



Electric Vehicle Chargers & Infrastructure Plan

NSFM Spring Conference 2023

Presentation Overview

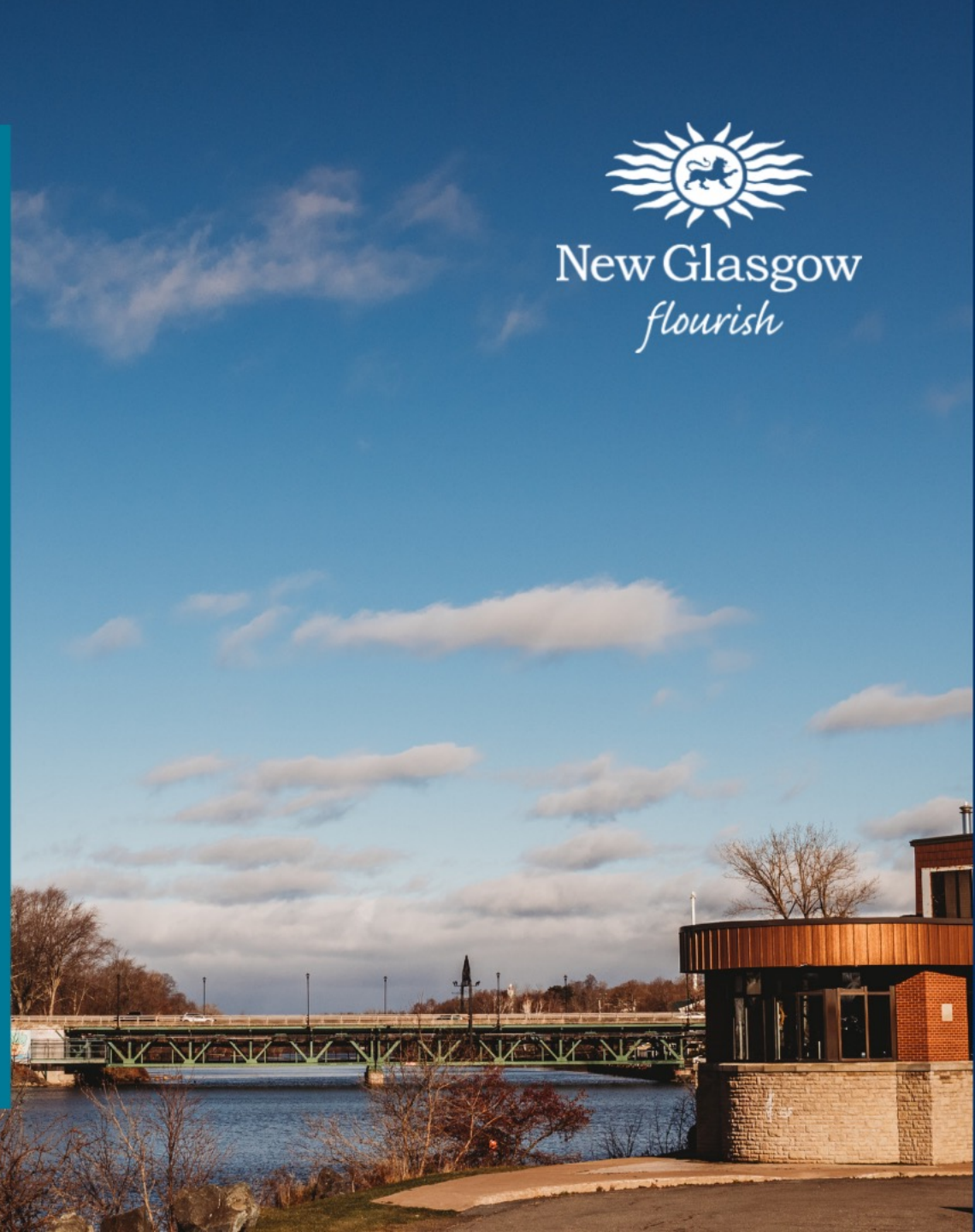
NSFM Spring Conference 2023

Key topics to be discussed in this presentation

- Background
- Community EV Infrastructure Plan
- New EV Charger Installations
- Community Engagement



New Glasgow
flourish





Community Climate Action Plan &
Greenhouse Gas Emissions Reduction Target
2022-2030

Town of New Glasgow



Working Towards Net-Zero and Climate Resilience

- Council recommitted to Climate Change Action in 2019.
- Guiding Documents: Community GHG Inventory (2018) and Community Climate Action Plan (2022).
- Climate Emergency declared in 2022.



2018 BASELINE
128,641 tCO₂e



25% GHG REDUCTION
by 2025

50% GHG REDUCTION
by 2030

Transportation Emissions

- 31% of community-wide emissions
- Equal to the emissions from 4,697,660 gallons of gasoline consumed



2018 BASELINE FOR TRANSPORTATION
39,082 tCO₂e



TARGET:
50% reduction of
transportation-related
GHG emissions by 2030

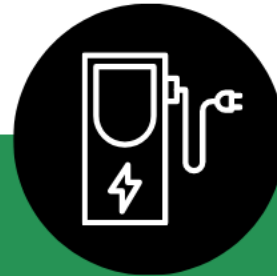


Action Area: Zero-Emission Transportation

An EV in Nova Scotia emits as much as 50% less CO₂ than a gas car, which will only improve over time as Nova Scotia works to reach 80% renewable energy by 2030 (NS Power).



**COMMUNITY EV
INFRASTRUCTURE
PLAN**



**INSTALL EV
CHARGERS**



**COMMUNITY
ENGAGEMENT**

Community Support

Electric vehicles and EV charging infrastructure emerged as a key priority during the Town's 2021 Climate Action Engagement.



41.6 %

**1/4 of the vehicles on the road should be replaced with EVs
by 2030**

32.7 %

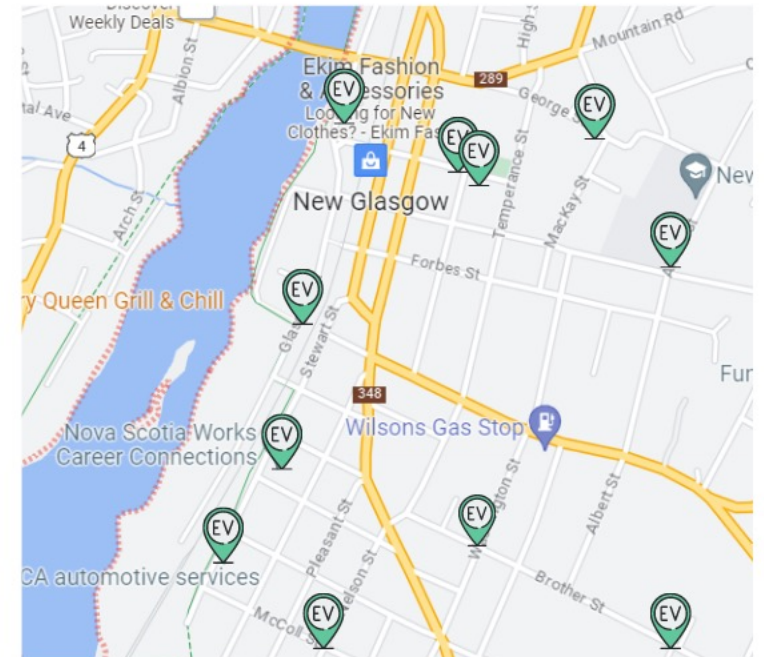
**1/2 of the vehicles on the road should be replaced with EVs
by 2030**

Community EV Infrastructure Plan

- Working with WSP's Zero Emission Mobility team
- Funded by the Province of Nova Scotia
- Council-approved in April 2023

Key Deliverables

- Policy & bylaw recommendations
- EV uptake analysis
- List of ideal locations & number of chargers
- Financial assessment
- Deployment plan



Estimated EV Uptake

- 88 EVs registered across Pictou County with 5 in New Glasgow as of Jan 1, 2023
- By 2029, WSP estimates 2,750 EVs will be on the road in New Glasgow
 - Financial costs, savings & incentives
 - Supply chain issues
 - Gas prices
 - Intra-County travel
 - Proportion of NG residents willing to adopt EVs
 - Nova Scotia-wide EV uptake rate





Ideal Locations & Numbers

- Recommended network of **90–110 EV chargers** to meet the demand of 2,750 EVs
 - 30 Town-owned
- **Priority locations** identified with hotspot data, stakeholder feedback, & equity considerations
 - Public parking spaces
 - Downtown
 - Grocery stores
 - Hospital
 - Library
 - Mall
 - Aberdeen Business Centre
 - Multi-unit residential buildings

Community-informed Plan

- Public & stakeholder consultation via questionnaires
 - General public
 - Private Sector
 - Community Sector
 - Utility
 - Municipal Corporations

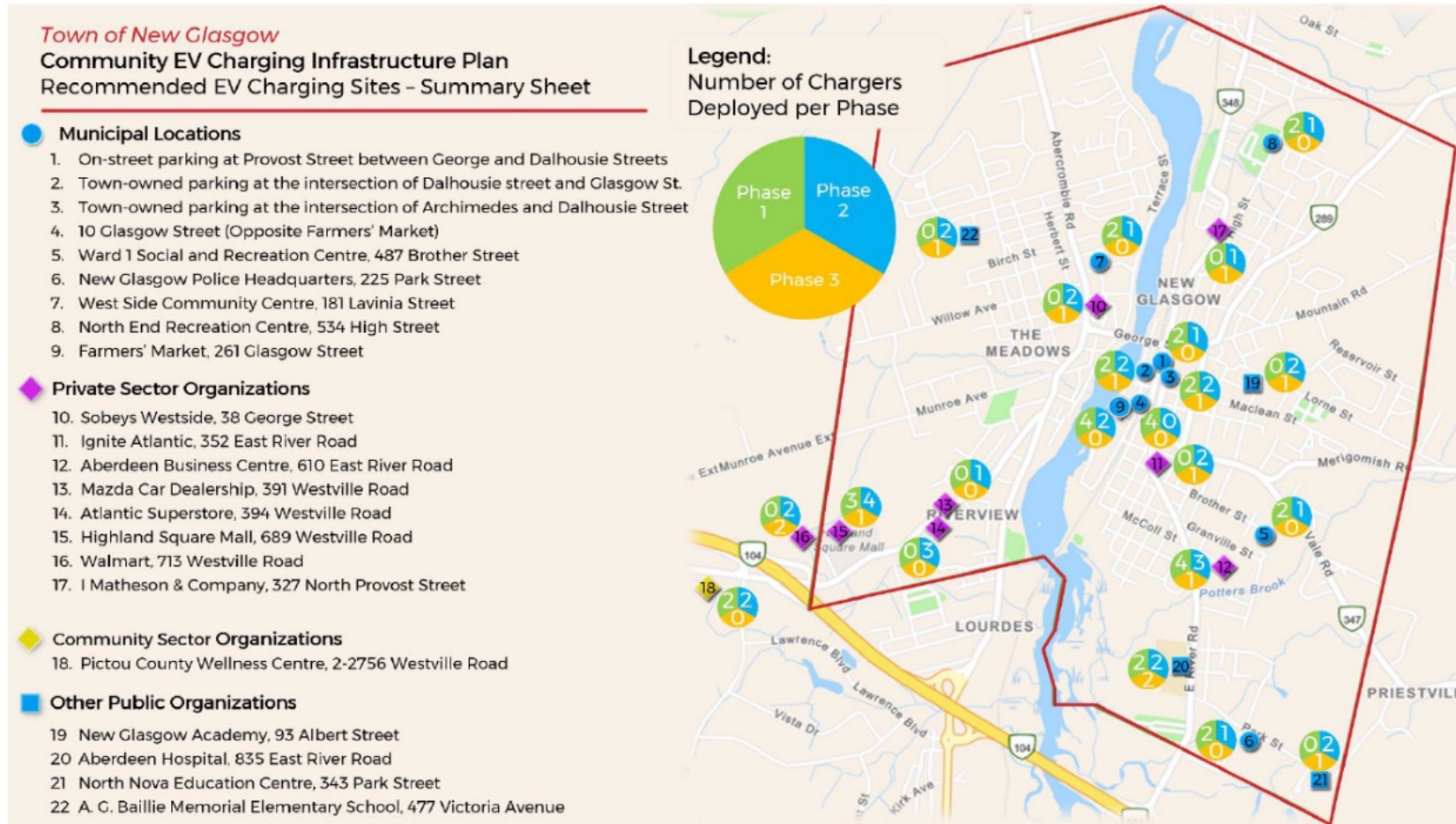


Key Findings

- Net positive preference for EV adoption by the general public
- Private & community sector interest in EV charger deployment
- Private sector willingness to invest \$1000/year on EV chargers
- Key challenges: costs, supply chain, limited charging infrastructure, range anxiety, lack of knowledge



Community EV Charging Map - WSP Recommended Sites



Recommended 3-Phased Deployment Plan at Town-owned Sites

Location	Phase 1 (2022-2025)	Phase 2 (2025-2027)	Phase 3 (2027-2030)	
Ward 1				
1	Ward 1 Social and Recreation Centre, 487 Brother Street	2	1	0
2	10 Glasgow Street (Opposite Farmers' Market)	4	0	0
3	On-street parking at Provost Street between George Street and Dalhousie Street	2	1	1
4	New Glasgow Police Headquarters, 225 Park Street	1	1	0
5	Town-owned Parking at the intersection of Archimedes Street and Dalhousie Street	1	1	1
6	Town-owned Parking at the intersection of Glasgow Street and Dalhousie Street	1	1	1
7	Farmers' Market, 261 Glasgow Street	4	2	0
	Total for Ward 1	15	7	3
Ward 2				
1	North End Recreation Centre, 534 High Street	2	1	0
	Total for Ward 2	2	1	0
Ward 3				
1	West Side Community Centre, 181 Lavinia Street	2	1	0
	Total for Ward 3	2	1	0
	Total	19	9	3





Key Recommendations

- Town-owned deployment in Phase 1 to expedite adoption
- Procure a mix of 80:20% low and high-power chargers
- Charge \$2.00/hour
 - Reducing operational costs to an estimated \$1000 per charger annually
- Seek external funding to offset capital and installation costs
- Develop a consultation process to encourage private sector participation
- Mandate new development to reserve residential parking for EV charging, with 100% of all new residential parking stalls being EV-ready by 2029

Newly Installed EV Chargers

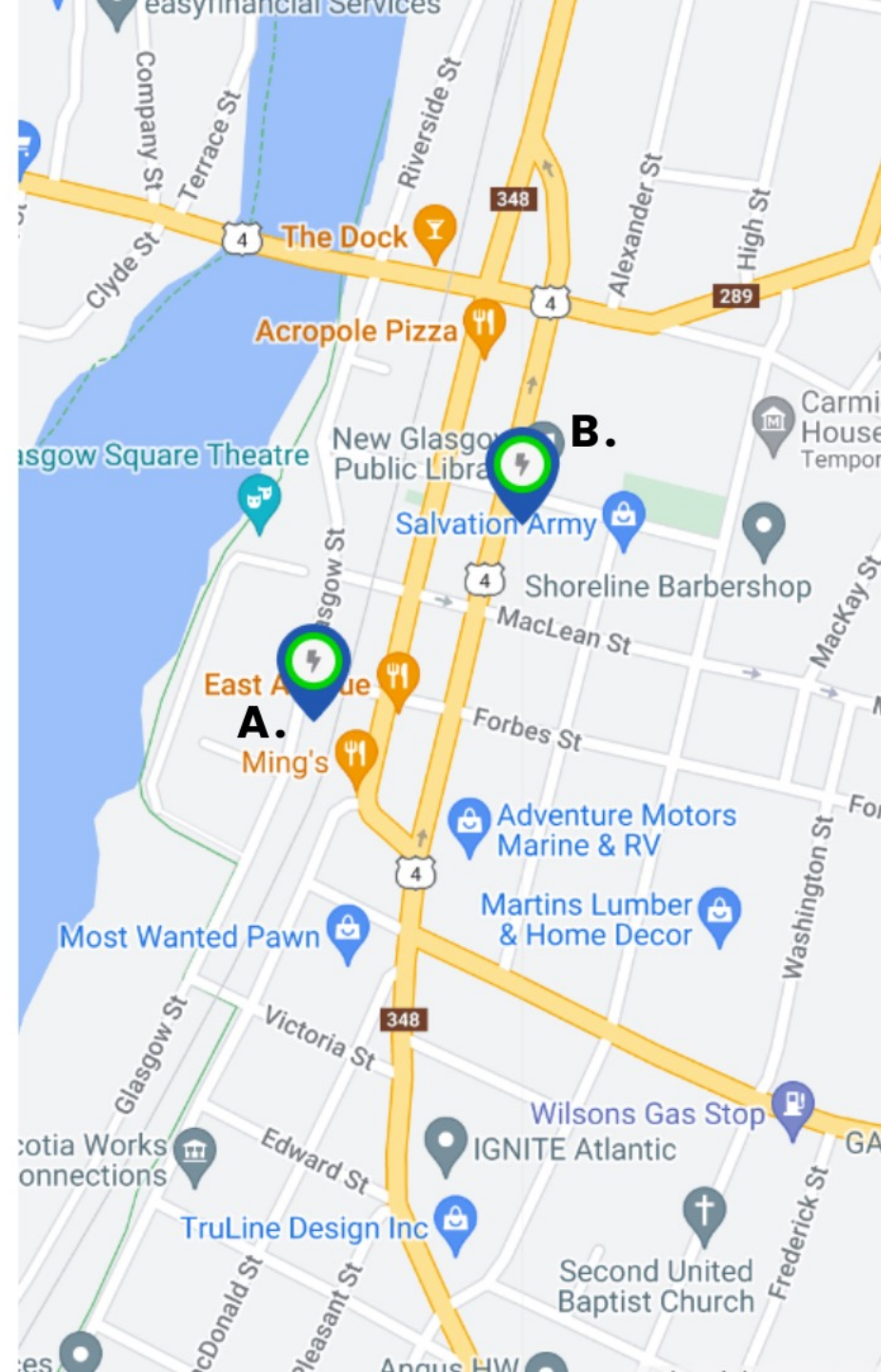
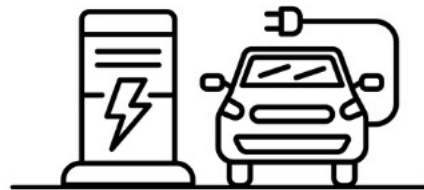
- 3 new dual-port level 2 ChargePoint chargers were installed in March in the downtown core
- Funded through the Clean Foundation's EV Boost Program

A. FARMERS MARKET

10 Glasgow St
EV Plug (J1772)
1 Level-2 charger
\$2.00/hour
2 plugs total

B. PUBLIC LIBRARY

138 NS-289
EV Plug (J1772)
2 Level-2 chargers
\$2.00/hour
4 plugs total



Current Usage

- 7 unique drivers in March and 16 charging sessions
- 12 unique drivers in April and 31 charging sessions
- Average charging session length of 1 hr 4 min



400kg of GHG
emissions avoided



Equivalent to planting
10 trees and letting
them grow for **10 years**

Ribbon Cutting Ceremony & EV Test Drives

- 60 total engagements: 6 drives, 10 passengers, 2 e-bike rides







Early Private Sector Participation

- Two new privately-owned EV charges in Town
 - County Mazda
 - Open to public
 - Free
 - Pictou County Partnership
 - Reserved for staff
- Recognized by the Town as leaders in the EV transition





NetZero
NEW GLASGOW

Thank you

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PICTOU COUNTY



Climate Summit