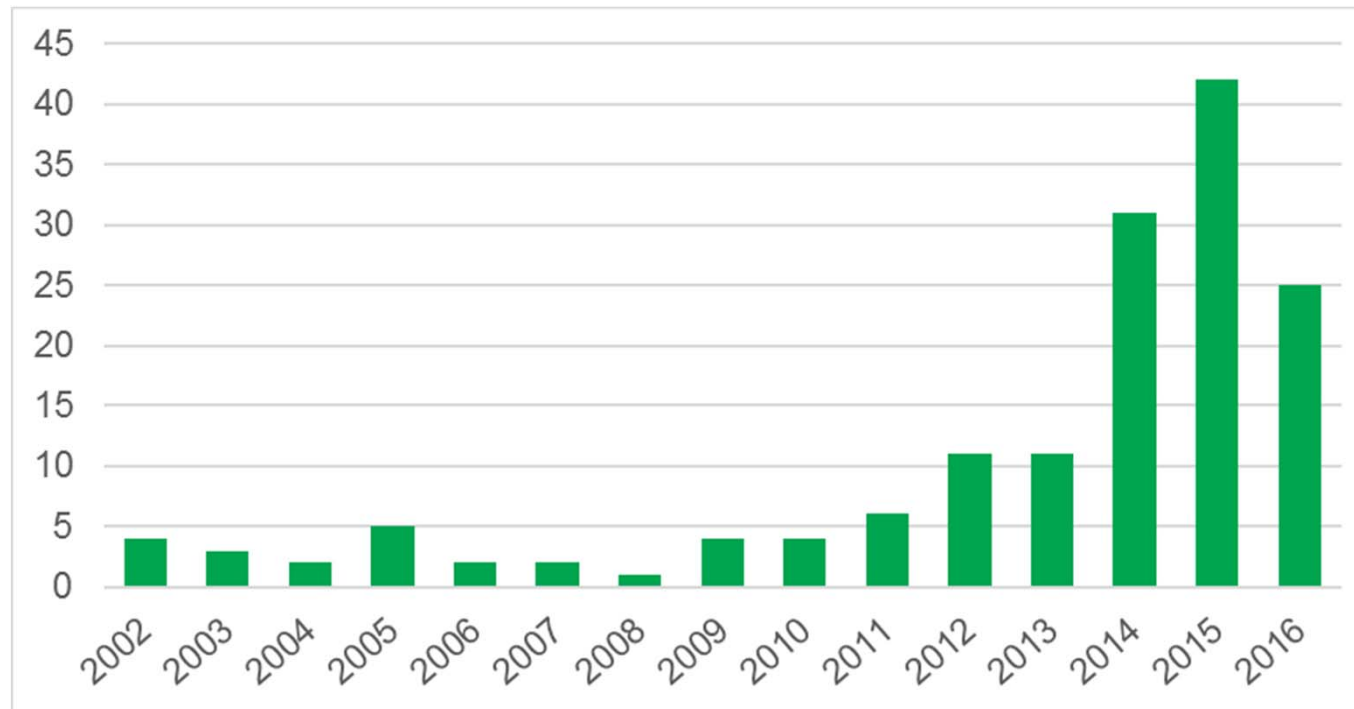
LGC spot price Jan 2015 – April 2016



Why go big?

- Meanwhile in the market above 100kW

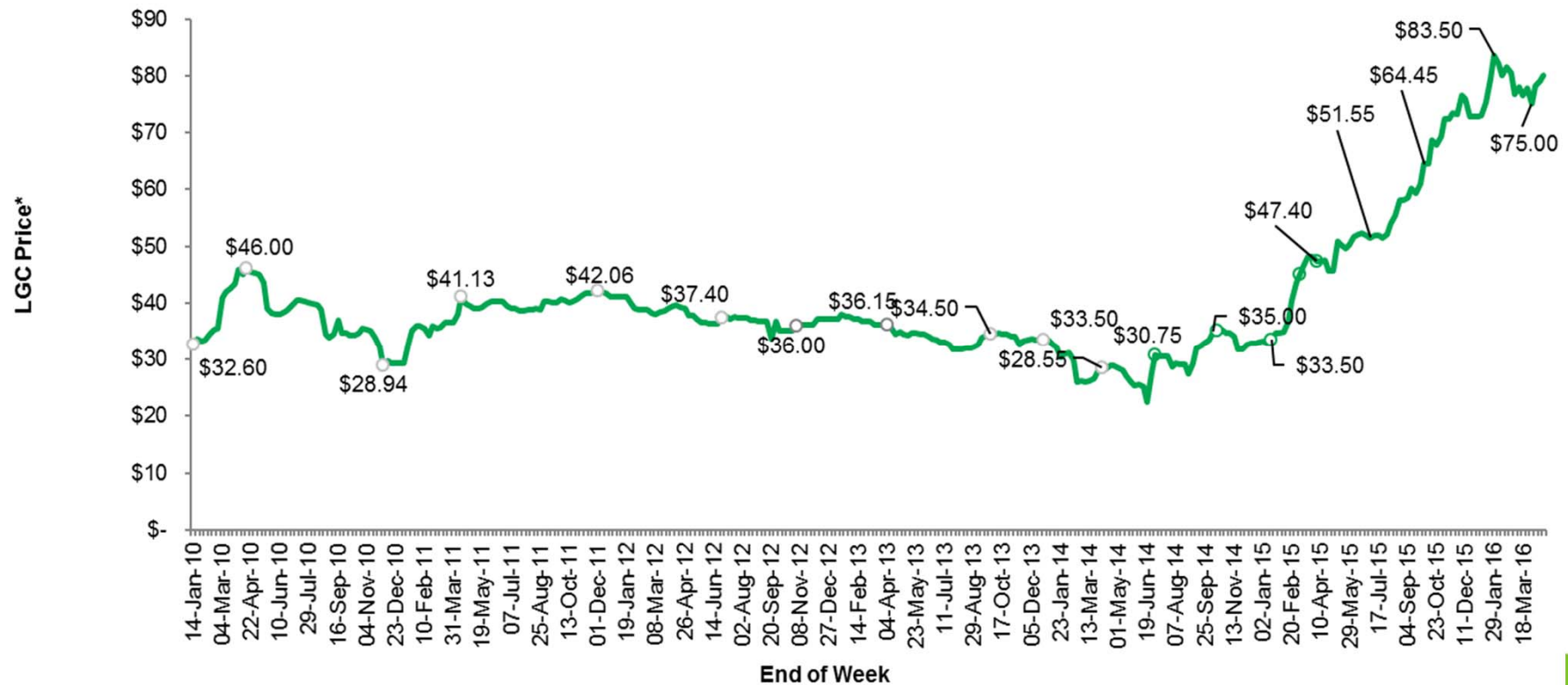
Number of PV power stations accredited for large-scale



But be wary

- If we extend the timeframe....

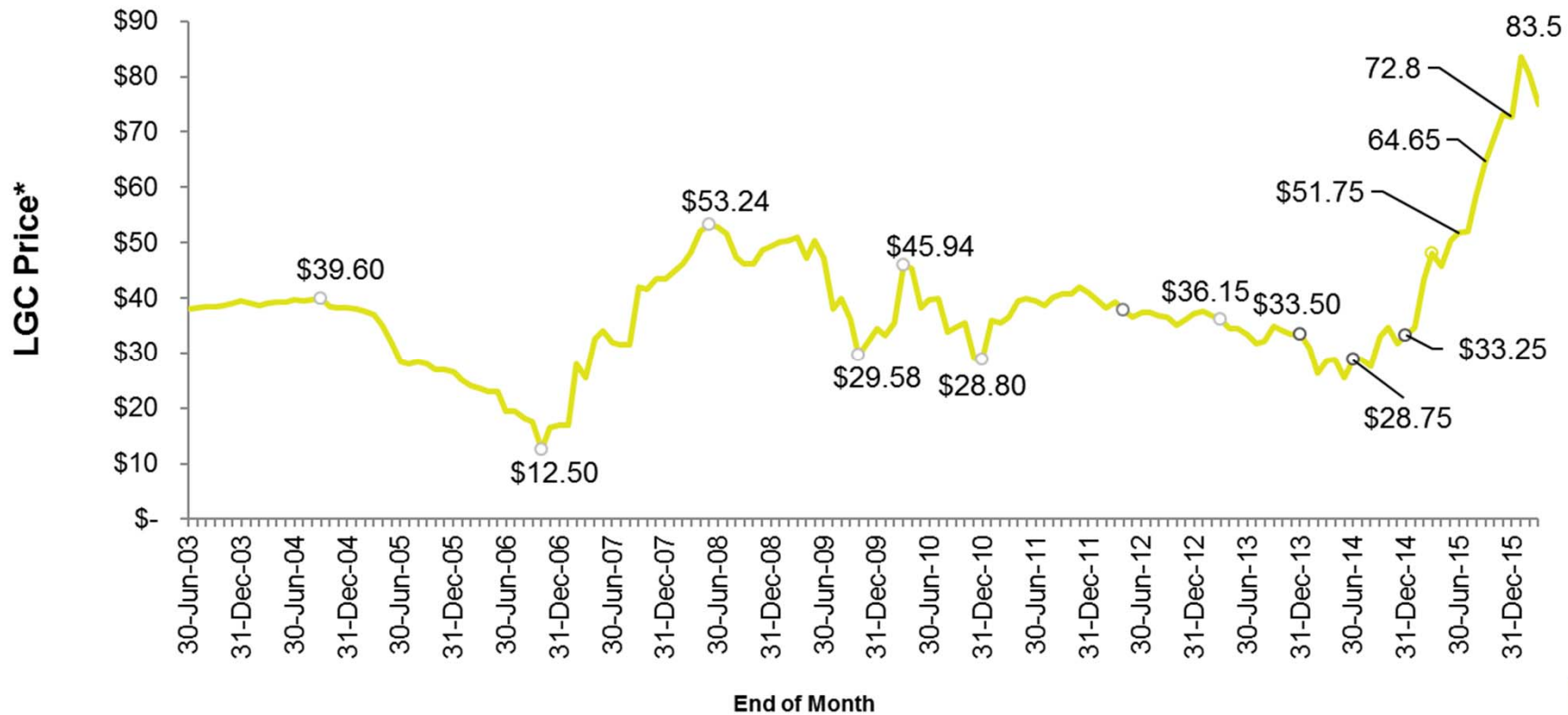
LGC spot price since Jan 2013



But be wary

- And then extend the timeframe even further...

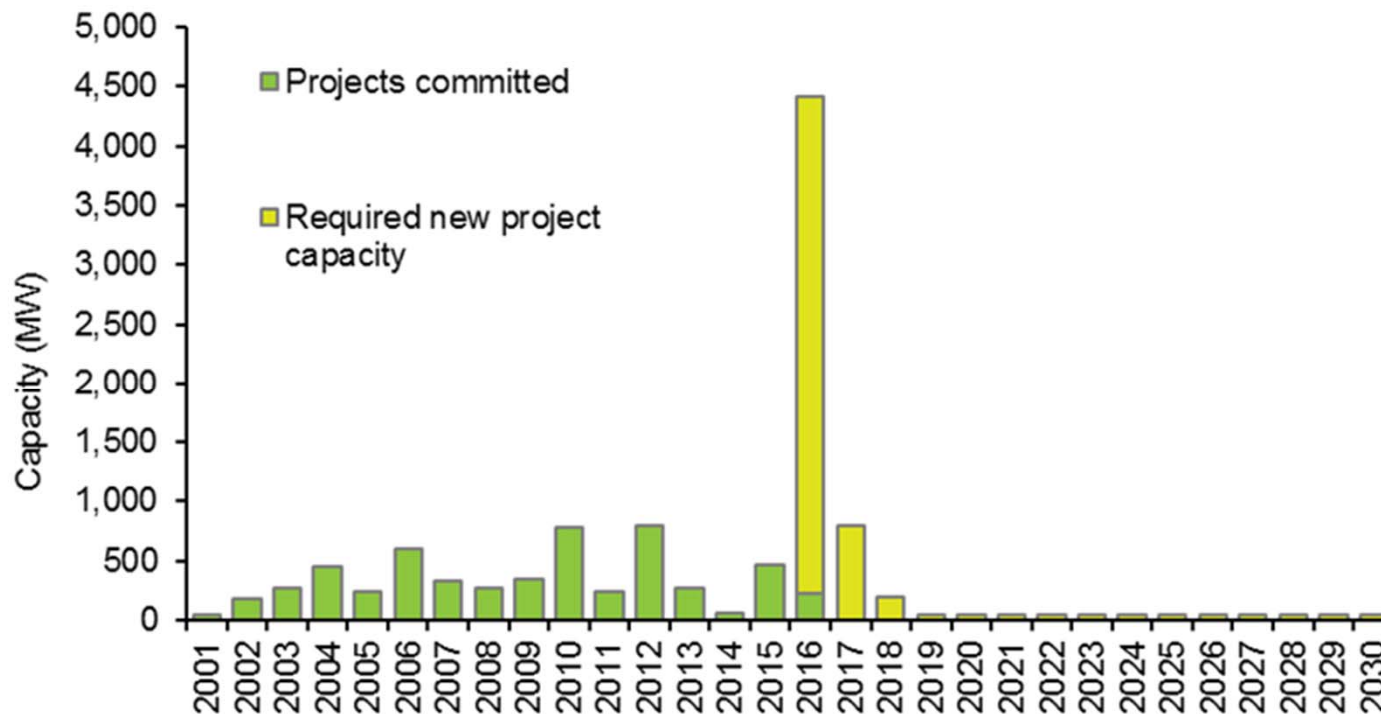
LGC spot price since June 2003



What about the future for LGCs

- We need an awful lot of capacity and quickly

Historical MWs committed versus required to meet RET



What about the future for LGCs

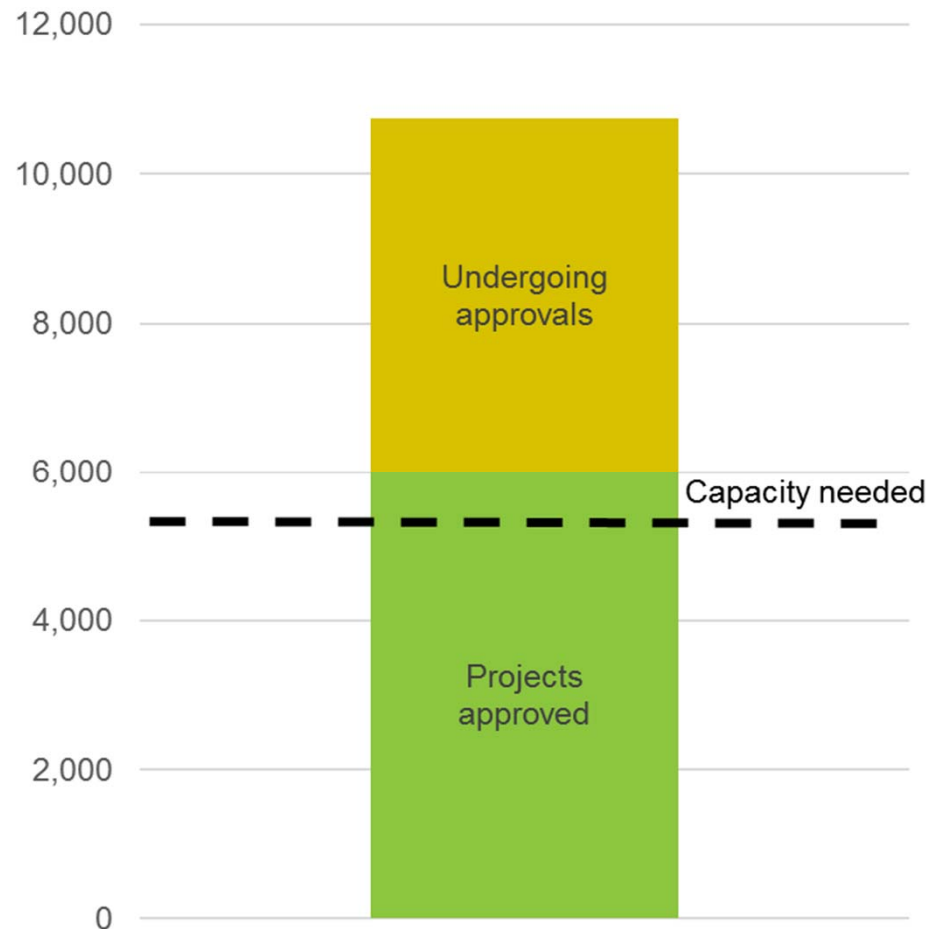
- Within the next 5 years market looks good with shortages likely around 2018.
- Shortfall penalty \$65 per LGC
 - Tax effective now: \$92.86
 - 27.5% tax = \$89.66
 - 25% tax = \$86.67
- Although could government intervene to lower target where we fall significantly short?



What about the future for LGCs

- But shortage not for lack of projects

Megawatts of projects in development versus requirement



What about the future for LGCs

- Is the high LGC price sustainable?

Combined value
Power + LGC

	Wholesale power 2019	Plus LGC @ \$80
SA	\$70	\$150
QLD	\$58	\$138
NSW	\$50	\$130
VIC	\$43	\$123

- ACT wind auction results:
 - Hornsdale I – \$92
 - Hornsdale II – \$77
 - Sapphire – \$89.10
 - Coonooer Bridge – \$81.50
 - Ararat - \$87



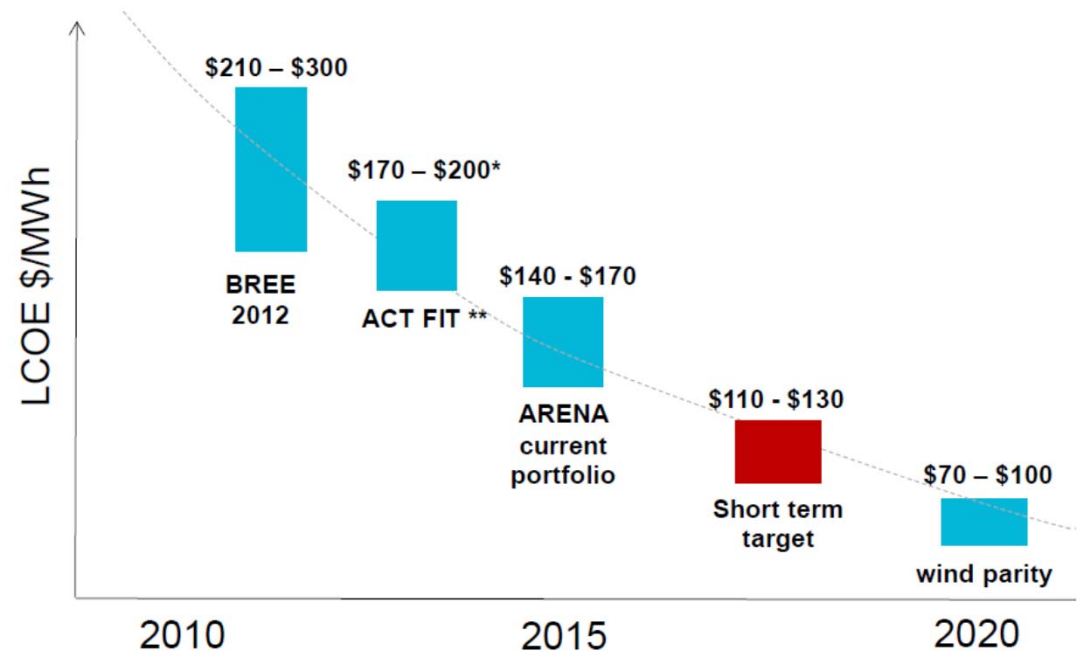
What about the future for LGCs

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Large-scale PV levelised cost - ARENA



Some conceivable scenarios

- Shortage for next few years – price linked to penalty
- Decline to cost of new entry
- The love child of Abbott - \$40 compensation
- Victim of success – price collapse to option on new policy
- Killed by kindness – New non-RET support policy drives:
 - Oversupply; or
 - Increase in wholesale power prices



How we can help – market intelligence

- We live and breath STCs and LGCs via:
 - Analytical arm (Green Energy Markets); and
 - Trading arm (Green Energy Trading)
- Monthly updates on LGC and STC supply and price
- Quarterly detailed reviews of committed supply and demand
- Quarterly reviews of who has got the LGCs, who needs them, who's buying and who's selling.
- Quarterly review of price drivers and future pathways for LGCs



How we can help – power station registration and contracting



- Sister company Green Energy Trading has registered more solar PV power stations than any other company
- (until last month – SunEdison)
- GET buy LGCs on spot basis
- GET can provide fixed LGC prices on multi-year contract



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