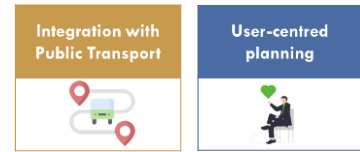


3.4 Cairngorms National Park E-bike share service (UK)

Public Private Partnership to provide e-bike sharing service in Cairngorms National Park (CNP) Scotland, implemented as part of the Horizon 2020 INCLUSION project. The service included 3 small scale e-bikes hubs in key gateways towns/transport interchanges for the national park, 16 electric-assist bicycles, 25 standard dock bicycles and 16 recharging docking points.



3.4.1 About Cairngorms National Park, Scotland

<u>Country</u>	<u>Region</u>	<u>Target Area</u>	<u>Population</u>	<u>Population density</u>	<u>Visitors/year</u>
UK (Scotland)	Scottish Highlands	2000 Km ²	18.000 inh.	11 inh./Km ²	1,92 M

The Cairngorms National Park is one of the most popular tourism destinations within the Scottish Highlands and comprises an area of 4.528 km².

It is a geographically isolated area with a seasonal economy and declining population. The number of inhabitants is around 18.000. The major centres of population are Aviemore, Ballater, Braemar, Grantown-on-Spey, Kingussie, Newtonmore, and Tomintoul.



Figure 55 – Cairngorms National Park panorama

Tourism is vital to Cairngorms National Park, accounting for 30% of the economy (GVA) and 43% of employment. The annual number of visitors is around 1,9 million for summer hiking and winter skiing.

The public transport infrastructure is composed by fixed bus and rail routes (both privately operated), but the system is insufficient for the population needs. The railways connect Aviemore (neighbouring town) to the biggest Scottish cities. The public transport system is complemented by a Demand Responsive Transport (operated by Community Transport and local authorities), carsharing schemes (run by HiTrans) and taxis.

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3.4.2 Description of the Mobility Solution

The pilot lab in the Cairngorms National Park (CNP), in Scotland, was implemented as part of the Horizon 2020 INCLUSION project, with the aim of improving accessibility to public transport for elder people, young adults, teenagers, and tourists in the CNP, with e-bikes and car clubs.

The main objective was to promote modal shift for the active travel and to create conditions for a safer environment for residents and visitors to travel within the National Park.

The e-bike hire project, in particular, was focused on implementing 3 small scale e-bikes hubs in key gateways towns/transport interchanges for the national park, such as Aviemore, Grantown on Spey and Aberlour



Figure 56 – e-bike on Cairngorms cycle lane

The project ended in early 2022 and the e-bikes were transferred to community organisations to continue being loaned out for trials. The Cairngorms National Park E-bike share service has been implemented to improve accessibility to public transport both for residents and tourists.

Target user groups and needs

The aim of the project was to provide a scheme on which the bikes could be loaned for people to trial them over a few hours, days, or weeks before they committed to purchasing their own e-bike. The target user groups were elderly people, persons of reduced mobility, young adults and teenagers, residents who suffer from fuel poverty due to high rural fuel costs, and tourists.

The scheme was launched in January 2020 and at the end of March the country went to lockdown. Due to the Covid lockdown, the bikes were used for long term loans, mainly by healthcare workers who used them to get to/from work. According to HITRANS, the project was adapted to make e-bikes available to key workers during lockdown, and then more widely to those wishing to try an e-bike once the restrictions were eased in the summer.

In Fort William, the 6 bikes were put out on long-term loan to key workers in the NHS, Care Workers and a teacher, from April to August.

In Aviemore and Grantown on Spey, the bikes were used by people wanting to try out an e-bike either for leisure (health, wellbeing, keeping up with family/friends on a ride) or to test whether an e-bike would be a feasible alternative to a car for utility trips.

Involved Bodies

The main bodies involved were the transport authority (HITRANS) and local bike shops within a public-private partnership agreement. HITRANS provided the financial support to purchase the e-bikes and the local bike shops host and operate the service.

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Mobility services provided/addressed

The pilot lab²¹ was based on a fully managed service where a single supplier provided:

- 16 electric-assist bicycles
- 25 standard dock bicycles
- 16 recharging docking points
- 2 or 3 stations
- Virtual stations (as many as needed)
- Complete Back Office and IT infrastructure (mobile app, website)
- Bike share operations and management

Ridership and other key metrics/results

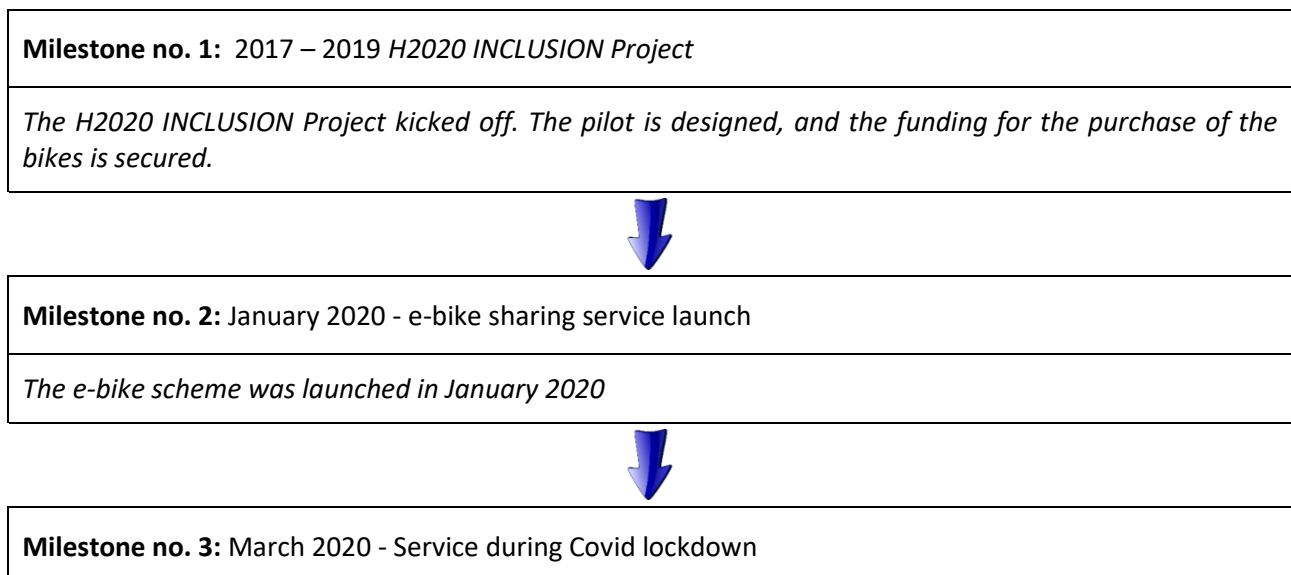
Over the project period there have been 382 users:

- 105 users in Aviemore
- 236 users in Grantown on Spey
- 41 users in Fort William

Supporting technologies

- Back Office and IT infrastructure (mobile app, website)
- Experimentation of Mobility as a Service

3.4.3 Timelines and Milestones



²¹ [Inclusion: Cairngorms National Park \(UK\) \(h2020-inclusion.eu\)](https://www.inclusion.eu)

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The scheme was adapted due to Covid lockdown, and during the lockdown period, the bikes were used for long term loans, mainly by healthcare workers who used them to get to/from work.



Milestone no. 4: 2022 - End of the project

The project ended in early 2022 and the e-bikes were transferred to community organisations in the Cairngorms and Lochaber, to continue being loaned out for trials.

3.4.4 Long-term assessment

Success, Durability and Expansion

The project ended in early 2022 but the e-Bikes were transferred to community organisations in the Cairngorms and Lochaber, to continue being loaned out for trials.

In addition to these supplies, given the excellent success of the tested electric bike sharing service, numerous shops have been opened that rent electric bikes of various types suitable for every tourist need.

Funding and Financing

The capital costs of the bikes were £38,558. The operating and maintenance costs were covered by the bike shops as the project partners.

For the public sector to set up and manage an e-bike sharing service in the rural CNP area would require on-going day to day operational input and additional premises or infrastructure to establish hubs for hosting the service, needing significant additional budgets and staffing.

The solution that was delivered for CNP was to establish a public-private-partnership with existing local bike shops in the main towns of the CNP area. Through this partnership the public-sector partner (HITRANS) provided the financial support to purchase the e-bikes and then partnered with local bike shops that own suitable premises and employ office/ admin/maintenance staff who can host and operate the service.

Loans and trials were free.

Why is it considered a good practice?

The solution was a first attempt in a remote rural area affected by huge seasonal touristic variation to provide bike sharing service through PPP, with the authority (HITRANS) providing the financial support to purchase the bikes, and the local shops engaged to operate and maintain the service. The project was intended to facilitate the use of an e-bike for 1st/last mile of journeys made by public transport, and to provide a sustainable means of transport for shorter journeys.

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3.4.5 Transferability considerations

CONTEXT PECULIARITIES	TRANSFERABILITY CONDITIONS
<p>Implementation of a free of charge and hassle free (as no registration was needed in advance) e-bike system to be used by residents and tourists for the last mile between the national park and the surrounding towns and PT interchanges.</p> <p>The bikes were loaned for people to trial them over a few hours, days or weeks before they committed to purchasing their own e-bike.</p>	<p>The mobility solution should be easily transferable to other areas for the last mile. The necessary conditions to implement this mobility solution are:</p> <ul style="list-style-type: none"> - Identify a possible sponsoring organisation to purchase the e-bikes and bikes - Engage some local bike shops (or similar businesses) for the operation and maintenance of the service. - Develop a dissemination campaign to promote the service to residents and tourists - Draft a tariff scheme which can take into account the different spending power of residents and visitors
DIFFICULTIES ENCOUNTERED/WEAKNESS	LESSONS LEARNT
<p>Covid (and lockdown) was the main barrier since it hindered the possibility to make promotion or dissemination campaign and the service remain closed for some months.</p> <p>After lockdown, the main barrier reported by HITRANS was the access to the bikes because they were kept at a local bike shop, in each of the 3 locations, so it could only be accessed during shop hours.</p> <p>The lack of a business plan prevented the long-term sustainability of the initiative.</p>	<p>Public-private partnership with local bike shops can be a successful and cost-effective mechanism for delivering e-bike sharing schemes in rural areas. Generating revenue from tourist use provides an opportunity to cross-subsidise discounted local hires but there may be conflicting demand between tourists and residents for e-bike hire during summer/ tourist high season. Setting aside a small number of e-bikes for local only use shall being considered.</p>

References for further details

Organization: HITRANS <https://hitrans.org.uk/>
 Person contact: Vikki Trelfer, Active Travel Officer
 Email: vikki.trelfer@hitrans.org.uk

Main data sources

- https://www.rupprecht-consult.eu/fileadmin/migratedRupprechtAssets/Documents/INC_D5.5_Full-evaluation-test-results.pdf
- SMARTA 2 documentation: https://ruralsharedmobility.eu/wp-content/uploads/2019/09/2_INCLUSION_Smarta-Workshop_Brussels_20190131_Polis_PC.pdf
- <https://cairngorms.co.uk/>

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