



Spotlight

Cardboard Composting Initiative Skye

March 2025



The goal of the cardboard composting initiative was to address cardboard and food waste management challenges around Broadford and Strath.

Initially, a large-scale, centralised composting system was proposed but the geographic spread of the community, high transportation costs, and smaller waste volumes made this solution impractical. As a result, smaller cardboard shredders were distributed to local businesses and organisations. This solution led to the creation of micro circular systems tailored to the needs of the community, enabling localised waste management and resource reuse.

What we did

Local cardboard waste was collected, shredded and repurposed in the following ways:

Local businesses & organisations

- **Cardboard shredding for packaging** - local businesses and artisans shred cardboard to use as a sustainable alternative to plastic or polystyrene packing materials, contributing to waste reduction and strengthening their own eco-friendly credentials.
- **Saving on space -and waste disposal** - shredding also reduces cardboard volume, allowing businesses to save space in waste bins and reduce waste collection frequency. This results in cost savings on waste disposal and lowers carbon emissions from transportation.



Local Growing Hubs & Crofters

Excess shredded cardboard was also shared with local growing hubs and crofts, creating a closed-loop system where waste is converted into a valuable resource:

- **Composting** - shredded cardboard serves as a carbon-rich material for food waste composting, balancing out nitrogen-heavy food waste and optimizing the decomposition process.
- **Soil improvement** - shredded cardboard used as mulch in raised beds, aiding soil moisture retention, suppressing weeds, and enhancing soil structure.

Participating businesses and organisations

- **Partnerships with local businesses** - Local businesses in Broadford are actively involved in the initiative, reusing shredded cardboard for packaging or passing it to the BSCC's Growers Hub.
- **Growers Hub at Broadford & Strath Community Company** - The Growers Hub incorporates shredded cardboard into their composting systems, helping enrich the soil for sustainable agriculture.
- **Dun Brewing** - A local craft brewery, uses shredded cardboard for eco-friendly packaging, reducing reliance on plastics and enhancing their sustainability credentials.
- **Cosaig Growers** - Excess shredded cardboard is supplied to Cosaig Growers, supporting local food sovereignty and fostering a community-driven circular economy.
- **Energy Use** – Turning Cardboard into Fire Bricks: Coffee Bothy, a local café, compresses its shredded cardboard into fire bricks used for wood-burning stoves, offering a renewable heating alternative and reducing the café's waste output.

Impact

6,000 kg cardboard diverted from landfill per year (from 5 businesses).

6.6 metric tons of CO₂ saved from cardboard recycling and composting alone.

39 metric tons of CO₂ saved by avoiding plastic packaging.



Learning

We have found this to be a great solution for local waste in rural areas:

- **Localised systems adapted to community needs** - This decentralised model is perfectly suited to rural areas with dispersed communities. By providing shredders directly to businesses and growers, transportation costs and logistical challenges are minimised.
- **Low-cost, high-impact solution** - Smaller shredders are cost-effective and easy to maintain, making them accessible for small businesses and community groups. This approach reduces capital and operational costs, ensuring long-term sustainability.
- **Community engagement and ownership** - This initiative empowers local businesses and growers to take charge of their own waste management, fostering collaboration, and strengthening the local circular economy.
- **Scalable model** - This miniature circular system is flexible and can be expanded to other rural communities, or further developed within the West Highlands as demand grows.

Future potential

This decentralised waste management model demonstrates immense potential in rural settings. Its success suggests a viable path for strengthening community resilience and promoting environmental stewardship. By collaborating with educational institutions we can promote environmental awareness and community-led sustainability.

There is potential to replicate the model in other West Highland communities, creating a network of interconnected circular projects.

And there is scope to explore creating additional value-adding products, such as enriched compost and eco-friendly packaging solutions to support the sustainability and development of these models.



Conclusion

The cardboard composting initiative showcases the power of small, community-driven actions in making a significant environmental, economic, and social impact.

The approach, based on local, miniature circular systems, is practical, scalable, and sustainable, offering a blueprint for other rural communities to adopt. Through collaboration, resourcefulness, and a commitment to sustainability, this initiative is setting a strong example for future waste management solutions in rural areas.

To learn more: www.broadfordandstrath.org

The Highland Community Waste Partnership (2022-2025)

Funded by The National Lottery Climate Action Fund, and coordinated by Keep Scotland Beautiful, the Highland Community Waste Partnership (HCWP) brought together eight community groups in the Highlands to reduce waste and promote more sustainable consumption.

Learn more here: www.keeptscotlandbeautiful.org/highlandcommunitywaste/