



CHARGE UP EV INVESTING IN THE FUTURE

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GOAL

Convince apartment complexes to install EV chargers, which is essential to growing adoption of EVs in urban environments and supporting carbon reduction efforts. Apartment complexes will play a key role in growing the EV market.



ADDITIONALITY SURVEY

We created a survey to measure the direct impact this project could have on carbon reduction by looking at the potential for EV purchases increasing if more apartment complexes added chargers.

57% of survey respondents would be more likely to buy an EV if their complex had a charger on location

29% of survey respondents were more likely to buy an EV if there was a charger near their apartment building

Conclusion:

- Getting apartment buildings to install chargers on their campus would play significant role in carbon reduction
- This reduction wouldn't occur without people replacing their gasoline car to EV



KEY BENEFITS

GROWING EV MARKET

32.57% CAGR

EV Sales projected to grow from 1.5 million in 2018 to 10 million units in 2025

PROPERTY OWNER BENEFITS

- Attract / retain residents
- New revenue stream
- NPV positive investment
- Reduce carbon emissions
- Grow adoption of EV vehicles

RESIDENT BENEFITS

- 95% of charging done at home
- Cheaper, more convenient charging options
- Reduce carbon emissions
- Grow adoption of EV vehicles

CO-BENEFITS

- Non EV owners: Reduction in exhaust emissions, potentially improving public health overall
- EV owners: Positivity around contributing to cleaner, more sustainable future
- US: Reduction in US's reliance on oil and petroleum
- Apartments: Potential residents who own EV more likely to move in. Sustainability focus creates goodwill with current tenants

INVESTMENT & PROFITABILITY

Please see comparison chart below to analyze an apartment complex's estimated returns, depending on number of EV chargers installed and usage per stall.

CARBON REDUCTION EQUIVALENT



14.8

Ford Fusions off the road for one year, based on 8 EV chargers installed and used 12 hours/day

ASSUMPTIONS

- Charger depreciates over 10 years, no salvage value
- Commercial electricity rate \$0.095/kwh
- Apartment complex charges residents an electricity rate of \$0.19/kwh

EV CHARGER INVESTMENT COMPARISON CHART

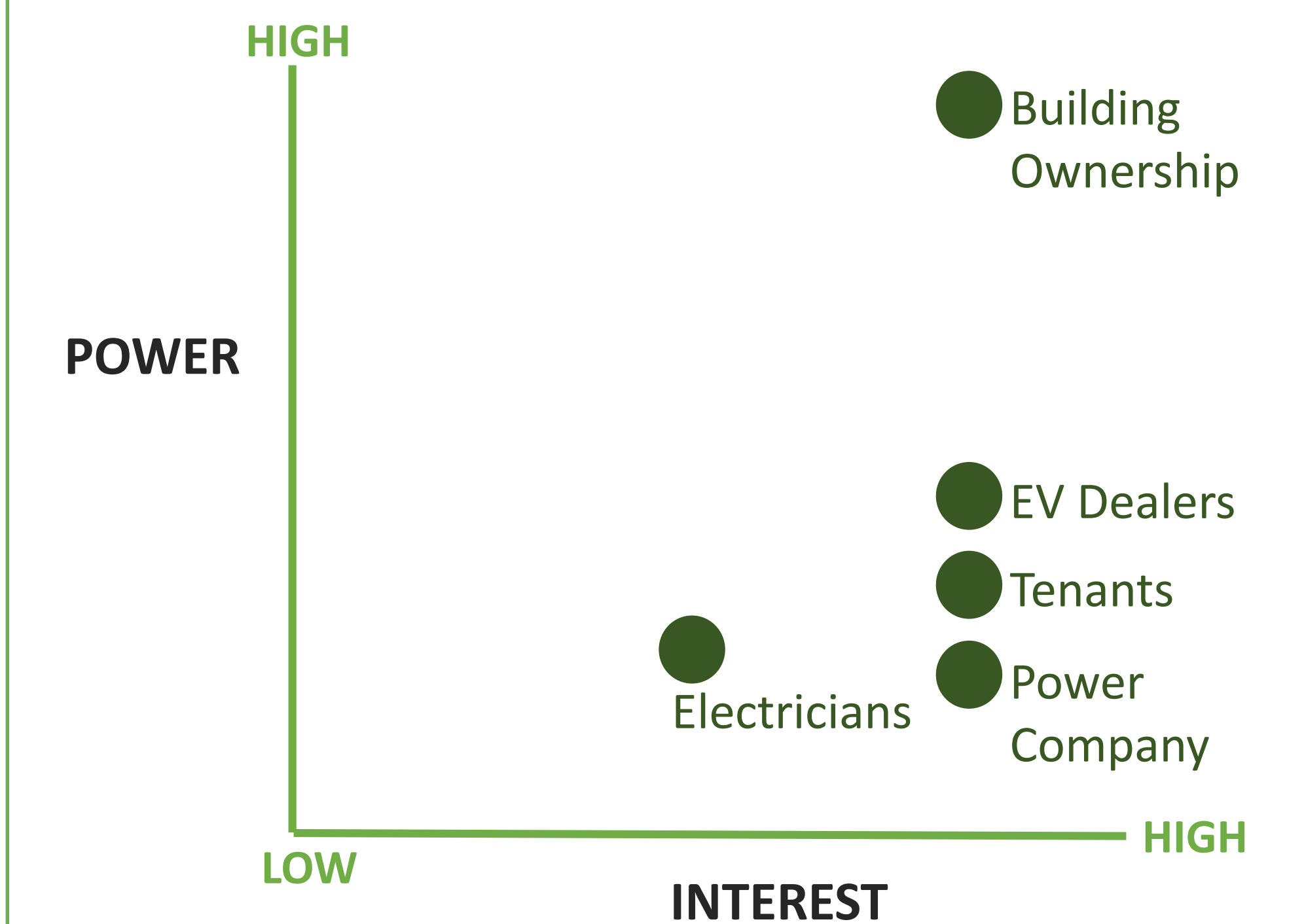
Scenario 1: Each stall used 6 hours / day

| # of EV CHARGERS INSTALLED | 2 | 8 |
|--|----------|----------|
| APPROX COST TO INSTALL CHARGERS \$ | \$12,000 | \$37,500 |
| ROI (% OVER 10 YEARS) | 85 | 127 |
| IRR (%) | 13 | 19 |
| TOTAL CARBON SAVED PER YEAR (LBS) PER APT BUILDING | 40,805 | 163,219 |
| # of FORD FUSIONS OFF THE ROAD FOR ONE YEAR | 1.9 | 7.4 |
| PAYBACK PERIOD (YRS) | 5.4 | 4.4 |

Scenario 2: Each stall used 12 hours / day

| # of EV CHARGERS INSTALLED | 2 | 8 |
|--|----------|----------|
| APPROX COST TO INSTALL CHARGERS \$ | \$12,000 | \$37,500 |
| ROI (% OVER 10 YEARS) | 235 | 319 |
| IRR (%) | 31 | 41 |
| TOTAL CARBON SAVED PER YEAR (LBS) PER APT BUILDING | 81,609 | 326,438 |
| # of FORD FUSIONS OFF THE ROAD FOR ONE YEAR | 3.7 | 14.8 |
| PAYBACK PERIOD (YRS) | 3 | 2.4 |

STAKEHOLDER ANALYSIS



Primary stakeholder:

- Building ownership has decision-making power
- Would provide initial capital and would profit financially from charger use

Secondary stakeholders:

- EV dealers and tenants are both key to reducing carbon emissions
- Tenants benefit from lower costs / convenience
- Dealers leverage tenant benefits to sell more EVs

CURRENT STATUS/NEXT STEPS

- Have contacted 4 apartment complexes to date and are continuing to reach out to apartments to demonstrate benefits of EV for profitability and the environment
- Trying to engage with a Chief investment officer to get buy-in from a large apartment brand