


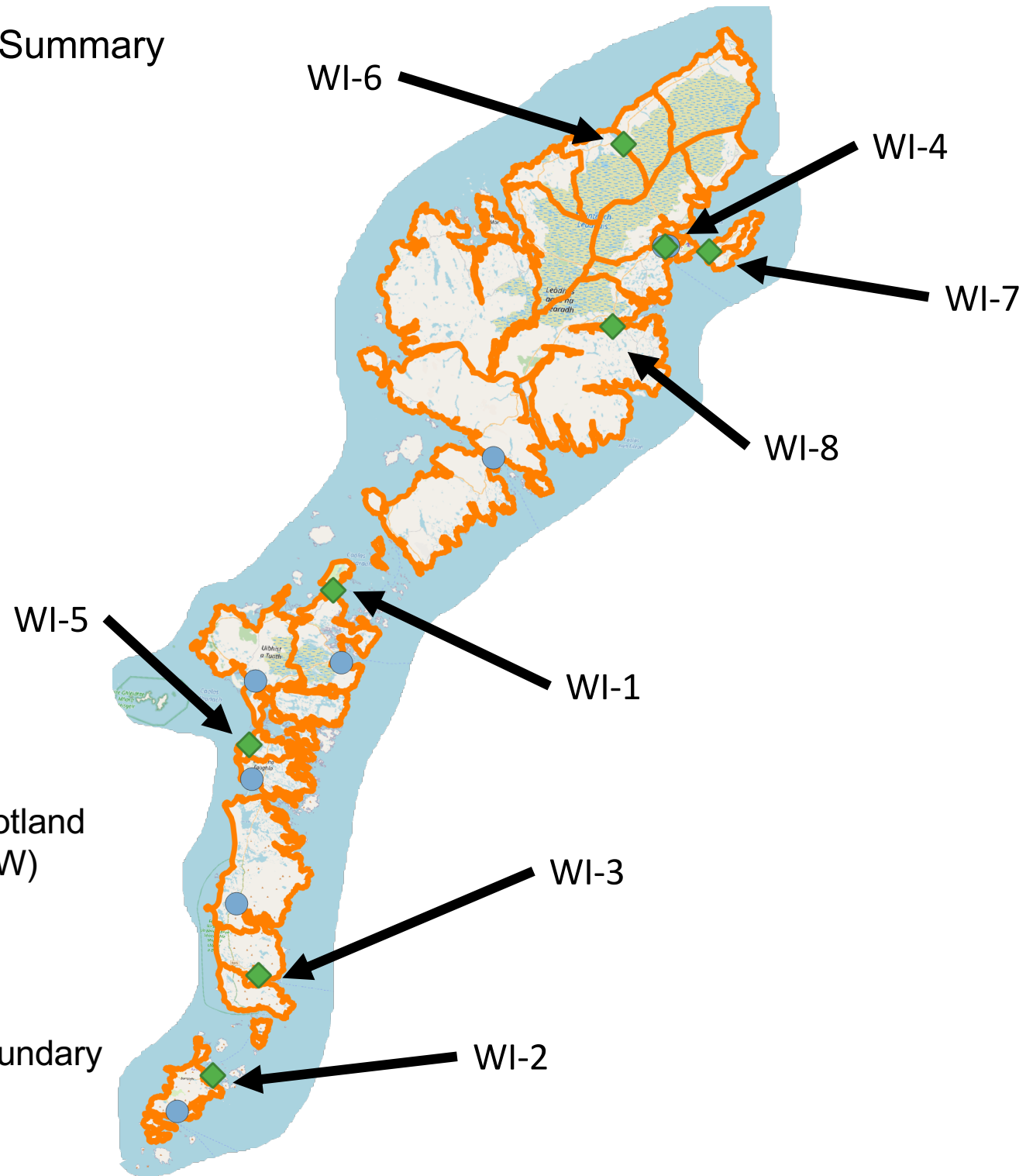


Western Isles Council Site Summary

Key

-  Existing ChargePlace Scotland 'Rapid' Charger (c. >50 kW)
-  Proposed FASTER site
-  Western Isles Council Boundary



Otternish Ferry Terminal

Site Identifier: WI-1

Not for Construction

Configuration	Unit	Charger Type	kW (output)	kW (input)	Quantity	Connectors			Bays	Total Bays
						CCS	CHAdeMO	Type 2		
Configuration	Unit 1	DC Rapid Charger	50	53	1	✓	✓		2	2
	Unit 2	N/A								

Summary of Assessment	Site Ownership	Evidence Category			Connection Rating (kVA)	LA Ranking (#/8)
	Council	Demand	Coverage	Local Authority		
			✓	✓	53	1

Summary Narrative

Through geospatial analysis of existing rapid charging infrastructure in the Western Isles Council, an area of poor coverage was identified in the Isle of Berneray. Western Isles council indicated that rapid charging facilities at, or near, the Berneray Ferry Terminal would be desirable as a key location on the main North/South route across Western Isles. This terminal is the main link between Uist and Harris (and Lewis) with approximately 76,000 passengers in 2019.

Recommendation

The Berneray Ferry Terminal was the preferred location for the charging infrastructure however SSEN estimated costly (c. £49k) distribution network upgrades would be required primarily due to lack of three-phase infrastructure on the island and a long service drop to that site. An alternative site located approximately 1km south of Berneray at Otternish Ferry Terminal was identified as an alternative site. The Otternish Ferry Terminal is an isolated location and while a good compromise for a rapid charge point location does not justify a complimentary AC destination charge point.

Site Location		High-Level Costing Estimate	
		EVSE Unit 1 Hardware + Warranty + Maintenance (10 years)	£24,616
		EVSE Unit 2 Hardware + Warranty + Maintenance (10 years)	N/A
		DNO/Connection Costs	£9,000
		Site electrical works (e.g. metering, LV cabinet)	£6,000
		Installation & commissioning	£120
		Accessories (signs/bay-marking/sim-card/etc.)	£2,335
		Contingency (5 %)	£2,104
		Total Costing	£44,175

Ardmhòr Ferry Terminal

Site Identifier: WI-2

[///tenses.pitch.streetcar](http://tenses.pitch.streetcar)
(approx.)

Not for Construction

Configuration	Unit	Charger Type	kW (output)	kW (input)	Quantity	Connectors			Bays	Total Bays
						CCS	CHAdeMO	Type 2		
Configuration	Unit 1	DC Rapid Charger	50	53	1	✓	✓		2	4
	Unit 2	Dual Outlet AC Charger	22	22	1			✓(2)	2	

Summary of Assessment	Site Ownership	Evidence Category			Connection Rating (kVA)	LA Ranking (#/8)
	Council	Demand	Coverage	Local Authority		
			✓		75	1

Summary Narrative	
	Geospatial analysis of the Western Isles was carried out on a per-island-group basis (i.e. Harris & Lewis, Uist & Benbecula and Barra). Analysis of Barra identified an area of poor coverage towards the north of the island with Ardmhòr Ferry Terminal identified as a suitable site for rapid EV charging.

Recommendation	
	The ferry at Ardmhòr links Barra to Eriskay allowing for onward travel through Uist. The ferry carries approximately 64,000 passengers annually. The ferry terminal has an on-site café, public toilets and parking. The rapid charge point is to be supplemented with a dual outlet ac charger.

Site Location		High-Level Costing Estimate	
		EVSE Unit 1 Hardware + Warranty + Maintenance (10 years)	£24,616
		EVSE Unit 2 Hardware + Warranty + Maintenance (10 years)	£3,600
		DNO/Connection Costs	£8,000
		Site electrical works (e.g. metering, LV cabinet)	£7,000
		Installation & commissioning	£240
		Accessories (signs/bay-marking/sim-card/etc.)	£4,670
		Contingency (5 %)	£2,406
		Total Costing	£50,532

Lochboisdale Tourist Information Car Park

Site Identifier: WI-3

Not for Construction

Configuration	Unit	Charger Type	kW (output)	kW (input)	Quantity	Connectors			Bays	Total Bays
						CCS	CHAdeMO	Type 2		
Configuration	Unit 1	DC Rapid Charger	50	53	1	✓	✓		2	2
	Unit 2	N/A								

Summary of Assessment	Site Ownership	Evidence Category			Connection Rating (kVA)	LA Ranking (#/8)
	Private	Demand	Coverage	Local Authority		
		✓		✓	53	1

Summary Narrative
Lochboisdale was identified by both PNDC and the local authority as being a good location for a rapid EV charge point. Demand analysis of the area indicated that many residents do not have access to home-charging. The town is a major ferry port with sailings to both Mallaig (29,000 passengers annually) and Oban (49,000). Lochboisdale represents an inter-regional hub between the three FASTER local authorities in Scotland.

Recommendation
Initially, the ferry terminal was considered for charging infrastructure however the site was discounted due to challenges with vehicle movements on the pier. The car park belonging to the local tourist information was suggested as an alternative by the local council. The site is adjacent to local restaurants and shops.

Site Location		High-Level Costing Estimate	
		EVSE Unit 1 Hardware + Warranty + Maintenance (10 years)	£24,616
		EVSE Unit 2 Hardware + Warranty + Maintenance (10 years)	N/A
DNO/Connection Costs		£19,650	
Site electrical works (e.g. metering, LV cabinet)		£6,000	
Installation & commissioning		£120	
Accessories (signs/bay-marking/sim-card/etc.)		£2,335	
Contingency (5 %)		£2,636	
Total Costing		£55,357	

South Beach Car Park Stornoway

Site Identifier: WI-4


Not for Construction

Configuration		Charger Type	kW (output)	kW (input)	Quantity	Connectors			Bays	Total Bays
						CCS	CHAdeMO	Type 2		
Configuration	Unit 1	DC Rapid Charger	50	53	1	✓	✓		2	4
	Unit 2	Dual Outlet AC Charger	22	22	1			✓(2)	2	

Summary of Assessment	Site Ownership	Evidence Category			Connection Rating (kVA)	LA Ranking (#/8)
	Council	Demand	Coverage	Local Authority		
		✓		✓	75	1

Summary Narrative
Demand based analysis identified Stornoway as an area where existing rapid EV charging will need to be supplemented to support future EV adoption. Many of the population will not have the option to home-charging (e.g. no driveways) and will therefore need to rely on public/private charging infrastructure to meet their requirements. Stornoway has links to Highland Council via the Ullapool Ferry – this is a popular Cal-mac service in terms of passenger numbers (300k) and vehicles (101k) carried. There is evidence from other local authorities that suggests ferry times may contribute to queuing at local EV charging infrastructure.

Recommendation
The site selected in South Car Park is a short walk to retail outlets, restaurants, and tourist amenities. The ferry terminal is adjacent to the site. It is proposed that a 50kW Rapid charger and a co-located fast charger are installed in the South Beach Car Park to supplement the existing dual outlet fast charger already at this location.

Site Location		High-Level Costing Estimate	
		EVSE Unit 1 Hardware + Warranty + Maintenance (10 years)	£24,616
		EVSE Unit 2 Hardware + Warranty + Maintenance (10 years)	£3,600
DNO/Connection Costs		£4,175	
Site electrical works (e.g. metering, LV cabinet)		£7,000	
Installation & commissioning		£240	
Accessories (signs/bay-marking/sim-card/etc.)		£4,670	
Contingency (5 %)		£2,215	
Total Costing		£46,516	

Balivanich - Stepping Stones

Site Identifier: WI-5

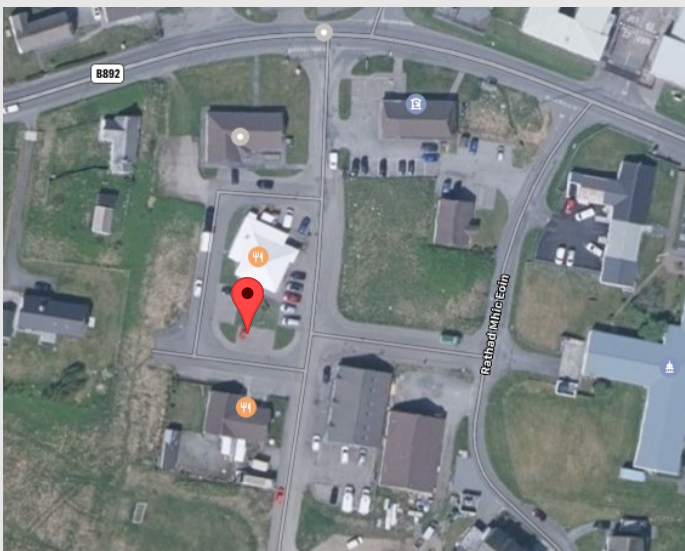

Not for Construction

Configuration	Unit	Charger Type	kW (output)	kW (input)	Quantity	Connectors			Bays	Total Bays
						CCS	CHAdeMO	Type 2		
Configuration	Unit 1	DC Rapid Charger	50	53	1	✓	✓		2	2
	Unit 2	N/A								

Summary of Assessment	Site Ownership	Evidence Category			Connection Rating (kVA)	LA Ranking (#/8)
	Private	Demand	Coverage	Local Authority		
		✓		✓	53	1

Summary Narrative
Demand analysis highlighted that the Balivanich community had a relatively large and local demand that could be served well by rapid EV charging infrastructure. Balivanich was identified as an area where many of the population will not have the option to home-charge (e.g. no driveways) and residents will therefore need to rely on public/private charging infrastructure to meet their requirements. The town also has an airport which links the island to Stornoway and Glasgow.

Recommendation
Two sites were investigated in the area. Initially, installing EV charging at the airport terminal was proposed, however, changes in personnel at the airport meant this site was no-longer an option. The local restaurant 'Stepping Stones' was suggested as a preferred location anyway by the local authority, primarily due to proximity to local facilities. This site is near to local amenities such as other restaurants and takeaways. A local banking branch is in close proximity as is the local supermarket, post office and hospital.

Site Location		High-Level Costing Estimate	
		EVSE Unit 1 Hardware + Warranty + Maintenance (10 years)	£24,616
		EVSE Unit 2 Hardware + Warranty + Maintenance (10 years)	N/A
DNO/Connection Costs		£4,480	
Site electrical works (e.g. metering, LV cabinet)		£6,000	
Installation & commissioning		£120	
Accessories (signs/bay-marking/sim-card/etc.)		£2,335	
Contingency (5 %)		£1,878	
Total Costing		£39,429	

Barvas and Brue Community Centre

Site Identifier: WI-6

Not for Construction

Configuration	Unit	Charger Type	kW (output)	kW (input)	Quantity	Connectors			Bays	Total Bays
						CCS	CHAdeMO	Type 2		
Configuration	Unit 1	DC Rapid Charger	50	53	1	✓	✓		2	2
	Unit 2	N/A								

Summary of Assessment	Site Ownership	Evidence Category			Connection Rating (kVA)	LA Ranking (#/8)
	Private	Demand	Coverage	Local Authority		
		✓	✓	✓	53	1

Summary Narrative
Geospatial analysis found several areas of poor coverage in north-west Lewis particularly near Port of Ness and Carloway – areas popular with tourists. The community of Barvas lies at a main road intersection between these locations and links to Stornoway. Barvas was itself identified as a demand driven site due to its relatively large population density (although home-charging does appear to be more feasible for the community). It was determined that a charger in the community of Barvas would be suitable for servicing both of these demands.

Recommendation
No appropriate public land was identified in the area, however, the Barvas and Brue Community Centre was considered as an appropriate alternative by PNDC and the local authority. The site has a large car park, local recreation facilities and a nearby school. The community centre also acts as the local post office. This site, along with WI-7 and WI-8 aims to help increase coverage across the Isle of Lewis.

Site Location		High-Level Costing Estimate	
		EVSE Unit 1 Hardware + Warranty + Maintenance (10 years)	£24,616
		EVSE Unit 2 Hardware + Warranty + Maintenance (10 years)	N/A
DNO/Connection Costs		£500	
Site electrical works (e.g. metering, LV cabinet)		£6,000	
Installation & commissioning		£120	
Accessories (signs/bay-marking/sim-card/etc.)		£2,335	
Contingency (5 %)		£1,679	
Total Costing		£35,250	

Buth a' Rubha

Site Identifier: WI-7

Not for Construction

Configuration	Unit	Charger Type	kW (output)	kW (input)	Quantity	Connectors			Bays	Total Bays
						CCS	CHAdeMO	Type 2		
Configuration	Unit 1	DC Rapid Charger	50	53	1	✓	✓		2	2
	Unit 2	N/A								

Summary of Assessment	Site Ownership	Evidence Category			Connection Rating (kVA)	LA Ranking (#/8)
	Private	Demand	Coverage	Local Authority		
		✓		✓	53	1

Summary Narrative
 The Knock peninsula was identified as a potential site for rapid EV charging through demand analysis carried out by PNDC. Western Isles council also indicated a preference that this area was covered by a rapid EV charge point to avoid residents having to use infrastructure in Stornoway. The peninsula is a short drive (<10 minute) to Stornoway airport and ferry terminal. There are several B&Bs in the local area.

Recommendation
 No appropriate public land was identified in the area. Western Isles Council recommended that the business 'Buth a' Rubha' located at the Old Knock School was approached as it is a popular meeting point in the region.

Site Location		High-Level Costing Estimate	
		EVSE Unit 1 Hardware + Warranty + Maintenance (10 years)	£24,616
		EVSE Unit 2 Hardware + Warranty + Maintenance (10 years)	N/A
DNO/Connection Costs		£8,000	
Site electrical works (e.g. metering, LV cabinet)		£6,000	
Installation & commissioning		£120	
Accessories (signs/bay-marking/sim-card/etc.)		£2,335	
Contingency (5 %)		£2,054	
Total Costing		£43,125	

Ravenspoint

Site Identifier: WI-8

Not for Construction



[///acrobats.estate.mastering](http://acrobats.estate.mastering)
(approx.)

Configuration	Unit	Charger Type	kW (output)	kW (input)	Quantity	Connectors			Bays	Total Bays
						CCS	CHAdeMO	Type 2		
Configuration	Unit 1	DC Rapid Charger	50	53	1	✓	✓		2	2
	Unit 2	N/A								

Summary of Assessment	Site Ownership	Evidence Category			Connection Rating (kVA)	LA Ranking (#/8)
	TBC (suspected it's council > council to confirm)	Demand	Coverage	Local Authority		
			✓	✓	53	1

Summary Narrative
Geospatial analysis revealed an area of poor coverage in the central Lewis area. More generally, Lewis & Harris has no rapid EV provision outside of Stornoway and Tarbert. While the main A859 road which runs as a spine road through Lewis & Harris is generally well covered geospatially, coverage along the some of the roads which connect to the A859 are more poorly served. Kershader, specifically near the Ravenspoint Centre, was identified by Western Isles council as a potential site for EV charging.

Recommendation
The Ravenspoint Centre was approached and receptive to the idea however the car park is small, often busy and may have conflicting usage patterns. The land adjacent to the site, beside the community fueling station, was suggested as an alternative. This site will be organized in a wide 'lay-by' style configuration. The site hosts a hostel, café and museum and is popular with walkers and cyclists.

Site Location		High-Level Costing Estimate	
		EVSE Unit 1 Hardware + Warranty + Maintenance (10 years)	£24,616
		EVSE Unit 2 Hardware + Warranty + Maintenance (10 years)	N/A
		DNO/Connection Costs	£7,200
		Site electrical works (e.g. metering, LV cabinet)	£6,000
		Installation & commissioning	£120
		Accessories (signs/bay-marking/sim-card/etc.)	£2,335
		Contingency (5 %)	£2,014
		Total Costing	£42,285