

City Manager

1 City Hall Plaza ▪ Ellsworth, ME 04605-1942
Phone (207) 669-6634 ▪ Fax (207) 667-4908
cpearce@ellsworthmaine.gov



<https://video.chargepoint.com/watch/Y52NQsKXbb6m6rQymZ4a5R?>

MEMO

To: City Council

CC: Mike Harris (Director of Public Works), Amanda Ray (Public Works Administrator)

From: Charlie Pearce, City Manager

Date: September 16, 2024

Re: September 2024 Agenda – Proposal to Install 4 EV Charging Banks in Ellsworth

Suggested Motion: “Move to approve the request of the City Manager to sign a contract with Revision Energy and apply to Efficiency Maine for an award program which will help fund the installation of 4 EV Fast Charging Stations in the City of Ellsworth.”

Purpose

I am requesting authorization from the City Council to sign a contract/application for the installation of 4 level 2 “destination” electric vehicle (EV) charging ports in Ellsworth. This project is predominantly funded by state and federal energy efficiency programs with cost recoup for the city’s portion available through the vehicle charging fees. The city’s initial required match is approximately \$10,863, leveraging \$118,941 in state and federal funds. This project represents a substantial opportunity for Ellsworth to enhance our energy infrastructure, generate revenue, and position ourselves as a leader in modern, sustainable transportation.

Benefits of Early EV Charger Adoption

By taking advantage of this opportunity, Ellsworth will benefit in several key ways:

1. New Revenue Stream:

- The city will have the ability to charge above market rates for EV charging, meaning the initial investment of \$10,863 will be recouped over time, along with additional revenue.

- Cities and towns in Maine are charging somewhere between 36 and 56 cents per kilowatt hour depending on the slow/fast charging capabilities. The current average kwh rate in Maine is 23 cents per hour.
 - As EV charger use increases, the city will, in effect, be entering the "gas" business, providing power for electric vehicles and profiting from each charge.
 - For example, with an 80% charge on 90kW battery costs around \$28 at the nearest fast charge station near the Ellsworth McDonalds (Example below).
 - The city has the ability to set its own rate to what the market demands, but EV sites often make 15-30% of each bill as additional revenue for the city.
 - Multiply this across a growing number of EV users and we generate a steady income stream, especially while the supply of EV chargers is low in the region.
2. **Support for Downtown Businesses:**
- EV drivers often spend between 30 minutes to 2 hours waiting for their vehicles to charge, which presents a significant opportunity to encourage spending at our local businesses.
 - The strategic placement of chargers near downtown will bring visitors closer to our shops and restaurants, as well as highlight our historic City Hall.
3. **Infrastructure Growth:**
- The EV6000 ChargePoint chargers are some of the most modern, "Buy American" units available, offering cutting-edge technology to both residents and tourists.
 - These chargers will begin as Level 2 "destination" chargers, capable of providing a slower charge, but setting us up to apply for additional grants next year for fast chargers (which cost hundreds of thousands per unit).
4. **City EV Fleet:**
- As the city acquires EVs for their own fleet in the coming years—ideally with additional state or federal incentive funding—these chargers can also be used to power our municipal fleet, further reducing our reliance on fossil fuels and lowering operating costs.

Potential Concerns

While this proposal has substantial benefits, there are also some potential concerns to address:

5. **Parking and Usage:**
- EV adoption is currently growing but remains slow in some areas. Initially, these charging stations may not be fully utilized, taking up valuable parking spaces that staff and citizens currently rely on.
 - There is, however, no requirement that the spaces be reserved exclusively for EVs, meaning we can adjust the restrictions based on demand. This gives us the flexibility to either designate the spaces for EVs or allow them to be used for regular parking when needed.
6. **Maintenance and Accessibility:**
- There may be some logistical challenges in ensuring that the chargers remain accessible during winter months, especially during snow removal operations.

Additional staff time may be required to keep the area clear of snow and ensure the chargers are operational year-round.

7. Upfront Investment:

- This would require additional city funds to seed the investment that would either have to come out of undesignated fund balance or through an upcoming grant cycle.
- It is unclear how fast it would take for the investment to be recouped and would take additional analysis of rates and usage calculations which are not currently available.
- We are about to be reimbursed substantially from FEMA for resilience projects as an outcome of last year's storms. This income was not accounted for in the current budget but could be reallocated to more than cover these EV charging stations.

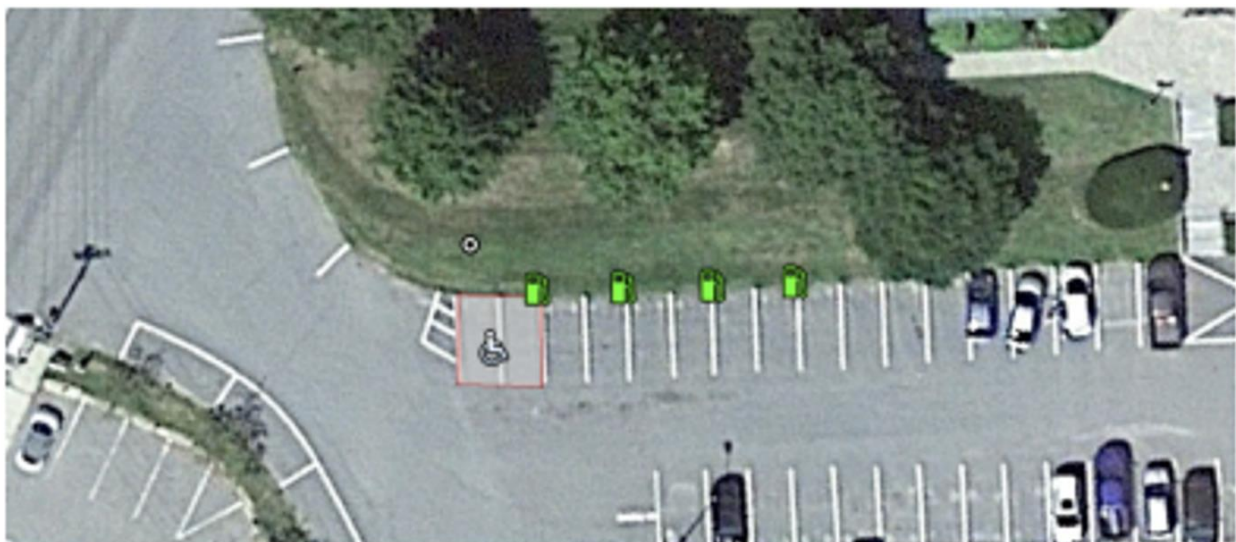
8. Timeline:

- The funding round for this year is rapidly closing and we are hopeful though not certain we will get the award for this year.

Location Benefits

After considerable discussion, the chosen location for the charging bank near downtown was selected for several key reasons:

- **Proximity to Phase 3 Power:** This location provides easy access to the necessary electrical infrastructure, reducing installation costs and making the project more feasible.
- **Central Location:** It is ideally located near downtown businesses, encouraging foot traffic and promoting economic growth.
- **Snow Management:** The site is not in an area where snow is typically piled, making it more accessible during the winter months.



If we delay this project to further reevaluate alternative sites, it could jeopardize our ability to meet the grant application deadlines, potentially causing us to miss out on this round of funding.

This delay would also hinder our chances of securing fast chargers early next year, as it would push back our entire EV infrastructure timeline.

Next Steps: Fast Charger Investment

The installation of these Level 2 chargers will also position Ellsworth well to apply for future funding, possibly in the multiple hundreds of thousands of dollars, to install fast chargers soon. Once we have both slow and fast chargers in place, EV drivers will be encouraged to "queue" at the slower chargers while waiting for the faster ones to become available—driving even more traffic (and revenue) to our downtown businesses.

“Over the next several years, Maine will receive an additional \$12 million from the National Electric Vehicle Infrastructure program and \$15 million from a U.S. Transportation Department grant program. Maine intends to use the money to establish fast charging every 50 miles or less along Maine’s major corridors, in urban areas and in rural service centers”

<https://www.pressherald.com/2024/06/12/maine-to-add-17-high-speed-ev-charging-stations/>

Conclusion

Taking advantage of the federal incentives available now will allow Ellsworth to pull in over \$118,841 in federally/state funded infrastructure investment this year and set us up for much larger grants next year. These investments will not only pay for themselves over time through the revenue gained by the charging fees, but will also enhance the quality of life for our residents, increase tourism, and help prepare us for the future of transportation.

Request for Authorization

I request the City Council’s authorization for the City Manager to sign the attached application for EV chargers with Revision Energy. Legal counsel has reviewed the contract and notes that the contract is not valid unless the city receives the Efficiency Maine award and proceeds to funding the city’s portion of the project. Revision Energy will be responsible for securing the Efficiency Maine credit. The City of Ellsworth’s Finance team will be responsible for securing the federal credit. The Efficiency Maine reimbursement typically takes around 1 month. The federal credit can take from 1-4 months. This project is a critical first step in positioning Ellsworth as a leader in modern energy infrastructure and will bring both immediate and long-term benefits to our community.

Additional Resources

“Electric Vehicle Charging Explained:” https://www.nrdc.org/stories/electric-vehicle-charging-explained?gad_source=1&gclid=EAIaIQobChMIzoH36OPDiAMVIE5HAR0wJA4DEAAYASAAEgLQcfD_BwE

“How to make money on EV charging:” <https://www.enelxway.com/us/en/resources/blog/how-to-make-money-from-ev-charging-stations#:~:text=Charging%20for%20station%20use&text=Organizations%20can%20charge%20per%20kWh,by%20location%20and%20charge%20speed.>

Funding For Level 2 and Level 3 EV Chargers: <https://www.efficiencymaine.com/docs/CFI-EV-Charger-Funding-Brochure.pdf>

Sincerely,

Charlie Pearce

City Manager

Ellsworth, Maine

ChargePoint - Receipt

Charging Services

Receipt date: September 14, 2024

Receipt Number

Station ID:

REVISION ENERGY / ELLSWORTH Ellsworth

CPE#2

62.5 kW DC

Charging duration:

September 14, 2024 at 11:30 AM - 12:23 PM

Total Energy Dispensed:

54.2235 kWh

Energy Rate

54.2235 kWh @ \$0.52/kWh \$28.20

11:30:32 AM - 12:23:23 PM

Total

\$28.20

Price set by Revision Energy

Transaction started by mobile app

Station Address:

225 High St

Ellsworth, Maine 04605 United States

Station Energy Meter (kWh):

16,104.3197 - 16,158.5432

Questions? Visit www.chargepoint.com/support/

Map

Activity

Home

Account

