

Are streetlights logical investments for electricity network companies?

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Vector

Vector is New Zealand's leading energy infrastructure group



Electricity

Auckland's network

Gas

Network
Processing
Sales

Technology

Energy metering
Communications

Services

Vegetation management

Vector's owners



- Majority owned by Aucklanders (75.4%)



- Balance owned by thousands of individual shareholders
- Listed on the New Zealand Stock Exchange
- Close working relationship with Auckland Council and its CCOs

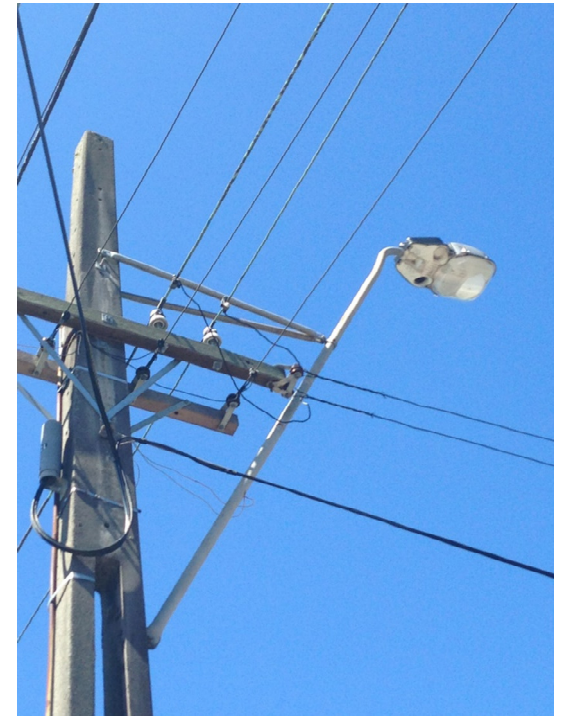
Key facts – Auckland electricity network



17,865 km

Network length

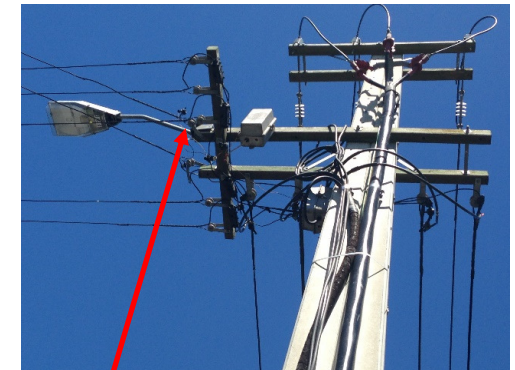
Zone substations	105
Distribution substations	23,226
Percentage underground	~50%
Grid exit points	15
Number of poles	113,954
Streetlights on Vector poles	~50,000
Employees and field contractors	Over 1,700



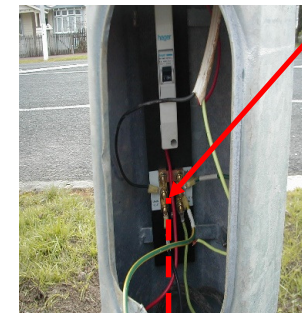
Street lights and electricity network - overlaps



- Contiguous network – these are pole mounted electrical assets
 - 'this is what we do'
 - electrical asset management - core capability
 - established customer service and fault management systems
 - best placed to manage safety on our network
- Common poles
 - Approx. half of Auckland's 97,000 streetlights are mounted on electricity poles
- Vector already controls most of Auckland's streetlights
 - we turn lights on/off
 - manage database and provide usage data to AT for billing
- Upgrades and new build
 - Upgrades: we involved for network connection/electricity pole mounting
 - New build: we install some new streetlights on co-ordinated projects
- Maintenance
 - overlaps and re-work for streetlight fault diagnosis and field response



Vector network



What needs to be true for a successful streetlight PPP?



Critical success factors of any streetlight PPP:

- enables Council to deliver better quality street lighting to rate payers
- enables Council to deliver that better service at lower cost in the long term
- enables PPP participants to earn a reasonable commercial return on their investments

Benefits of electricity network delivering street lighting



- Long terms savings for Council
 - Consolidate maintenance and operations for streetlights and electricity network
 - Align replacement and upgrade programmes
 - Energy savings and reduced maintenance from upgrades to LEDs and “smart grid” technology
 - Council avoids up-front capital investment required for LED upgrade
- Better performing and more efficient streetlights
 - Ability to combine LED with “smart grid” technology and sustainable energy generation
 - Council can performance-manage utility under arms-length SLA
 - reviewable for changing Council needs
 - Transparency of costs
- Better customer experience
 - Single and more efficient fault response (no confusion Council/utility)

Electricity network providers = natural streetlight providers

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