How to set up and run a community e-cycle scheme

A guide based on learnings from the E-Move project, September 2024

Contents

Introduction

Purpose of this handbook

This handbook is intended as a comprehensive reference guide for communities considering establishing their own community e-cycle scheme. Drawing from the experiences of the E-Move project (2021-2024), this manual will help you plan, launch, and manage an e-cycle or e-cargo bike loan program tailored to the needs of your community.

This handbook is a product of the lessons learned from E-Move and offers guidance to local authorities or community groups looking to implement an affordable and inclusive e-cycle loan scheme.

Background

The E-Move project was initiated by Sustrans Cymru and funded by the Welsh Government, aiming to provide free access to e-cycles and e-cargo cycles for individuals facing transport poverty or organisations aiming to reduce carbon emissions. Operating across five locations in Wales, the project offered these loans as a means to improve access to education, employment, green spaces, and other social benefits for those with limited mobility due to poor public transport, lack of personal vehicles, age, or health conditions.

Purpose of an e-cycle and e-cargo cycle loan scheme

The primary objective of an e-cycle loan scheme is to provide individuals and organisations, who might not otherwise have the opportunity, with access to e-cycles or e-cargo cycles. Here's why these cycles are an attractive, sustainable alternative to traditional transport:

Key benefits of e-cycles:

- **Accessibility:** E-cycles make cycling feasible for a broader range of individuals, including those with physical limitations. Learning from the E-Move project, for example, found that pedal assist, boosted confidence in women, providing a sense of security and control over their travel.

- **Convenience:** With electric assistance, commuting, especially over hilly terrain or long distances, becomes much easier.

- **Cost savings:** E-cycles can save money on fuel, parking, and maintenance, compared to owning a car.

- **Health benefits:** While less physically demanding than standard cycling, e-biking still provides cardiovascular benefits, improving muscle strength and lung capacity.

- **Environmental impact:** E-cycles produce zero emissions, making them a green alternative that helps to reduce air pollution and improve local environments for people and nature.

Developing the case for your scheme

Introduction

The purpose of this section is to provide support in building the case and presenting the purpose for your e-cycle loan scheme:

Understanding local needs

Begin by assessing the demand for low-cost transport options within your community. Is transport poverty a challenge? Could cycling improve access to education, jobs, or other opportunities?

Analyse current transport modes available to the community to identify gaps and how an e-cycle scheme could help provide an alternative.

Engage with your community to identify barriers to cycling and active travel. Could an e-cycle loan scheme mitigate these challenges? Use stakeholder mapping and community engagement (e.g., surveys and polls) to gather insights.

Stakeholder mapping

Identify key individuals and organisations that can support your project, such as local authorities, businesses, charities, schools, and elected officials. Keep a detailed, living record of these contacts and communication efforts. This spreadsheet should track key connections and opportunities for collaboration.
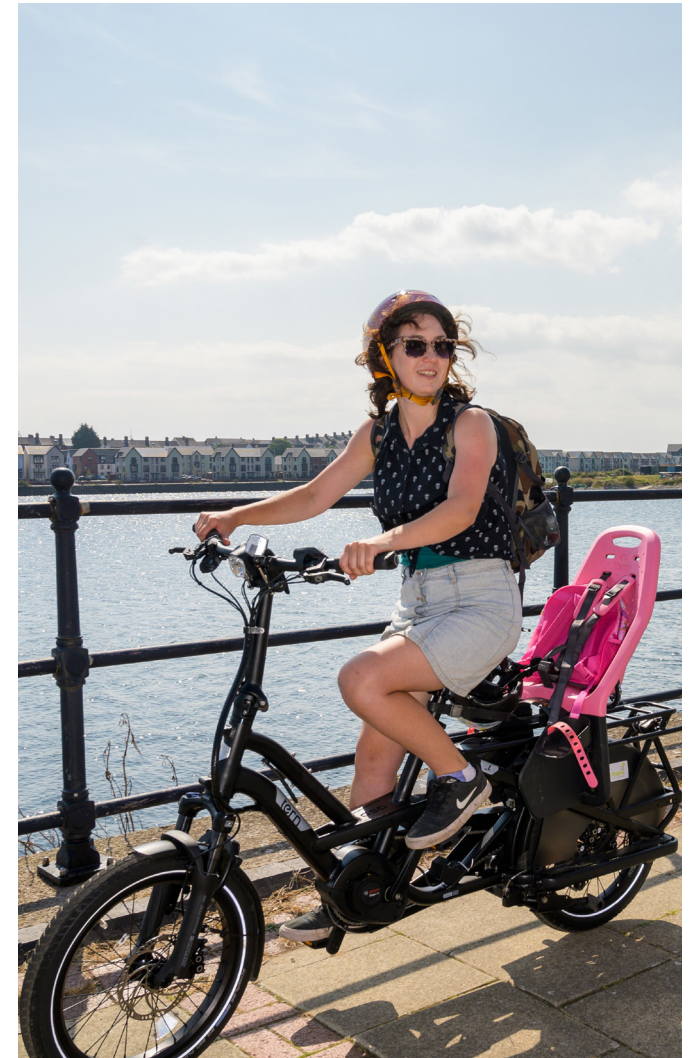
Speak to the community

Once you have mapped stakeholders, engage directly with the community. Residents are the experts on local needs, and their input is invaluable.

Community engagement methods:

- **In-person events:** Host community meetings at libraries, community centres, or high-traffic public spaces.

- **Virtual engagement:** Online sessions can increase participation, especially for those unable to attend in person.

- **E-cycle trials:** If available, offer demonstrations and trial rides to excite potential users.

Ensure inclusivity

To ensure your engagement activities represent all demographics, consider the following:

- **Incentives:** Offering compensation can increase participation, preventing financial limitations from excluding community members.

- **Flexible scheduling:** Run sessions at different times and days to accommodate various schedules, including shift workers and caregivers.

- **Targeted advertising:** Promote sessions through trusted community partners and advertise in local spaces to reach a wide audience.

Fully funded or revenue earning?

As a community service, will your scheme offer cycles for loan without a cost, or will a fee be charged for the duration of each hire?

The Sustrans E-Move project provided cost free tasters, to provide users an accessible experience of the benefits of e-cycles and e-cargo cycles. However, other e-cycle loan schemes have operated with a small charge to users for the hire of the bike.

Revenue generated through the day to day operation of the scheme, can provide a sustainable source of income for the continued support and longevity of a bike loan scheme.

Long-term sustainability planning

- **Maintenance and operations**: Discuss how the scheme will be maintained and operated over time, including who will be responsible for e-cycle upkeep and how funds will be allocated.

Formulate a clear vision and objectives

With the data you have gathered and your detailed understanding of the local community and how an e-cycle scheme would help improve local transport options, set yourself some clear targets for the scheme.

- **Vision statement**: Develop a clear vision statement that communicates the purpose and aspirations of the e-cycle scheme.

- **SMART objectives**: Establish specific, measurable, achievable, relevant, and time-bound (SMART) objectives for the project to guide development and evaluation.

Consider forming a working group or committee.

- **An advisory board**, should represent the diversity of the community, include stakeholders with expertise in active travel, policy, and social equity. This should include, gender equity and disability advocates, community representatives, public health experts, and environmental advisors. You could also consider finance experts to support with the on-going development of sustainable funding models, and data specialists to help shape and monitor the with effective on-going delivery of the scheme.

- Building relationships with established local community organisations was crucial for the success of the E-Move project. Collaborating with the Salvation Army and Red Cross in Rhyl allowed us to reach people who might have been difficult to access independently. This partnership fostered trust between Sustrans and the beneficiaries and helped prioritise suitable candidates for the programme.

Success stories

Using case studies to highlight successful e-cycle initiatives can demonstrate the effectiveness of similar programs and inspire confidence among stakeholders.

Gemma's story: How e-bikes have changed our family's travel

Barry resident Gemma Loveless had wanted to try out e-bikes after hearing about the Welsh Government-funded E-Move project at an event for the local council. A last-minute meeting with one of Sustrans Cymru's project officers led to Gemma and her family experiencing an e-bike for the first time. Here, she tells us how it's been going.

Combatting health inequalities in my community with active travel: Hannah's story

In this guest blog, we hear from Hannah about her experience of borrowing an e-cycle for free for a month to commute to work, attend hospital appointments, and to boost her fitness levels. Through our Welsh Government-funded E-Move project Hannah, from Swansea, is helping to lead by example for the communities in her area by encouraging active travel.

The bike-based business in Aberystwyth with big ambitions

Sally set up her business, The Chai Bike, after borrowing an e-cargo cycle through Sustrans' E-Move project, funded by Welsh Government. By selling homemade Masala chai from her e-cargo cycle, Sally's on a mission to connect with the Aberystwyth community.

Funding and bugeting for your e-cycle scheme

Introduction

Now you have developed the case, it's time to consider funding.

Finding and securing funding

The size and scope of your scheme will determine its funding needs. A small, volunteer-run program might only require a one-time grant, while a larger, more complex scheme could need multi-year funding.

Government programs and regional transport initiatives often align with goals of reducing emissions, improving health and promoting sustainable travel. Other than the Welsh Government funded e-Move project, there are a number of good examples of e-cycle projects currently operating in Wales.

Pembrokeshire's e-bike trial, funded by the Swansea Bay and South West Wales Metro with a £150,000 investment, is a recent regional example. The trial is designed to encourage residents to substitute short car trips with e-bike journeys, supporting local environmental goals and enhancing mobility access across four towns: Haverfordwest, Fishguard, Goodwick, and Tenby.

In Newport, South Wales, The Gap with support from Spokesafe have expanded the use of a secure cycle hub, funded through the Burns Commission, to provide a community e-Cargo bike hire service. In addition the Newport scheme made good use of combining

local council support with broader funding sources. In this case, Newport City Council's regeneration drive for the city centre, that made underused city centre buildings available for alternative uses at low cost.

Funding sources

Corporate sponsorship

Corporate sponsorships can play a useful role within your funding profile. Large corporations interested in corporate social responsibility or marketing opportunities, may offer sponsorships for projects aligned with community impact and social value.

Other local businesses that may be interested in sponsoring the e-cycle scheme for marketing or corporate social responsibility purposes.

Trusts and foundations

One avenue to explore when it comes to funding a cycle hub is Trusts and Foundations. Every Charitable Trust/Foundation is different, there is no 'one size fits all.' There are a variety of different types of charitable Trusts:

- **Family trusts:** Those started by family members and set up to disperse personal family donations. E.g., Sainsbury's Family Trust. https://www.sfct.org.uk

- **Company (corporate) trusts:** Corporate foundations donate money to charitable organisations from company profit. E.g., Santander Foundation and the Asda Foundation.
  Santander foundation: https://www.santanderfoundation.org.uk
  Asda foundation: https://www.asdafoundation.org

- **Private trusts:** Private trusts and foundations generate funding from private income, usually raised through investments. They then donate interest to charitable organisations in the form of a grant. The Wolfson Foundation: www.wolfson.org.uk

- **Community foundations:** There are 46 community foundations across the U.K. that connect donors with local groups and develop endowment pots to award grants over longer periods of time. In 2014/15, community foundations gave grants totalling £65 million.

- **Community foundation Wales:** https://communityfoundationwales.org.uk/grants-overview

Crowdfunding

Crowdfunding can be a useful tool for funding community prjects, allowing communities to directly support initiatives they value. Platforms like Spacehive and Crowdfunder UK provide tailored options for communities, and often offer matched funding.

- **Spacehive:** https://www.spacehive.com

- **Crowdfunder UK:** https://www.crowdfunder.co.uk

Lottery funding

Lotteries offer a range of grants, ranging from up to £10,000, to larger multi-year capital funding that could cover the cost of equipment and operational support.

- **National Lottery Community Fund:** https://www.tnlcommunityfund.org.uk – Offers funding to projects that improve health, wellbeing, and access within communities.

- **Awards for all:**
  https://www.tnlcommunityfund.org.uk/funding/programmes/national-lottery-awards-for-all-wales - A quick grant program with funding from £300 to £20,000 for community-driven projects.

- **People and Places**
  The Lottery Wales People and Places Programme offers grants for community projects that improve wellbeing, inclusivity, and sustainability. It has two levels:

  Medium grants: £10,001 to £100,000, supporting projects that create meaningful impact within communities.

  Larger grants: £100,001 to £500,000, for significant, long-term initiatives promoting cohesion and development.

  https://www.tnlcommunityfund.org.uk/funding/programmes/people-and-places-medium-and-large-grants

Useful resources:

- Funding Cymru: Explore available funding sources https://funding.cymru

What elements would a typical e-cycle scheme require funding for?

Cycles and accessories

Your most significant initial cost is going to be the purchase of your e-cycle fleet and accessories. This is likely to include costly high quality insurance compliant locks and

potentially even GPS tracking devices. Allow flexibility in your budget for unexpected needs that you've not previously forecast. Having a contingency within your budget for unforeseen events would be good practice. For example, in the E-Move project, high demand for child-carrying cycles prompted additional purchases of child seats and wet-weather gear.

Ongoing costs

Some of the recurring costs to consider include:

- **Storage:** Where will the cycles be kept?

- **Insurance:** What level of coverage will you need for theft, damage, or accidents?

- **Marketing and communications:** How will people hear about the opportunity of your scheme?

- **Maintenance:** E-cycles will require ad hoc maintenance as well as software updates.

- **Booking systems:** An efficient system to manage loan requests and track usage.

- **Stolen or missing equipment:** Plan for contingencies like lost accessories or stolen cycles.

- **Charging:** Consider where charging will take place - whether through a central hub with dedicated charging stations, in public facilities, or within beneficiaries' homes.

Revenue

If the scheme proposes to fund staff for the management and running of the project, revenue funding will be required. When calculating revenue costs, factor in office,

computers and any other peripheral requirements needed by staff to undertake their day to day job.

Key roles and skills

Determine what the key roles and skills needed to successfully run your project will be. Will this be volunteers or paid staff, or a combination of the two. Each choice has implications for your project's sustainability.

- **Typical tasks:** Routine tasks include:

  - Training

  - Basic cleaning and maintenance of e-cycles.

  - Managing storage and inventory.

  - Handling booking systems and user communication.

  - Advertising and social media management.

  - Coordinating user inductions and keeping up with e-cycle servicing and insurance.

  - Monitoring project finances and reporting as required.

Storage and facilities

Secure storage for e-cycles is essential. You will also need a safe area to conduct inductions and assess users' cycling proficiency. Other physical assets include:

- E-cycles and accessories.

- Storage units.

- Low-traffic or safe areas for inductions.

Gender-responsive budgeting

When planning your budget, use a **gender-responsive approach**. This ensures your e-cycle scheme equitably distributes resources and benefits all genders. A gender-responsive budget can help address inequalities and foster inclusivity within a community scheme.

Gender budgeting in the context of E-Move

For the E-Move project, gender budgeting meant examining how resources could be allocated to make e-cycles accessible to those who might otherwise face gender-based barriers. Traditionally, women may have different mobility needs, such as trip-chaining (multiple short trips) for work, family, or caregiving duties, and tend to face more transport insecurity. Through a gender budgeting approach, E-Move considered these factors, allocating resources towards diverse,   sometimes lighter e-cycle models and providing supportive measures like child seats and community training.

Another important piece of learning was that the visibility of women in cycling is influenced by perceived and actual safety in public spaces. As a result, E-Move allocated resources to provide led-rides and buddy systems, increasing safety and confidence, particularly for women who felt vulnerable cycling alone.

Gender-responsive budgeting can be adapted to address inequalities beyond gender, such as those related to race, disability, age, and socioeconomic status.

For example, Gender-responsive budgeting frameworks can integrate considerations for individuals with disabilities by allocating resources for accessible infrastructure or programs that   address economic barriers faced by low-income groups.

For further information, refer to the guide on gender-responsive budgeting from the Women's Budget Group and Oxfam https://policy-practice.oxfam.org/resources/rough-guide-to-gender-responsive-budgeting-620429/

Implementing an e-cycle scheme

Introduction

Implementing an e-cycle loan scheme requires careful planning and execution to ensure smooth operation, from the initial stages of setting up the scheme to ongoing management. This section outlines the practical steps involved, including selecting an operational base, organising logistics, developing communication strategies, and creating a process for booking and managing the hire of e-cycles.

Establishing a base of operations

The base of operations may serve as the hub for storing, maintaining, and distributing e-cycles, as well as for staff working on the scheme. For E-Move, locations varied from community centres to self-storage units. Evaluate the options in your area, keeping costs in mind.

Location considerations

- **Accessibility:** The location should be easily accessible to your target audience, ideally in or near busy areas such as community centres and served by good public transport links.

- **Visibility:** Choosing a location that has high visibility to promote awareness and encourage sign-ups, may be useful. Consider collaborating with local businesses or organisations to secure a prominent location.

- **Safety:** Users should feel safe accessing a storage hub, especially during early morning or evening when visibility is lower and foot fall in the immediate area may be minimal.

- **Proximity to cycle routes:** It's beneficial if the scheme operates close to key cycling infrastructure, such as national cycle routes, to encourage easy access and safe use of the e-cycles.

- **Infrastructure development:** Using feedback from users, are there opportunities to work with your local authority to identify local network improvement proposals to enhance the local infrastructure?

Choosing a fleet of cycles and accessories

When selecting e-cycles, consider different needs and physical limitations. For example:

- **Step-through cycles:** Ideal for users with mobility issues or those wearing restrictive clothing for religious reasons.

- **Light weight cycles:** Support a wider range of riders in handling, parking, and storing the cycles with ease.

- **Folding cycles:** Useful for those with limited storage space.

- **Cargo cycles:** Cycles with loading capacity are excellent for transporting children or goods.

- **Adaptive cycles:** Trikes and other adaptive cycles increase inclusivity for individuals with disabilities.

Cost and quality

High-quality, budget-friendly e-cycles should be included, which will offer durability and high safety standards. However, consideration should be given to the cost of individual cycles. Include lower budget alternatives to make sure you are not reinforcing notions that e-cycles are unaffordable and out of reach for many.

Accessories

In addition to e-cycles, consider essential accessories that will make cycling practical for your users:

- **Child seats**

- **Bike racks**

- **Mudguards** for protection from weather.

- **Lights** for safety, especially if they aren't built into the e-cycle.

- **Panniers** or **cargo racks** for carrying items.

- **Locks:** Ensure all cycles come with high-security locks (Sold Secure Gold Rated) to prevent theft.

- **Tool kits** for puncture repairs and basic maintenance.

Staffing and volunteer support

Running the day-to-day operations of an e-cycle scheme will require staff and, in some cases, volunteers.

- **Staffing needs:** Identify roles for managing the booking process, overseeing bike collection and return, performing bike maintenance, and handling customer queries.

- **Volunteer roles:** Consider involving local volunteers to support events, assist with maintenance, or lead guided bike rides for new users.

Investing in staff training, particularly in e-cycle maintenance and customer service, will improve user satisfaction and the long-term success of the scheme.

Bike storage

- **Secure storage facilities:** The e-cycles will require safe and secure storage. A locked, weatherproof facility with sufficient space to store all the cycles is essential. Ensure it has enough room for easy retrieval and return of cycles.

- **Charging points:** E-cycles will need to be regularly charged, so the storage facility must have adequate power outlets for charging multiple cycles at once.

- **Maintenance area:** Consider setting aside space for basic repairs, cleaning, and servicing of the cycles.

- **Scalability:** Consider flexibility in your layout, with infrastructure that could be expanded with relative ease. For example, the use of modular elements, that would allow for a changing fleet, cargo bikes, or include various e-cycle types as community needs evolve.

Security

- **CCTV and monitoring:** Security measures such as CCTV cameras, alarm systems, and reinforced locks should be considered to prevent theft or damage to the e-cycles when not in use.

- **Insurance:** Ensure that you have appropriate levels of insurance covering theft, damage, and third-party liability for the stored e-cycles.

Communications and marketing

Building awareness and excitement around your e-cycle scheme is crucial to its success. A well-thought-out communications and marketing strategy will help generate interest, encourage participation, and sustain long-term engagement.

Target audience

Identify your target users and tailor your communications accordingly. Typically these will include:

- **Parents and families:** Versatility, enabling school runs, daily short journeys and shopping, without the need for a car.

- **Local businesses:** Efficient deliveries, errands, and employee commuting. Reduced need for parking, and the positive brand image associated with supporting sustainable, community-focused transport options.

- **Commuters:** Promote the scheme as a solution for reducing car dependency and improving health.

- **Low-income residents:** Position the scheme as a means of reducing transport poverty and enhancing access to work and services.

Marketing channels

- **Social media:** Use platforms like Facebook, Instagram, and Twitter to share updates, success stories, and e-cycle trial events. Create engaging content, including user testimonials, videos, and infographics to showcase the benefits of the scheme.

- **Local press and media:** Engage with local newspapers, radio stations, and news websites to raise awareness of the scheme and its community benefits.

- **Flyers and posters:** Distribute promotional materials at local hubs, such as libraries, schools, community centres, and cafes. Make sure these materials clearly explain the benefits and how to sign up.

- **Email newsletters:** Create an email list and regularly send updates, promoting new initiatives, e-cycle availability, and success stories from participants.

- **Website and app:** Build a user-friendly website or app for the scheme, where users can access information, book e-cycles, and view the benefits of using an e-cycle.

- **Word of mouth:** Encourage users of the scheme to share their positive experiences with friends, family.

Launch event

Plan a public launch event to introduce the scheme to the community. Include:

- **E-cycle demonstrations:** Provide e-cycle trials and show how to use the cycles.

- **Q and A sessions:** Allow potential users to ask questions and learn more about the scheme.

- **Partnership announcements:** Involve local businesses and stakeholders in the launch to boost credibility.

Regular events following the launch, featuring happy users can provide a useful promotional tool. These events allow current users to share their positive experiences directly, helping others understand the scheme's benefits from a relatable perspective.

Illegal e-Bikes – addressing negative perceptions of e-cycles

Illegal e-bikes, often modified to exceed legal speed limits or lacking proper safety features, can contribute to accidents and create a perception that all e-bikes are unsafe or used irresponsibly. This image can be a barrier to acceptance.

To counter this, ensure your scheme highlights compliance with UK regulations, particularly around speed limits and motor assistance cut-offs. Clearly communicate that your e-bikes are certified, tested, and fully meet safety standards.

There is a serious safety issues associated with uncertified batteries, which can pose fire hazards. Illegal e-bikes, particularly those with batteries bought from unregulated sources or modified to exceed their original specifications, have seen reports of overheating and catching fire.

Emphasize that your e-bike scheme only uses certified, safety-tested batteries that meet all UK and EU safety standards.

Offering community workshops or informational sessions can also help educate users about safe riding practices and the differences between legal and illegal e-bikes.

Booking and managing the hire process

Efficient and user-friendly systems for booking, managing, and tracking e-cycle loans are crucial to the scheme's success.

This section outlines the process, from booking an e-cycle to returning it after use.

E-cycle reservation system

For the E-Move project, a mix of direct public referrals and organisational referrals was used. Choose the most appropriate system for your community.

- **Manual reservation:** A manual booking process may be more accessible for those less comfortable with online systems. Staff at the operational base can assist users in booking cycles in person or by phone.

- **Online booking platform:** A digital platform may provide a convenient and efficient method for users to book e-cycles. A platform could allow users to:

    o View available cycles in real time

    o Select a bike for their preferred time slot

    o Sign up for a loan and complete necessary forms digitally

    o Set reminders and notifications for collection and return times

E-cycle collection process

- **Check-in procedure:** Upon arrival, the user should check in with a member of staff or through an app to collect the bike. Staff should confirm their identity, inspect the bike, and review key safety procedures.

- **User responsibilities:** The user should be responsible for maintaining the bike's safety, as well as cycling in a responsible manner, during their loan (e.g., ensuring brakes are working). Clarify this responsibility during inductions and in the loan agreement.

- **Helmet and accessories:** Provide users with helmets and any other accessories such as locks and lights as part of their loan package. Ensure they know how to use these items safely.

Loan agreement and user registration

Before a user can take an e-cycle on loan, they should:

- **Complete a user registration form:** Collect details such as name, contact information, and identification.

- **Sign a loan agreement:** This should outline the terms of use, including the duration of the loan, user responsibilities, and any potential penalties for late return or damage.

Cycle training and support

For first-time users, an induction session should be mandatory, including a test ride, safety training, and guidance on how to properly use and care for the e-cycle.
This should include some basic maintenance such as fixing a puncture and changing a tyre.

- **Cycle training:** Users unable to demonstrate competent e-cycle use should be referred to cycle training opportunities. Training to National Standard Cycle Training Level Two or equivalent (e.g., Bikeability Level Two) is recommended. Local authorities often provide these services; find your nearest sessions via the Bikeability website.

- **Buddy-rides / led-rides:** For confident cyclists lacking self-assurance, consider Buddy- or Led-Rides instead of formal training. Buddy-Rides involve a joint ride between the user and a staff member or volunteer. Led-Rides are organised rides for multiple users, coordinated by trained staff. Ensure ride leaders have received formal training from recognised organisations like British Cycling or Cycling UK to mitigate associated risks.

- **Breeze led rides:** Women often face unique barriers to cycling, such as concerns about safety or feeling self-conscious riding alone. Breeze rides address these by offering group support, guidance, and encouragement, which can build both skill and confidence. As led rides, they're conducted by trained female ride leaders who understand these concerns and can tailor the experience to meet each participant's comfort level.

- **How to operate an e-cycle:** As well as cycling competence, users should be provided clear instruction as to how the e-cycle works. This would include how to switch the bike on, operate the e-console, the different settings and charging the battery.

Next steps guide

To enhance the impact of each loan, provide users with a "Next steps guide," which includes:

- Information on Cycle to Work schemes and application processes

- Cycle insurance details

- Recommendations for secure locks

- Advice on e-cycle conversions and certified workshops

Monitoring usage and feedback

Tracking the use of e-cycles and gathering user feedback will help you assess the success of the scheme and form the basis of scheme evaluation. This data can be a powerful tool for helping to bid for funding for continuing or expanding the scheme. Ensure all participants are made aware of any tracking before the loan to ensure that any information gathered is GDPR compliant.

- **User demographics:** Capture user information such as gender, age, ethnicity, income level, employment status, and family or caregiving responsibilities. This demographic breakdown helps to ensure that the scheme is reaching diverse groups, especially underrepresented populations.

- **Mileage and journey purpose:** Encourage users to log their trips, as well as purpose, for example, commuting, school rum, shopping. Distance can be easily captured by the user, using the bike's dashboard, which tracks mileage. Alternatively, GPS trackers can be installed on cycles to gather data on usage patterns.

  This can help to help to understand differences in journey type and length and behaviours such as trip chaining, that may be more typical of a male or female participant.

- **Bike model preferences:** Record which types of e-cycles are preferred by different groups, noting features like weight, foldability, and cargo capacity. Feedback on whether specific models (e.g., lighter or cargo e-cycles) meet diverse user needs will support evidence of the benefits of offering a range of options.

- **Perceived safety and comfort:** Gather feedback on how comfortable and safe users feel while using e-cycles, with particular attention to factors like traffic navigation and cycle storage. This can help highlight gendered differences in perceived safety and security that are often heightened for women.

- **Barriers to usage:** Document any challenges users face, including lack of secure storage, maintenance difficulties, or cultural perceptions that deter specific groups from participating. This feedback can reveal structural barriers and inform strategies to make schemes more inclusive.

- **Physical and mental wellbeing impacts:** Capture self-reported data on any changes in users' physical health, mental wellbeing, or overall confidence, as these outcomes may differ across gender lines. For instance, the E-Move project noted that women experienced increased confidence and a sense of safety with e-cycles, especially due to added acceleration.

- **Qualitative feedback on social and economic benefits:** Collect qualitative feedback through interviews or open-ended survey questions about how the scheme has impacted participants' social connections, employment, and access to services. Gender budgeting insights can be particularly valuable in assessing how improved access to transport supports work-life balance and caregiving roles, which may disproportionately affect women.

- **Loan process:** After each loan period, request feedback from users on their experience, including ease of booking, bike performance, and any areas for improvement.

- **Regular check-ins:** Set up periodic check-ins (mid-loan and post-loan) to track how users are benefiting from the e-cycle and address any issues they may face.

- **Case studies:** Case studies offer compelling evidence for the effectiveness and impact of an e-cycle scheme. Capturing detailed, real-life experiences that illustrate the program's benefits.

E-cycle return and inspection

- **Return process:** When returning the bike, the user should check in with staff to ensure the bike is handed over properly. Staff should:

    o Conduct an M-Check (mechanical safety check) to assess the bike's condition.

    o Record the mileage and battery status.

    o Inspect for any damage or wear and tear.

- **Post-loan survey:** Collect any additional feedback through a post-loan survey to continuously improve the scheme.

Maintenance schedule

Establishing strong ties with local cycle workshops is essential. Not all mechanics are trained for e-cycle repairs. E-cycles should be serviced every six months or every 500 miles. Services must include:

- Safety checks

- Preventative maintenance

- Brake and gear adjustments

- Firmware updates as per insurance requirements

Some workshops may offer service plans that can be more economical and tailored to your specific needs.

Maintenance and preparation for next user

Once the e-cycle is returned:

- **Servicing and repairs:** Schedule regular maintenance checks for each e-cycle to keep them in optimal condition. Address any minor repairs or cleaning needs between hires.

- **Battery charging:** Ensure the battery is charged and ready for the next user.

- **Bike cleaning:** Clean the bike and ensure it is presentable and well maintained for the next user.

Other resources for beneficiaries

Maximise user benefits by providing information on local cycling routes that match their abilities and journey purposes. Recommended resources include:

1. **National Cycle Network**: A UK-wide network of routes for cycling and exploring outdoors. Find more at https://www.sustrans.org.uk/national-cycle-network/map/

2. **Active Travel Network Maps (Wales)**: Maps produced by local authorities, available at https://datamap.gov.wales/maps/active-travel-network-maps

3. **Cycling UK Journey Planner**: Create preferred routes using the tool available at https://www.cyclinguk.org/journey-planner

4. **Transport for Wales:** Information on cycle storage at train stations https://tfw.wales/ways-to-travel/cycling/bicycle-parking

Security and insurance

Introduction

E-cycles are valuable, making them targets for theft. Addressing security concerns upfront is crucial.

Storage security

- **At home:** You may require that users store cycles indoors or in secure out-houses, as required by insurers. This may be an issue, particularly when working with users in areas of multiple deprivation who may not have easy access to secure storage.

- **Identify community storage opportunities:** There may be an opportunity to work with the local authority and housing associations, to identify locations for community bike stores such as cycle hangers. An example of this would be the E-Move scheme currently running in Abergavenny. Monmouthshire County Council have arranged secure cycle storage in a town centre location which allows for easy access for both the officer running the scheme, as well as participants who are collecting and returning cycles.

- **During loan:** Users must lock cycles to a secure structure, through the frame. Explain locking procedures clearly to avoid invalidating insurance claims. Locks provided should be of a suitably high standard and should be in compliance with the requirements set by the insurance company.

Insurance options

- Work with a specialist insurer to cover your fleet. Companies such as **Yellow Jersey,** promoted by Cycling UK, provide good options.

- Register the cycles with **Bike Register,** a national database used by police to trace stolen cycles. Stickers with unique IDs act as theft deterrents.

- Consider bike trackers for added security and data collection on bike usage.

Dealing with theft or non-returned cycles

In rare cases, cycles may not be returned. In E-Move's case, police assistance helped recover some cycles. You may consider taking deposits from users as an additional security measure.

Public liability

Ensure your organisation's public liability insurance covers the safety of the users and the bike during the loan period. The user should be responsible for maintaining the bike's safety, as well as cycling in a responsible manner, during their loan (e.g., ensuring brakes are working). Clarify this responsibility during inductions and in the loan agreement.

Monitoring, evaluation, and learning

Introduction

Capturing the benefits and impact of your loan scheme will help you to develop and adapt your scheme to better meet the needs of your community. It will also provide invaluable data to support future schemes, enable on-going funding opportunities and contribute to the national understanding of how to enable modal shift towards more sustainable transport choices.

The purpose of this chapter is to help you consider what methods of monitoring and evaluation would best capture the impact of your scheme.

Sustrans E-Move project

For E-Move, we collected various data types to evaluate changes in cycling habits. All loanees completed surveys before and after their loan, and select users participated in interviews. Additionally, we tracked routes and mileage with GPS devices.

Qualitative data

- **Surveys:** Before and after surveys helped gauge changes in travel behaviour and perceptions.

- **Interviews:** Conducting interviews allowed deeper insights into user experiences.

Quantitative data

- **GPS trackers:** Installed on cycles to monitor routes and mileage, though they proved less reliable than expected.

- **Mileage logs:** E-cycles' dashboards recorded start and end mileage, serving as a reliable alternative.

Data from the 2021 census was cross-referenced with the demographics of E-Move beneficiaries to assess the project's representativeness of the local population. The project was adjusted based on the insights gained, with check-in points incorporated into the lifecycle to address emerging issues.

Evaluation

An evaluation will allow you to use the data you have collected to assess whether the objectives you set for the scheme have been met. An evaluation is also an opportunity to consider the wider benefits of the scheme.

As part of the evaluation of the E-Move project, Sustrans was able to gather user feedback, by working directly with organisations supporting refugees and low-income households, which showed that the scheme reached traditionally underrepresented groups.The project's range of e-cycle models, including lightweight bikes and folding options, addressed specific needs of women, parents, and individuals with limited storage, which encouraged a more inclusive uptake.

Additionally, participants, particularly women, reported feeling safer on e-cycles, which allowed them to keep pace with traffic and select safer routes, improving their overall confidence and willingness to participate.

By incorporating learning of this nature, an evaluation provides evidence-based recommendations, helping shape future projects. Findings should be shared widely to support other communities in developing or running similar schemes, helping to build on successful approaches and avoid repeated challenges.

Now deliver your project

Launching an e-cycle loan scheme presents an exciting opportunity to promote sustainable, low-cost transport within your community, while addressing key issues such as transport poverty, access to employment, and environmental sustainability.
By carefully planning each stage, from understanding local needs and securing funding to implementing a seamless booking system and engaging your community, you can create a scheme that delivers real, lasting benefits.

Now, with a clear vision, a robust plan, and strong stakeholder support, it's time to bring your project to life. By prioritising inclusivity, ensuring operational efficiency, and maintaining strong communications, you will deliver a successful e-cycle scheme that enhances mobility, reduces carbon emissions, and fosters a healthier, more connected community. Your efforts will not only contribute to improving individual lives but also to building a more sustainable future for all.

Appendices

Case studies

Rhyl community bakery
https://www.sustrans.org.uk/our-blog/news/rhyl-community-bakery-benefits-from-e-move-project/

Ceri's journey
https://www.sustrans.org.uk/our-blog/personal-stories/ceris-journey-to-cost-savings-confidence-and-wellbeing-with-e-bikes/

Hannah's story
https://www.sustrans.org.uk/our-blog/personal-stories/combatting-health-inequalities-in-my-community-with-active-travel-hannah-s-story/

Gemma's story
https://www.sustrans.org.uk/our-blog/news/gemmas-story-how-e-bikes-have-changed-our-family-s-travel/

Mark's story
https://www.sustrans.org.uk/our-blog/personal-stories/using-an-e-bike-gave-me-the-fitness-and-confidence-boost-i-needed-marks-story/

Tim's story
https://www.sustrans.org.uk/our-blog/news/switching-to-sustainable-travel-in-rural-wales-tims-story/

Community agriculture

https://www.sustrans.org.uk/our-blog/personal-stories/how-a-community-agriculture-project-benefitted-from-an-e-cycle-project/

Aberystwyth business

https://www.sustrans.org.uk/our-blog/personal-stories/how-sustrans-e-bike-project-helped-an-aberystwyth-resident-start-a-business-exercise-and-volunteer/

Commuting by example

https://www.sustrans.org.uk/our-blog/news/commuting-by-example-head-teacher-in-north-wales-replaces-car-with-e-bike/

Mark Drakeford healthy travel

https://www.sustrans.org.uk/our-blog/news/mark-drakeford-opts-to-swap-the-car-for-an-e-bike-with-help-from-sustrans/

Sally's Chai Bike

https://www.sustrans.org.uk/our-blog/personal-stories/the-bike-based-business-in-aberystwyth-with-big-ambitions/

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