Implications of electrical vehicle supply equipment (EVSE) in facilities

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Value Chain

- EVSE manufacturer
- Utility/electricity provider
- Network operators
- Individual site owners
- Consumer/EV owner
Implications of providing charging stations

Benefits:
• Customer attraction
• Revenue generation through user charging and parking
• Employee retention
• Advertising opportunities
• LEED certification
Revenue and Costs

• Equipment costs -
  Costs of Level I and Level II chargers to site owners range from $400-$800 and $800- $3,000, respectively

• Installation costs -
  Installation costs can vary widely depending on location and the electrical system already in place. This cost typically falls between $2,000 and $10,000.

• Maintenance costs -
  Maintenance costs of the machine fall on the low side, around $300 per year, does not include administrative costs.

• Marginal electricity costs ($0.05 to $0.10 per kWh) and demand costs ($4 to $15 per kW)

• Depreciation over equipment’s life time (For tax purposes, straight line depreciation over 7 year life)

• Subsidies and rebates

• Cost of equity (12%)

• Revenue through users (charge based on fixed and variable costs, revenue share models may be useful)
Key factors influencing EV charging stations viability and profitability

- Utilization
- Public willingness to pay for use
- Parking turnover
- Tax credits
- Ancillary revenue
- Revenue sharing models
- Enhanced purchasing power developed amongst providers
- Long term contracts with users
- Leverage EVSE with providing “Green PR”
- Unless site owners begin to obtain more control over revenues and costs in the value chain, profitability will be minimal and financial benefits will be low or non existent