

Lesson's Learned: Electrification

November 2nd, 2023



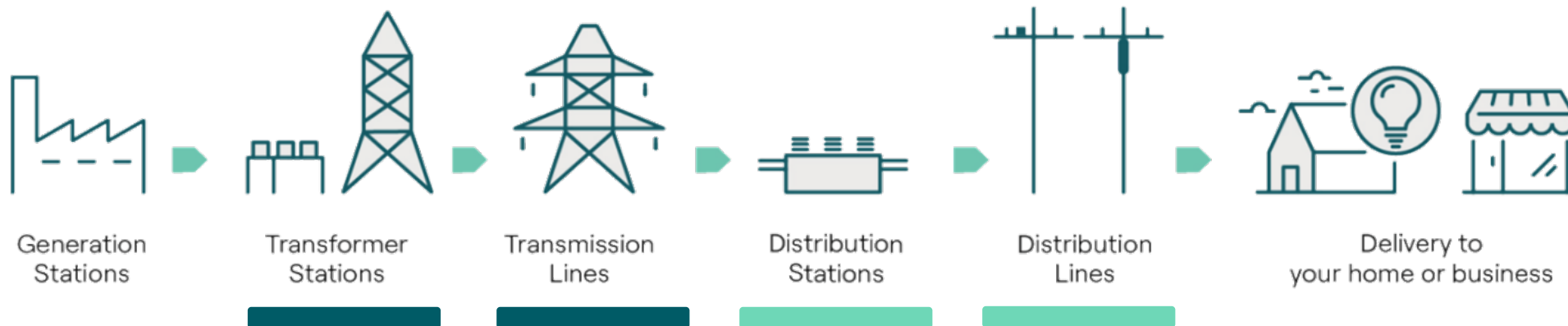
Agenda

- 1** Company Introduction
- 2** Problem and Solution
- 3** Journey in Progress



Company Introduction

Hydro One Overview

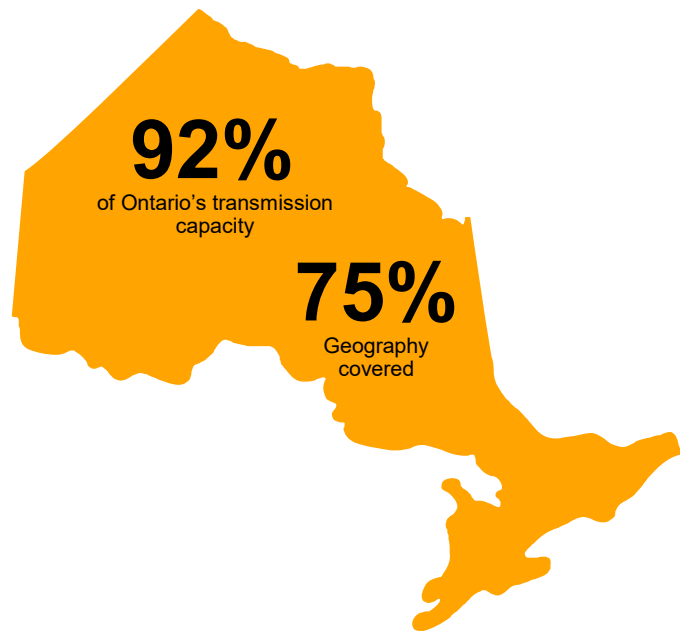


Transmission

- 37** LDC customers
- 85** Large directly connected industrial customers
- ~30,000** Transmission lines (circuit km)
- 306** Transmission stations in service

Distribution

- over 90** LDC's consolidated since 1999
- ~125,000** Distribution lines (circuit KM)
- ~1.5M** Distribution end customers
- ~1,000** Distribution and regulating stations



Unregulated Businesses



Telecommunications

Launched in 2000 as Hydro One Telecom, Acronym focuses on Internet and Network Solutions



Business to Consumer

Launched in 2020, Ivy Charging Network deployed the largest EV network in Ontario, working in partnership with OPG



Business to Business

Launched in 2022, AUX Energy was formed to help businesses achieve electrification goals

Growing Focus on Innovative Offerings

AUX's Mission for Ontario

Accelerate the use of sustainable electrification technologies in Ontario



AUX Fleet Charging

Turnkey charging-as-a-service for heavy-, medium-, and light-duty fleets



AUX Battery

GA mitigation, reliability, and energy markets



AUX Energy Solutions

Behind the meter electricity services for select customers

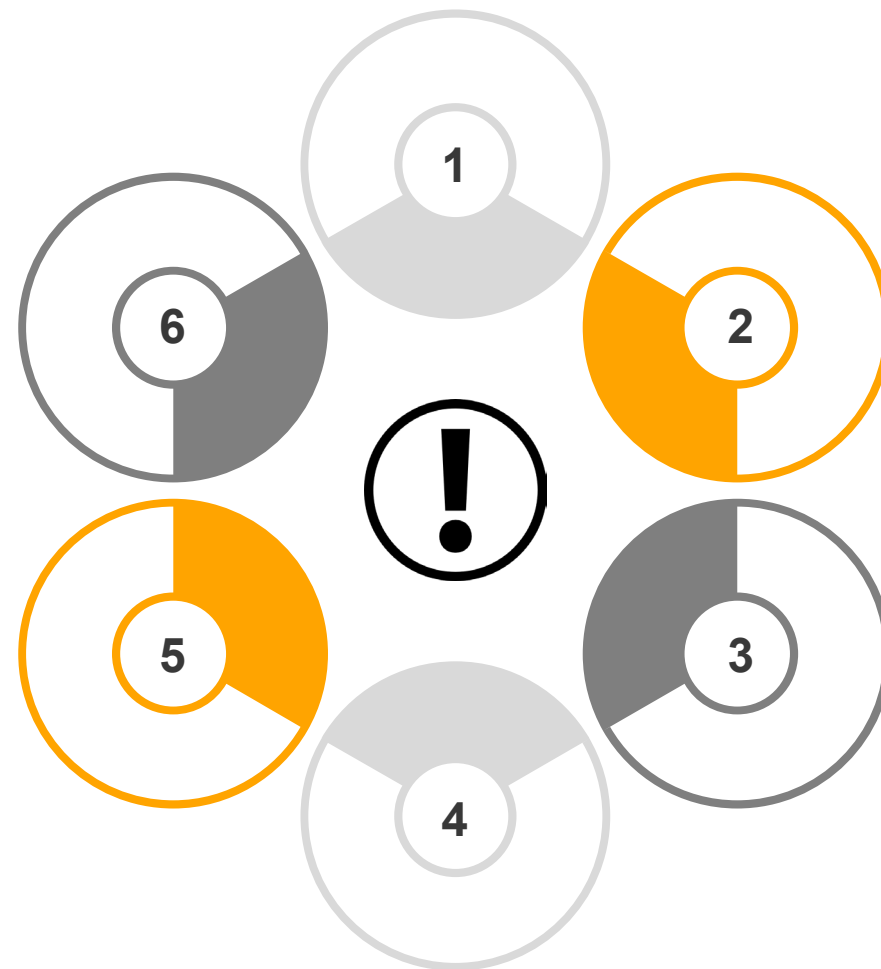


Problem & Solution

Six Problems Stopping Electrification for Small and Medium Municipalities

What is impacting electrification?

1. Increasingly complex energy needs
2. Lack of established service providers
3. Changing technological landscape
4. Aggressive government mandates
5. Supply chain struggles
6. Challenging funding / financing needs



The combination of all these issues makes it incredibly difficult to begin electrification.

AUX's Role in Electrification

Power Experts

Deep knowledge of the energy sector

Trusted Provider

Capable and Ontario focused provider

Deployment History

EV charger deployments across Ontario

Supply Chain

Leverage scale and relationships

Strategic Advisor

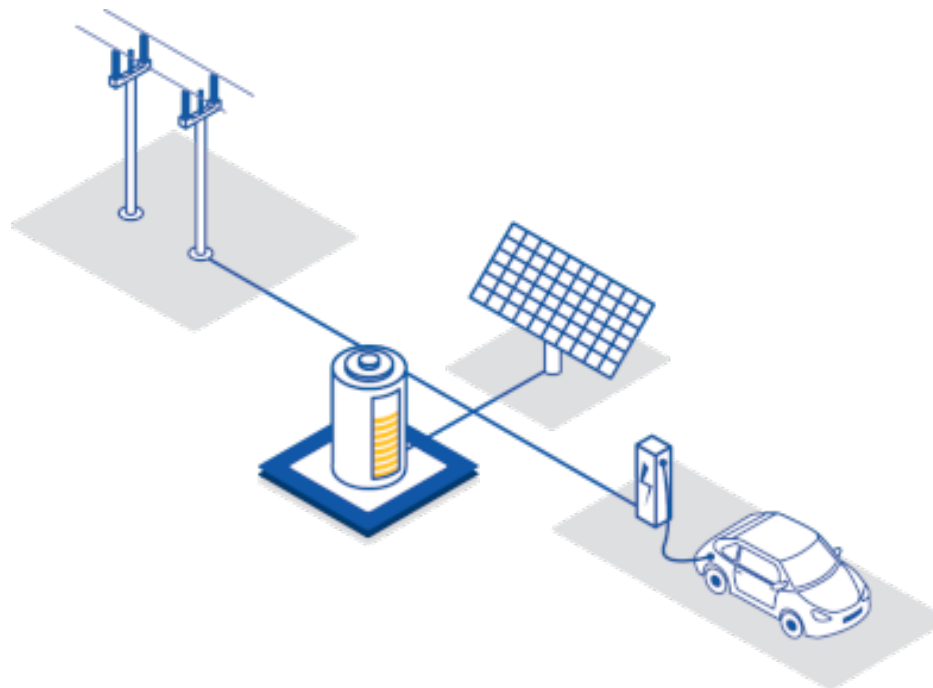
Help future proof your investments

Financial Backing

Use purchase power to enable companies to electrify



How is it done? Energy as a Service (EaaS)

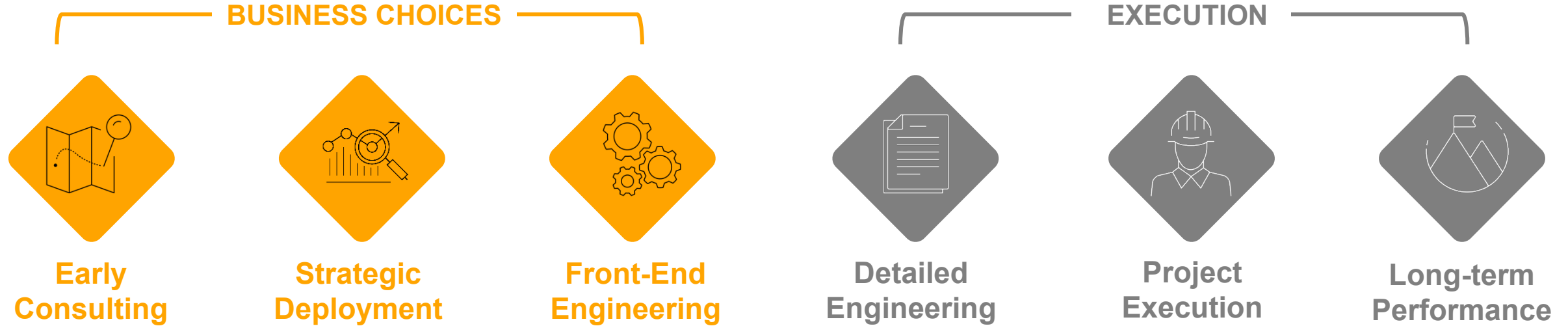


What is Energy as a Service (EaaS)?

- Convert upfront capital expenditures to yearly operational expenses / savings
- Providing turnkey deployment of energy solutions for EV's and batteries
- One source for energy expertise by de-risking your energy transition

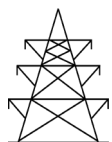
Fleet Electrification Journey

Fleet electrification journey has six main steps that are divided between the municipality's *Business Choices* and *Execution*.



Electrification Activity Examples

Charging Infrastructure



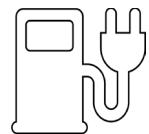
Grid connection

We handle utility applications & interconnection coordination while solving problems with the utility



Onsite make ready

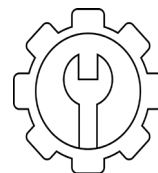
We design, build and commission the sites, solving any inevitable issues that arise



Charging equipment

We source charging equipment & required electrical equipment and manage any procurement issues

Ongoing Operations



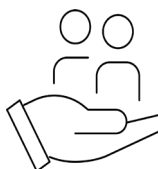
Operations & maintenance

Provide both corrective and preventative maintenance to ensure uptime, keeping a stock of necessary spares



Network management

We monitor the chargers to ensure uptime and track utilization, improving electric fleet operations



24/7 Service

We monitor 24/7 with the goal of discovering and resolving issues through remote diagnostics & restart

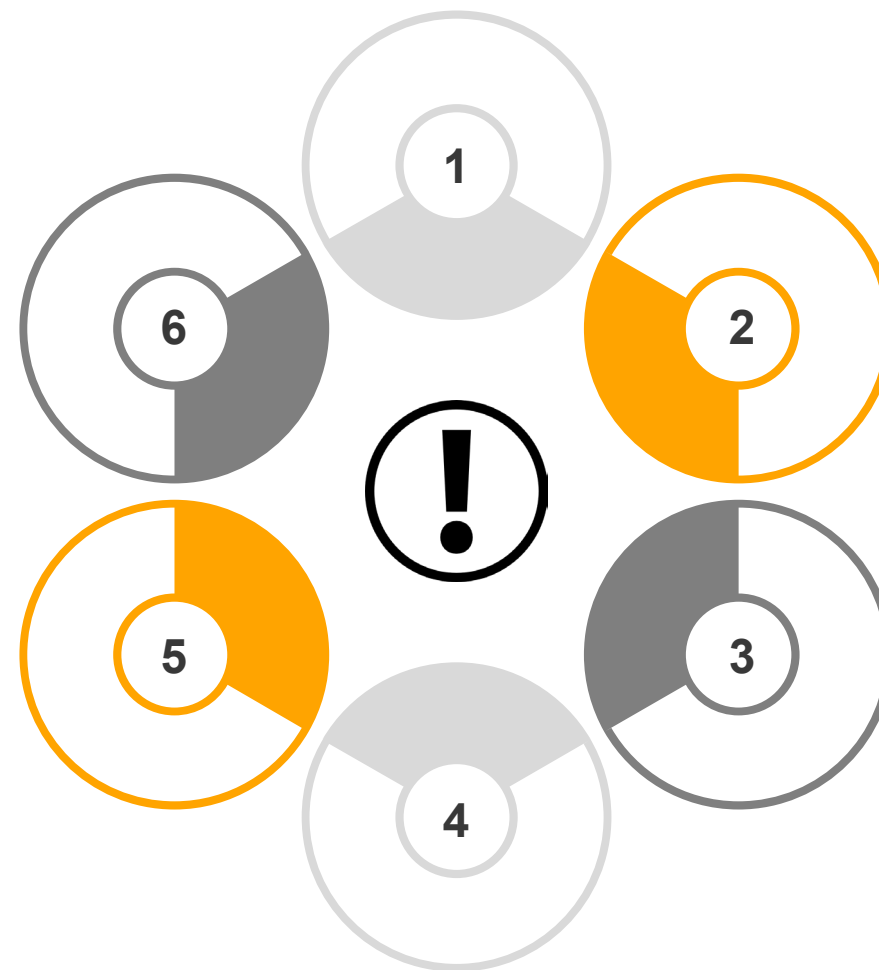


Journey in Progress

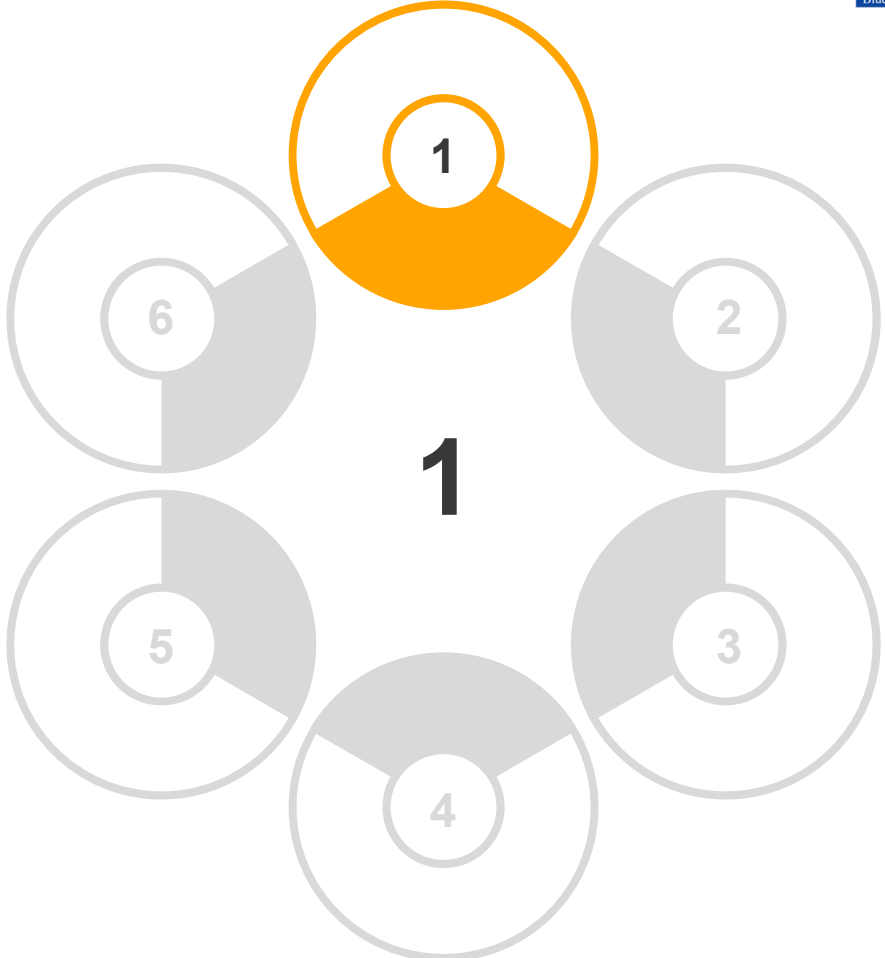
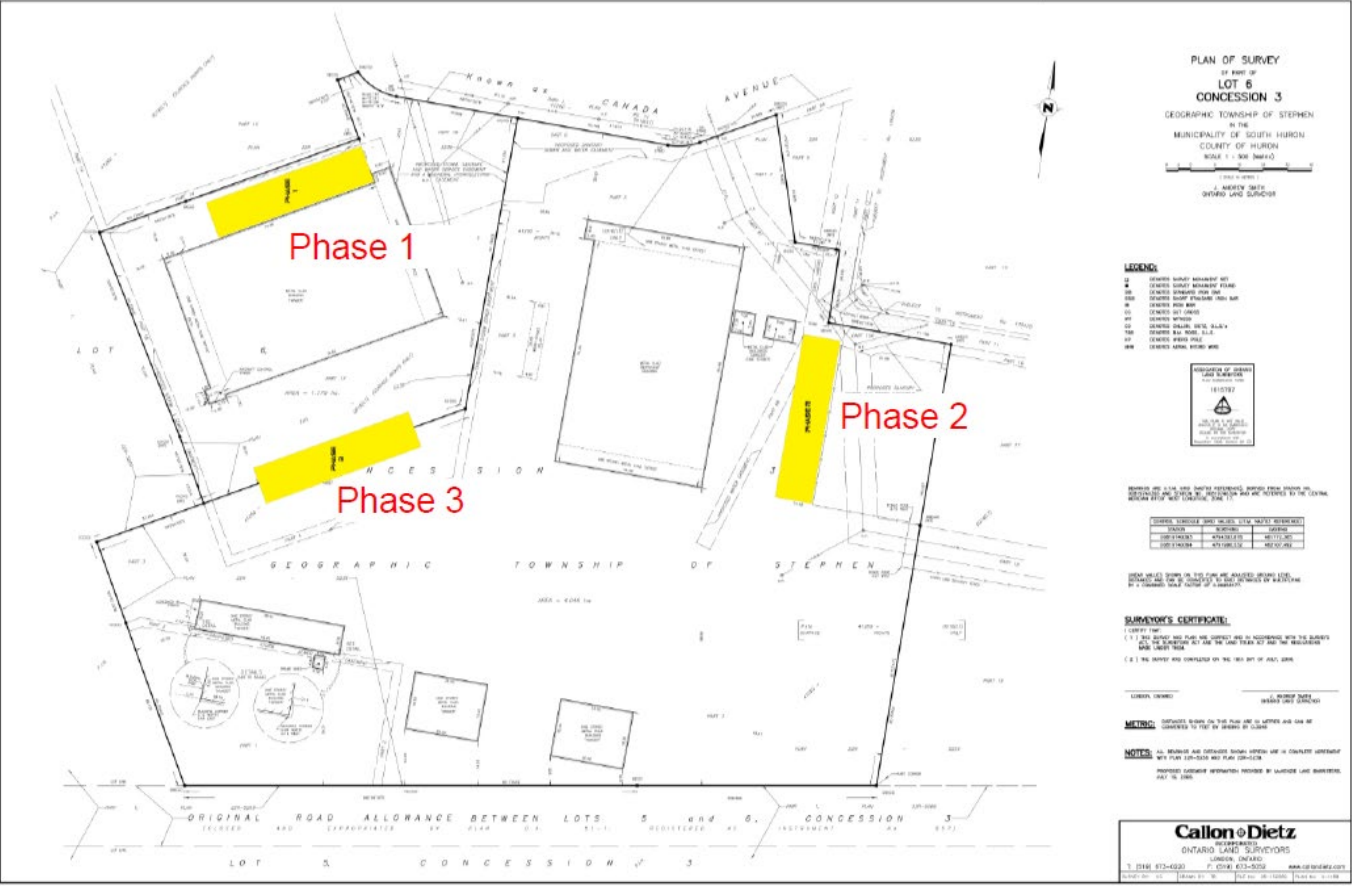
How to overcome the problems?

What is impacting electrification?

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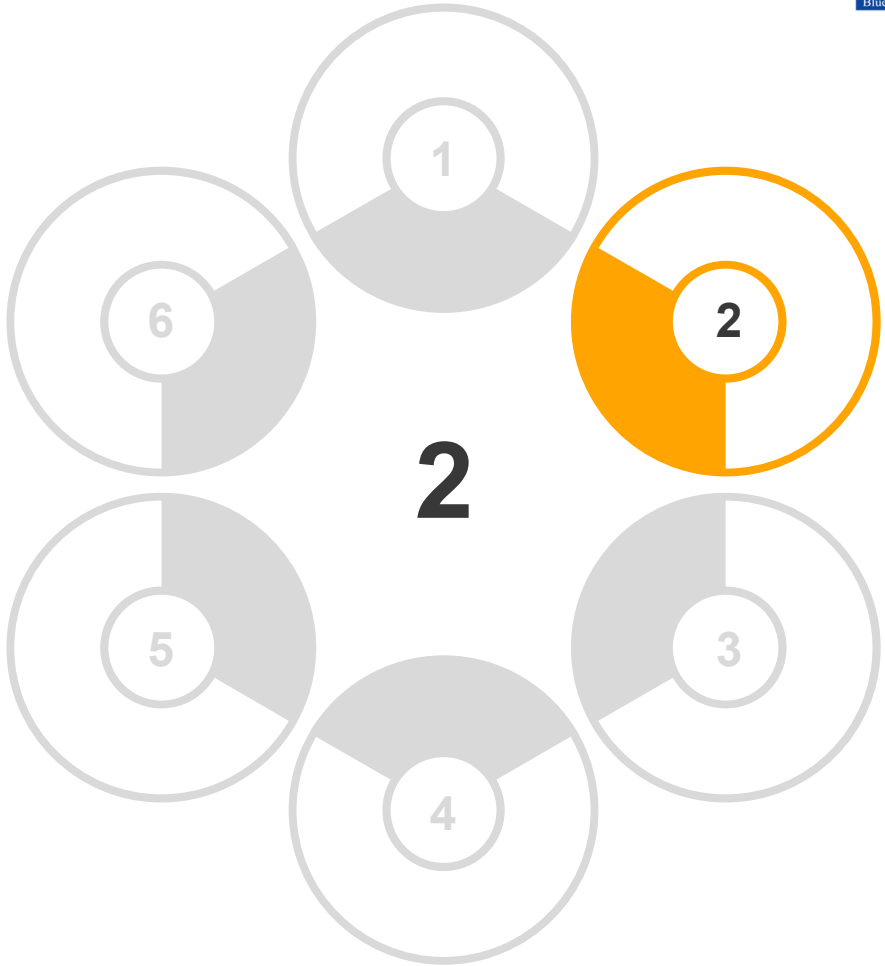
Bluewater Recycling Example #1



1. Increasingly complex energy needs

Bluewater Recycling Example #2

Bus Manufacturers

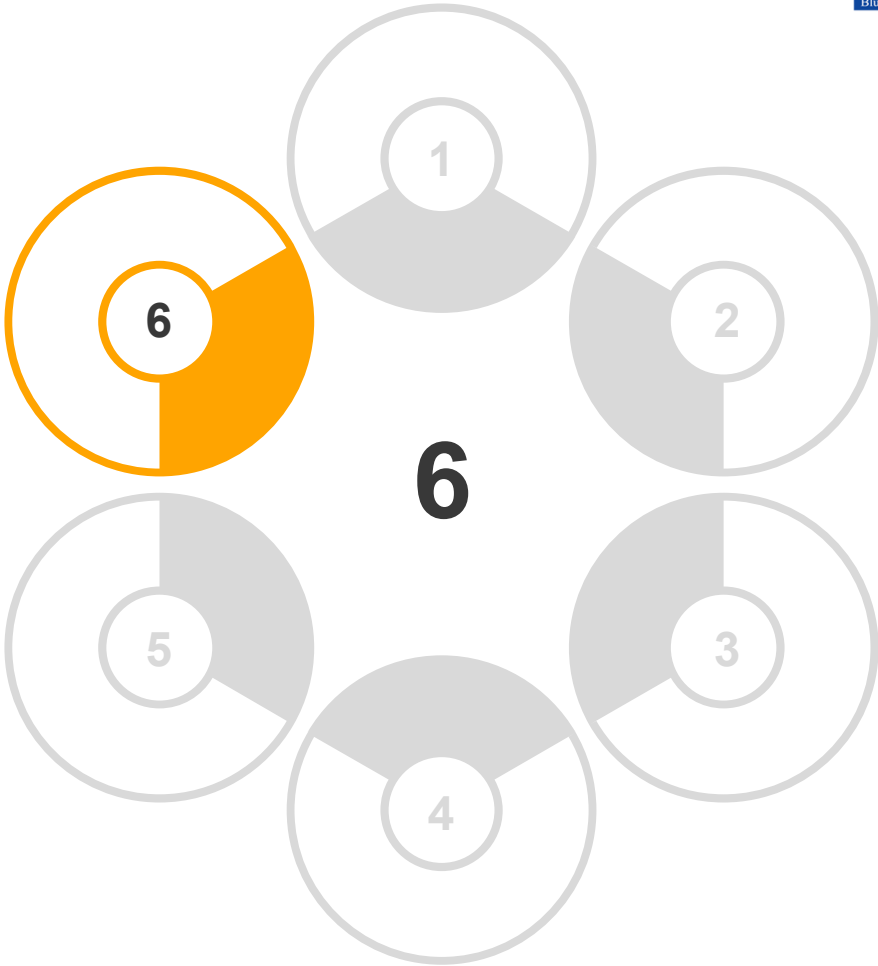


2. Lack of established service providers

Bluewater Recycling Example #3



CANADA 
INFRASTRUCTURE BANK



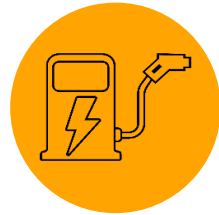
3. Challenging funding / financing needs



Appendix: Case Studies

Case Study #1

Power Experts



Deployment History



Ivy Charging Network



Problem: In 2018, the EV charging landscape was fragmented, highly unreliable, and failed to cover most of the Province.

Solution: Secure Federal Funding, develop partners, and deploy critical EV charging infrastructure at all Ontario ONroutes as well as in the rural and northern towns. Today Ivy has deployed 150 fast chargers and 63 Level 2 Chargers.

Key Learnings:

- Ontario's fragmented utility landscape creates unique challenges in Province-wide deployments
- Local network support essential to success
- Partnerships essential in the growing EV charging market

Case Study #2

Strategic Advisor



Confidential Retailer

Problem: Retailer seeking support in managing EV charging installation in context of staggered EV truck deliveries, and supply chain issues, while also planning for long-term.

Solution: Integrate charging-as-a-service offering to include consulting, future-proofing, and creative solutions that meet both short term needs and long-term planning by developing temporary EV charging solution to accommodate for early EV deliveries, structuring financing to meet truck delivery schedule, and building additional make-ready infrastructure.

Key Learnings:

- Fleet delivery schedule remains a significant issue
- Flexibility of charging-as-a-service effective tool for managing this constraint
- Deep understanding of client needs can allow for maximization of value per deployment

Case Study #3

Financial Backing



Securing Funding

Canada

Problem: Provincial funding for commercial / transit EVs is not currently at par with Quebec or BC, slowing down Ontario's deployment.

Solution: Leverage our balance sheet and strong market reputation to seek funding on spec, and/or to finance partners as they seek their own funding. To date, we've secured ~\$5M in funding for our clients and are currently financing clients as they seek additional funding for electrification.

Key Learnings:

- There is strong appetite to deploy in Ontario, but access to funding is becoming a barrier
- Federal government can be a strong and flexible partner when requirements are well understood
- Financial planning remains a significant challenge as costs and requirements still unknown

Case Study #4

Supply Chain



Charger Deployment

Problem: On this deployment, a transformer was unavailable for over a year due to utility's lack of inventory and ongoing supply chain challenges.

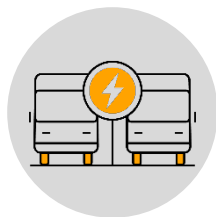
Solution: Working with our parent company we were able to get delivery down to one month.

Key Learnings:

- In supply chain constrained market, strong relationships a key to success
- Utilities have capability to be flexible, but requires strong understanding of their dynamics

Putting it All Together

Trusted Service Provider



- Aux is reflective of Hydro One's commitment to Ontario's electrification
- Aux brings the benefit of Hydro One's 110 years of providing energy services to Ontario
- Aux is focused on the providing innovative energy solutions to Ontarians, enabling the energy transition to achieve the shift to a low-carbon economy

Thank you for your Time!
www.AUXEnergy.com

