COMPANY HISTORY

- Founded in 2007 to address the need for efficient deployment of solar power in the Ontario marketplace.
- Current Portfolio of $250M in solar asset in Ontario consisting of 3000+ homes, 200+ commercial rooftops and ground mounts sites.
- Team of over 110+ employees and 200+ contractors.
SOLAR ENERGY
AND
WHY IT SHOULD MATTER TO YOU
CURRENT REALITIES

- There is continued pressure to manage capital and expense budgeting
- A majority of private citizens/constituents are in favor of sustainable or "green" solutions to be employed not just personally but by their local, provincial and federal governments
- There are limited options currently available in the market to address capital constraints, technical solutions and pressures placed on asset managers who need to perfect medium and long-term budget plans
- Energy management is becoming an integral component of asset management across various sectors due to the variability of energy costs
- Leveraging the experience we have gained over the years Grasshopper has developed a comprehensive and vertically integrated solution that we believe can address these points
Figure 1: Grid-connected PV Systems in Canada 2014
SOLAR AS AN ESTABLISHED ENERGY RESOURCE

- The cost of solar generation has continued decline, particularly in the last 5 years by 70%+, and is now competitive with other forms of generation.

- The adoption of solar power has been considerable across the globe (residential, commercial and industrial and utility scale)

- Due to the extent of the growth of solar installations, the industry has matured to a point where institutional investors, LDCs and government agencies perceive it as a critical component of future energy infrastructure development.
SOLAR IN ONTARIO

- The deployment of renewable energy in Ontario and solar in particular, has been driven by the Feed in Tariff program to date.
- The FIT program is concluding this year with the microFIT program expiring in December and the last round of FIT contract awards expected to be issued in Q3 2017.
- The future of renewables in Ontario and Canada in general is tied to growth in Net Metering.
- The provincial government is implementing rules this year around Net Metering (eliminating size constraints, first step in Virtual Net metering, TPO) that will support the growth of this program.
- Many LDCs are also supportive of this and some will be taking an active role to further this growth as it is a first step in building a holistic approach to long-term grid management.
Application of Solar Energy for Municipal Asset/Property Managers

- Third party owned, virtual net metering installation with a long term predictable power price
  - Ability to install solar across multiple municipal sites
  - Energy production is aggregated and rolled up to offset the overall electricity bill of the municipality/organization
  - No capital cost required
  - Payment for the energy produced is under a long term contract
Benefits of Solar for Asset Managers

- No capital cost
  - Preservation of capital is key to success in this model
- Competitive energy costs
  - Contracted price per kWh is below projected market pricing
- Predictable energy costs
  - Long term agreement with fixed pricing allows for better budgetary planning and long-term energy cost hedging
- Retention of Greenhouse Gas Credits
- Positive public relations for the municipality for environmental stewardship and fiscal responsibility
- Security of supply and greater resiliency for facilities
How to proceed next?

- Take the time to do the economics in conjunction with a provider
  - Will need historic consumption and facility specifications

- Consider your assets that are undermanagement as potential energy producers

- Solar is your PREDICTABLE GREEN SOLUTION