

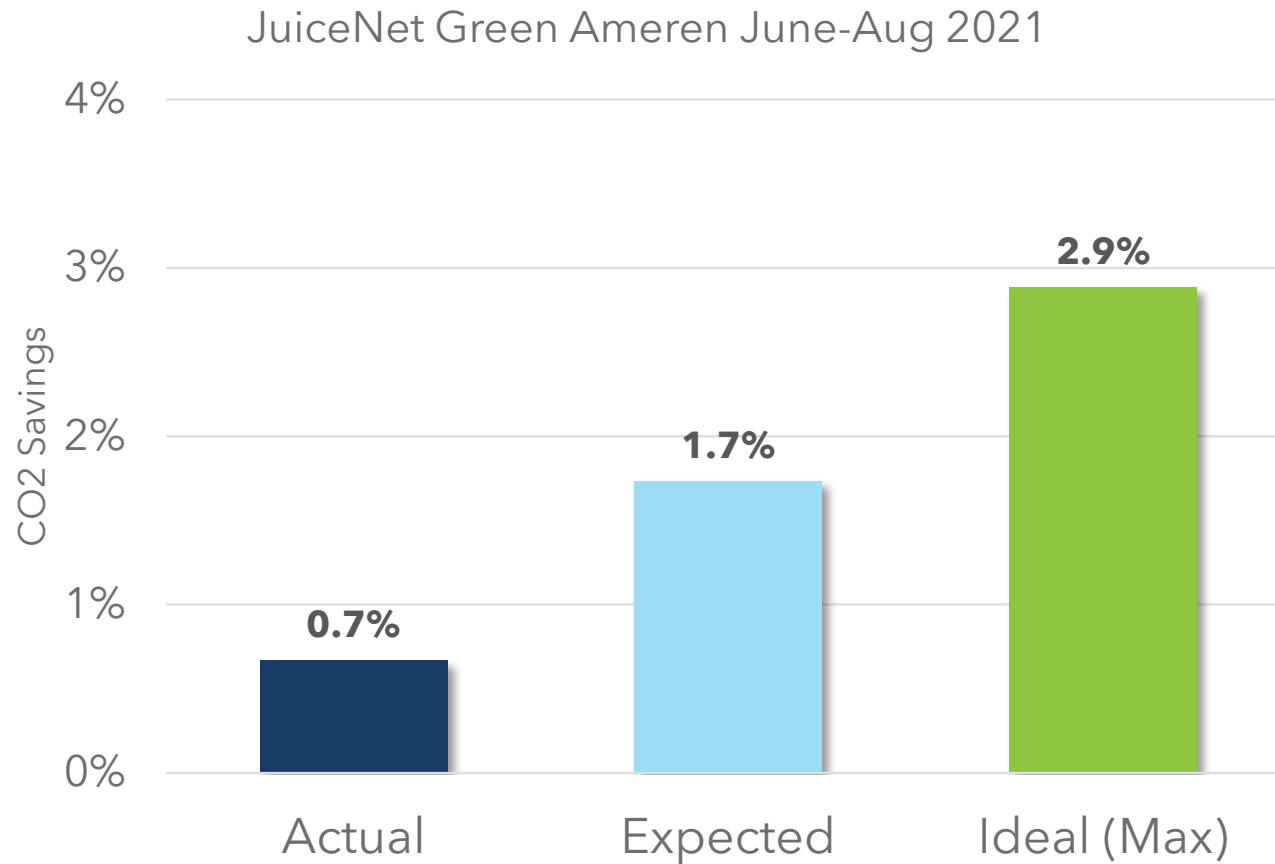
Ameren Pilot for EV Charging with Automated Emissions Reduction

2021-Q3 Update



Preliminary Results: June - Aug 2021

CO2 Savings Summary



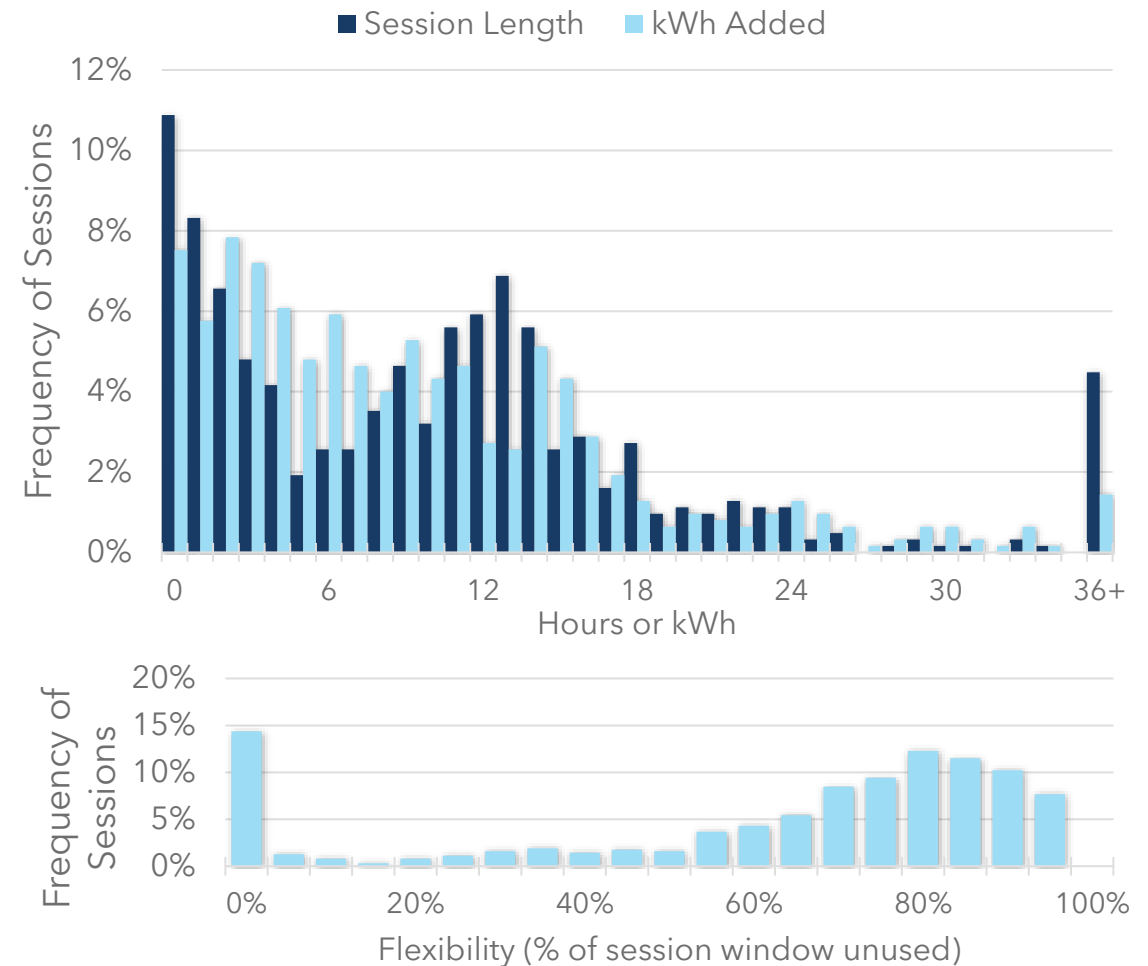
Performance Results

Metric	Value
Highest Actual Savings in a Session	11.6%
# of Sessions	626
CO2 saved	67 lbs

Charging Activity Summary: June-Aug 2021

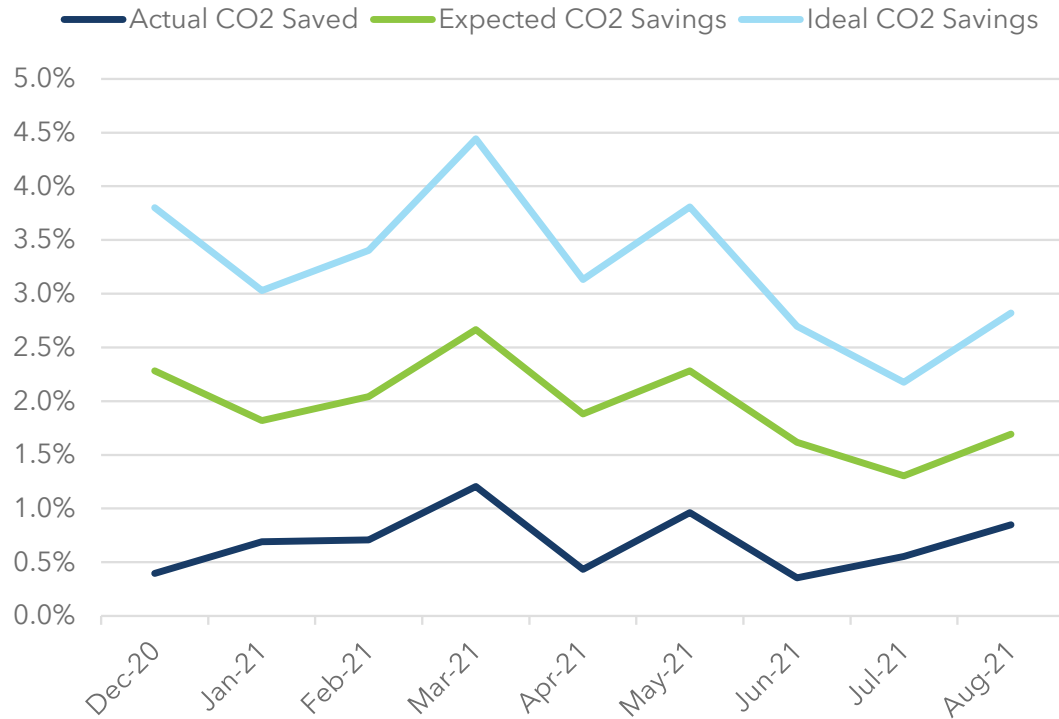
Charging Activity Summary

Population	10
# of Sessions	626
Plug-IN Time (most frequent)	5:00 PM to 6:00 PM
Plug-OUT Time (most frequent)	8:00 AM to 9:00 AM
Avg Session Length	12.3 Hours
Avg Charge Duration	2.2 Hours
Avg Flexibility	82%
Avg Charge Rate	4.5 kW
Avg Energy Added	9.9 kWh
Avg Miles Added	31 Miles



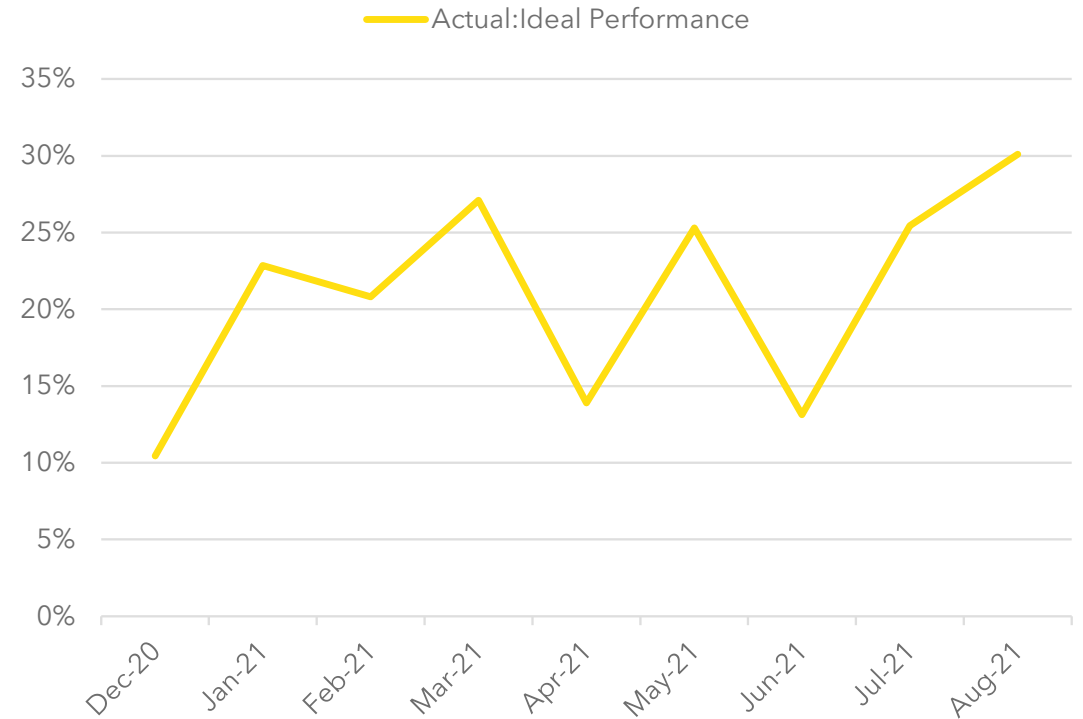
Performance Trends

Ameren JuiceNet Green Pilot Performance



The "Ideal CO2 Savings" represents the best-case savings opportunity, i.e. the best possible outcome given the charging sessions that occurred and the marginal emissions on the local grid (MISO_SAINTE LOUIS)

Ameren JuiceNet Green Pilot Performance



The relative performance of actual savings compared to ideal was the strongest yet in August

Discussion of Results and Next Steps

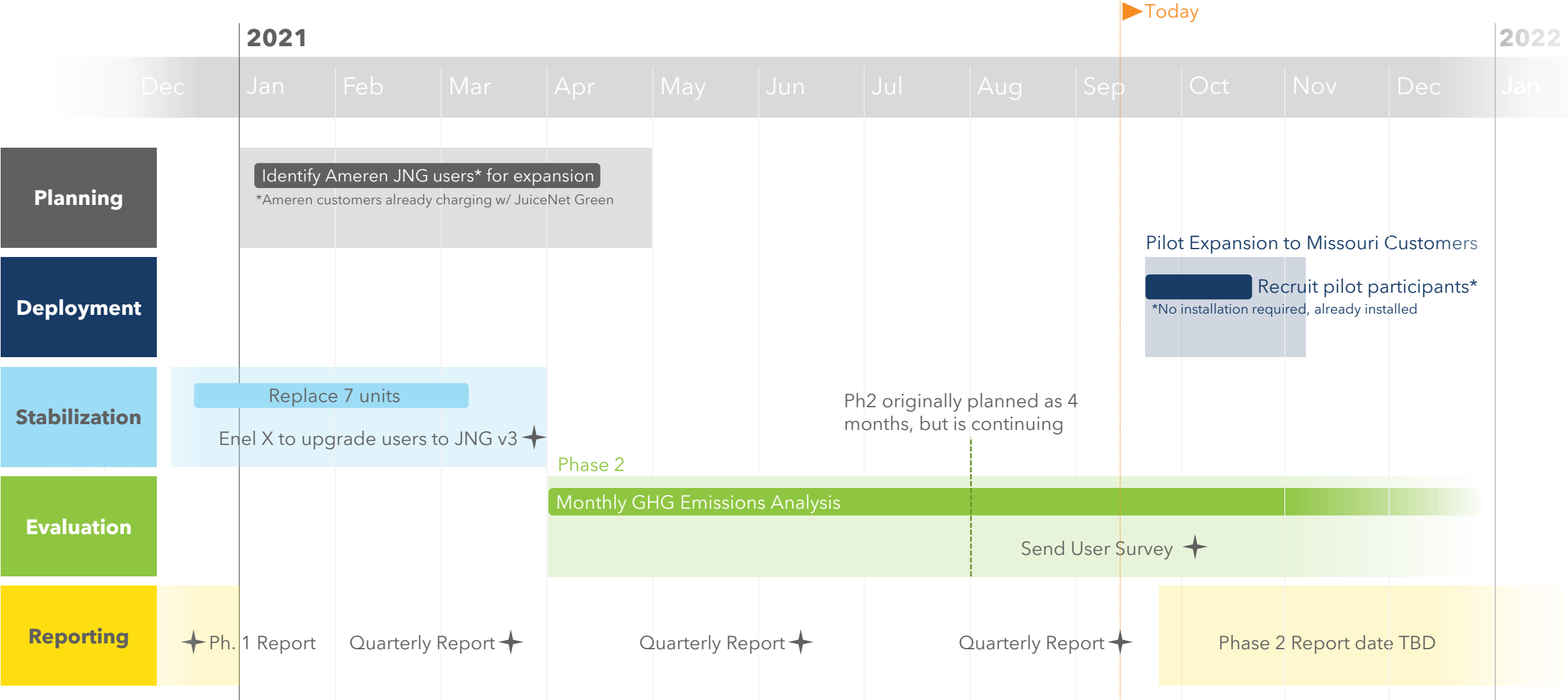
Results Discussion

- The JuiceNet v3.0 update came with improvements to Green, but also now prioritizes mobility (conservative assumptions by default if the user does not provide input for charging needs).
- This conservative approach to mobility limits the carbon savings performance if users are not regularly engaging with the app.
- There are signs that at least some of the users are not regularly engaging with the app, thus their experience and performance will be limited

Next Steps

1. Enel X is working on ways to continue to drive performance improvements to JuiceNet Green, both by improving their algorithms and by improving user engagement in the app. An app update is on the roadmap but is not imminent.
2. Analysis and reporting will continue on a monthly basis, as the phase 2 evaluation continues.
3. **Enel X and WattTime are expanding this pilot to JuiceBox owners in Missouri by giving them free upgrades to JuiceNet Green. Outreach to ~200 users will happen in September, with target participation of 50-75 users.**

Pilot Phase 2 Timeline



Thank You

Geoff Hancock

Product Manager (AER)

geoff@WattTime.org

734.347.0616

