Case Study Title: Scaling EV Charging Infrastructure Across a Distributed Retail Estate

Organisation	**Musgrave Limited**
Project	**ZEVI EV Charging Infrastructure Rollout**
Delivery partner	**EasyGo, subsequently rebranded to EZO**
Case-study focus	**Collaborative planning, standardisation, risk management and flow across multiple live retail sites**

Prepared for submission using project information available up to September 2026.

Company Overview | MUSGRAVE | musgravegroup.com

Musgrave is one of Ireland's leading retail, wholesale and foodservice businesses, supporting a network of established retail brands including SuperValu and Centra. Through its store development, sustainability, commercial and retailer support teams, Musgrave works collaboratively with independent retailers and delivery partners to enhance the customer offer, improve operational performance and support more sustainable retail environments across the island of Ireland.

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Overview & Background to the Lean Initiative

Musgrave partnered with EZO to secure Zero Emission Vehicles Ireland (ZEVI) grant funding and expand publicly accessible EV charging facilities across Musgrave-branded stores in the Republic of Ireland. The initiative brought together a government grant scheme, an affinity agreement, commercial contracts, property documentation, grid applications, civil and electrical works, charger installation, operation, maintenance and regular commercial reporting.

The Lean challenge was not a single installation, but the controlled replication of a common solution across a geographically dispersed network of live retail sites, each with distinct ownership, property, and grid-capacity considerations. The team needed to align retailer interest, grant compliance, legal approvals, site design, construction sequencing and operational handover while minimising disruption to trading. This positioned the project as a practical example of Lean thinking applied to distributed infrastructure delivery, with emphasis on the voice of the customer, flow in terms of seamless rollout, a pull from our customers and retail partners, standardised work, clear ownership, constraint management and continuous learning.

Partner roles:
Musgrave advances its sustainability objectives while supporting practical customer service across its store network.

EZO provides charge-point operator capability, grant administration, installation, operation, maintenance and a structured reporting framework.



Figure 1: EZO Zero Emission Vehicle & Charging Point

Lean Initiative Undertaken – Lean Thinking, Tools, Techniques

The initiative is centered on creating a repeatable delivery model for EV charging infrastructure across multiple retail locations that would deliver for our customers. Customers are constantly looking for more convenience to make their lives simpler. Based on our research, this was a service our customers wanted in their local store whilst they adopted more climate-friendly initiatives. The project team reviewed the extended value stream which enabled them to convert a time-bound grant opportunity into a structured programme that could move consistently from opportunity identification through to selection of EV supplier partner, grant submission, agreements, power applications, civil and electrical works, charger installation, energisation, operation and reporting.

Civil works, electrical capacity and energisation required close management throughout the rollout. Several installed chargers are awaiting ESB energisation, while some awarded locations had limited available power. For these sites, the team reviewed design options and considered battery supplementation where appropriate. Energisation timing remains a key planning factor, influencing when live usage data can be captured and when earlier business-case assumptions can be validated.

Lean and Collaborative Response

1. **Understanding the voice of the customer**
   Customer and retail partner feedback was gathered to assess local demand for EV charging infrastructure. This ensured that site selection and delivery were driven by a clear customer pull, with site-specific solutions progressed where demand, commercial viability and practical delivery requirements were aligned.

2. **Standardise the commercial pathway using value stream mapping and having a clear RACI**
   An overarching affinity agreement established roles, governance arrangements, and the commercial framework, including a lowest cost model for participating retailers. Under this approach, the ZEVI grant funding and EZO contribution supported the installation cost, reducing the need for direct retailer capital investment while retaining a structured contractual pathway through site-level contracts, leases, deeds of renunciation and service-level arrangements.

3. **Create a repeatable site process**
   The defined workflow progressed from initial consultation, agreement and grant submission through power application, civil and electrical works, equipment installation, and ongoing management and maintenance.

4. **Clarify ownership**
   EZO was responsible for grant submission, marketing and administration of offers, installation, operation, maintenance, commercial reporting and associated costs. Musgrave provided required information, coordinated retailer engagement, and supported agreed programme activities.

5. **Design for exceptions**
   Charger locations were assessed to balance proximity to the available power supply with the need to protect retailer car parking capacity. The Universal Design Guidelines for EV Charging Infrastructure were a key consideration, as accessible EV charging bays require more space than standard parking spaces. Where power supply was limited, battery solutions were also considered to help manage site constraints.

6. **Build feedback into operations**
   Weekly and quarterly profit reporting, complaint escalation and ongoing activity reporting established a governance basis for continuous improvement.

Lean principles demonstrated

- Define value from the customer and retailer perspective.
- Reduce variation through standard agreements, workflows and site documentation.
- Make work visible through staged approvals, reporting and ownership.
- Address constraints early, particularly grid capacity, landlord consent and site configuration.
- Use learning from the first energised sites to improve future site selection and business cases.

Lean Initiative Improvements & Impact

The programme converted the ZEVI opportunity into a scalable retail rollout, with 45 Centra and SuperValu sites awarded the ZEVI grant and aligned with the EZO affinity partnership. To date, chargers have been installed at 20 sites, with 5 live and 15 awaiting energisation. All 45 sites are targeted to be live in 2027. The project also established the legal, commercial and operational mechanisms required to progress installations across both independently operated and Musgrave-owned sites.

Risks, Countermeasures and Learning

- **Grid capacity and energisation delay:** Undertake power-capacity checks as early as possible; maintain redesign and battery options; separate "installed" from "energised" in reporting.

- **Multi-party approvals:** Use a clearly owned approval matrix covering retailer, landlord, Musgrave, EZO, ZEVI and network requirements.

- **Data consistency:** Maintain one controlled programme dashboard. Reconcile award, contract, installation and energisation counts before external publication.

- **Live-store disruption:** Plan civil and electrical works around trading, access, traffic management and customer safety.

- **Benefits validation:** Use the first energised cohort to test utilisation, dwell time, incremental sales, tariff assumptions and profit-share performance.

OUTCOME	EVIDENCE	LEAN SIGNIFICANCE
Scaled award portfolio	45 Centra and SuperValu sites awarded the ZEVI grant and aligned with the EZO affinity partnership.	Demonstrates repeatability across a distributed estate by using a simplified and standardised approach
Affinity-partner delivery	Single delivery model applied across the EZO-affiliated award portfolio.	Shows the value of a structured delivery partnership in coordinating grant, commercial, legal and operational requirements across multiple sites. Used extended Value Stream Mapping to understand the linkages between each party
Physical progress	20 sites have chargers installed, with 5 live and 15 awaiting energisation.	Moves the programme from planning into execution.
Lowest Cost	ZEVI grant funding, supported by EZO's delivery model, enabled a lowest cost route for retailers.	Removes a major retailer adoption barrier.
Operational controls	Maintenance, reporting and support obligations embedded in agreements.	Supports whole-life value rather than installation-only delivery.

Summary and Lessons Learned

- Treat energisation as a separate delivery milestone, not an automatic consequence of physical installation.
- Front-load grid and property due diligence before committing design resources and award assumptions.
- Use a standard core process but retain controlled options for landlord consent, battery support, site layout and alternative funding.
- Ensure status definitions are unambiguous: awarded, contracted, designed, installed, energised and operational.
- Build the benefits-realisation plan before rollout so usage, revenue, retailer value and customer outcomes can be measured from day one.
- Continue cross-functional governance across sustainability, legal, commercial, property, cost management, retailers and the charge-point operator while constantly evolving our system of improvement.

Next Steps

- Prioritise energisation of installed chargers awaiting connection and establish reliable target dates with the network provider.
- Capture actual utilisation and commercial data from live chargers and compare performance with the original assumptions.
- Target charger installation at the remaining EZO-affiliated grant-awarded sites, using lessons from completed installations to support efficient delivery and sequencing.
- Apply learning from the first cohort to designs, site selection, sequencing and retailer communications for the remaining programme.
- Maintain a single portfolio view of constraints, decisions, owners and forecast completion through 2027.
- Complete post-installation reviews and publish standard work for future EV-charging or distributed infrastructure projects.
- Capture feedback from our customers to ensure we can continuously improve our offer that will create a pull on our services.
- Deliver on our net zero target by 2040.

Musgrave