

# Take Art Rural Touring Model Carbon Assessment



A case study commissioned by Take Art  
in partnership with the National Rural Touring Forum

Analysis by Julie's Bicycle for Take Art  
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## Introduction

Take Art works with volunteer promoters to bring high quality live art performances to rural communities across Somerset. Julie's Bicycle were commissioned to assess the environmental impact of this Rural Touring model.

In this analysis, four consecutive Rural Touring performances by artist Blair Dunlop in February 2024 were compared to a single larger-capacity show in a more urbanised setting. This involved calculating the carbon footprint of audience travel and energy data collected from the Take Art shows before comparing to data submitted to the Julie's Bicycle Creative Climate Tools by a representative larger, town venue. This document sets out the results of the emissions comparison between the Rural Touring and central show model.

## Findings at a glance

- **This Rural Tour of 4 shows produced 57% less carbon emissions per audience member compared to a representative single centralised show in a more urbanised location.**

This analysis took into account the audience travel and venue energy usage, which are typically the most significant emissions for live events. Total emissions were normalised per audience member to account for the difference in venue capacity.

- **Audience travel emissions were comparatively 20% lower during the Rural Tour**  
By bringing art to local audiences, rural touring can enable an overall reduction in travel distances for those attending cultural events. This can achieve lower emissions per event when combined with efforts to encourage active travel to events (e.g. walking and cycling) and reduced car usage.

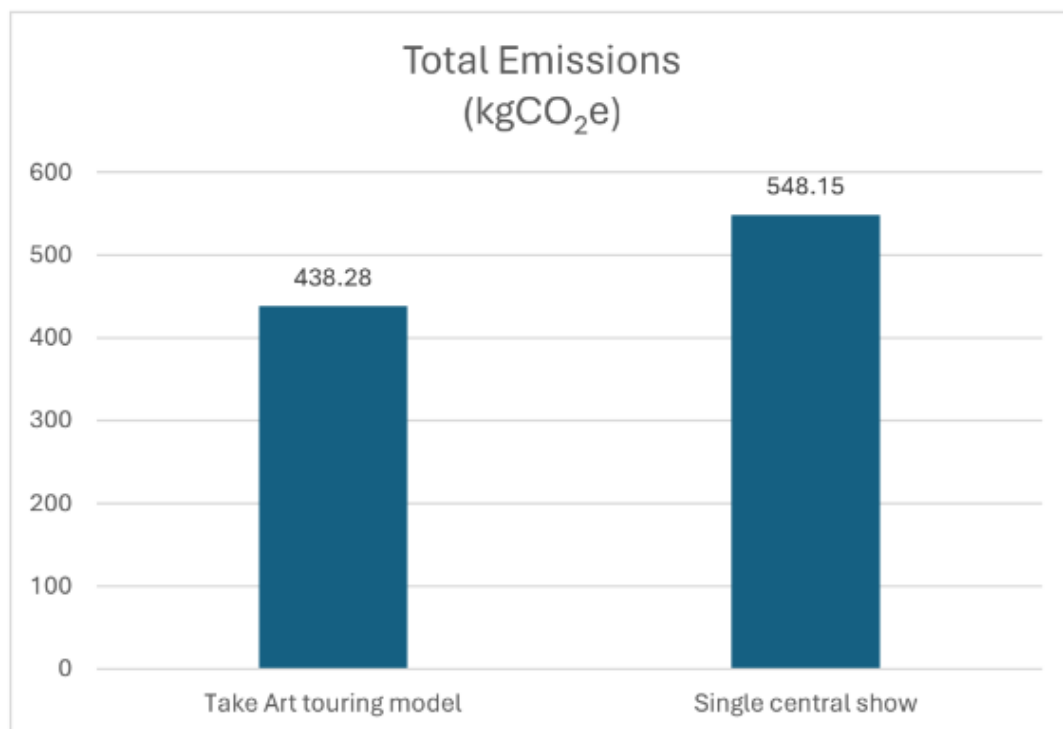
- **Venues in this Rural Tour generated 90% less emissions overall from energy than the representative larger central venue.**

This tour involved shows at rural community venues that have successfully installed renewable energy systems helping to reduce emissions. Owing to the smaller size of rural community venues, it is feasible to achieve all energy demand through small-scale and cheap renewable energy supply. Venues of all sizes should take this as inspiration to install their own renewable energy.

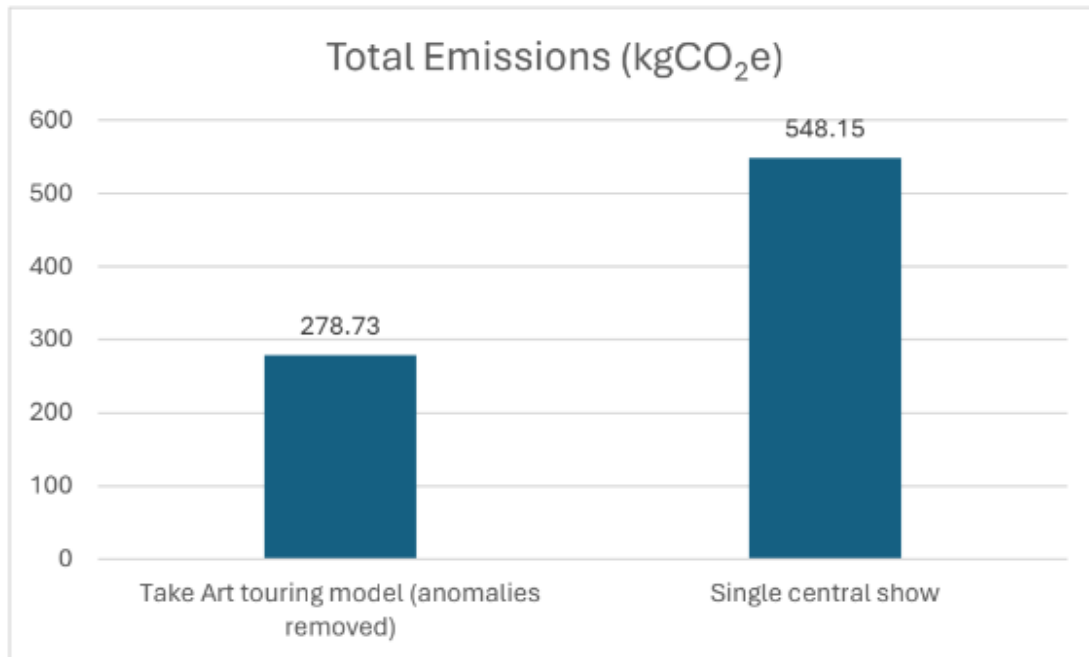
## Audience travel

In total, 79% of attendees across the four rural shows travelled via car with an average distance of 49 miles. Car travel accounted for over 95% of emissions for the Take Art shows due to the lack of public transport in rural areas.

The total emissions from audience travel were calculated to be 20% lower in the Take Art Rural Touring model compared to the single larger-capacity show in a more urbanised setting, when normalised to the same number of attendees (245).



Eleven journeys taken to the four Take Art shows were above 50km in distance, including one journey of 209km (130 miles). When these anomalies are accounted for and reduced in line with Take Art's average audience travel distance, the difference in emissions between the Rural Touring and the single larger-capacity show model is even greater, with a 49% difference.



## Analysis

The figures show that bringing art to the doorsteps of rural communities can help to reduce emissions. In total, 20% of audience members walked to the four rural performances, contributing no audience travel emissions. This particular tour saw a lower average of walkers, Take Art's average number of the audience walking to a venue is 40%

Principally, Rural Touring audience members do not need to travel as far to enjoy cultural performances. The representative more urbanised show in this study attracted audiences from further afield, with a 25% increase in the total distances travelled compared to the Take Art shows.

A key challenge for performances in rural locations is the provision of public transport options and accessibility via active transport modes, such as walking. Car travel accounted for 90% of the total distances travelled to rural shows and 95% of the emissions. Due to the greater availability of alternative travel methods in a town or city location, more audience members are able to travel by lower impact public transport, such as trams and local buses.

## Conclusion

Rural shows can encourage further emissions savings achieved from shorter audience travel distances by encouraging audiences to take more active modes of transport. This may include communicating safe walking and cycling routes, providing safe bike storage on-site, and offering incentives for active travel, such as discounts and exclusive events.

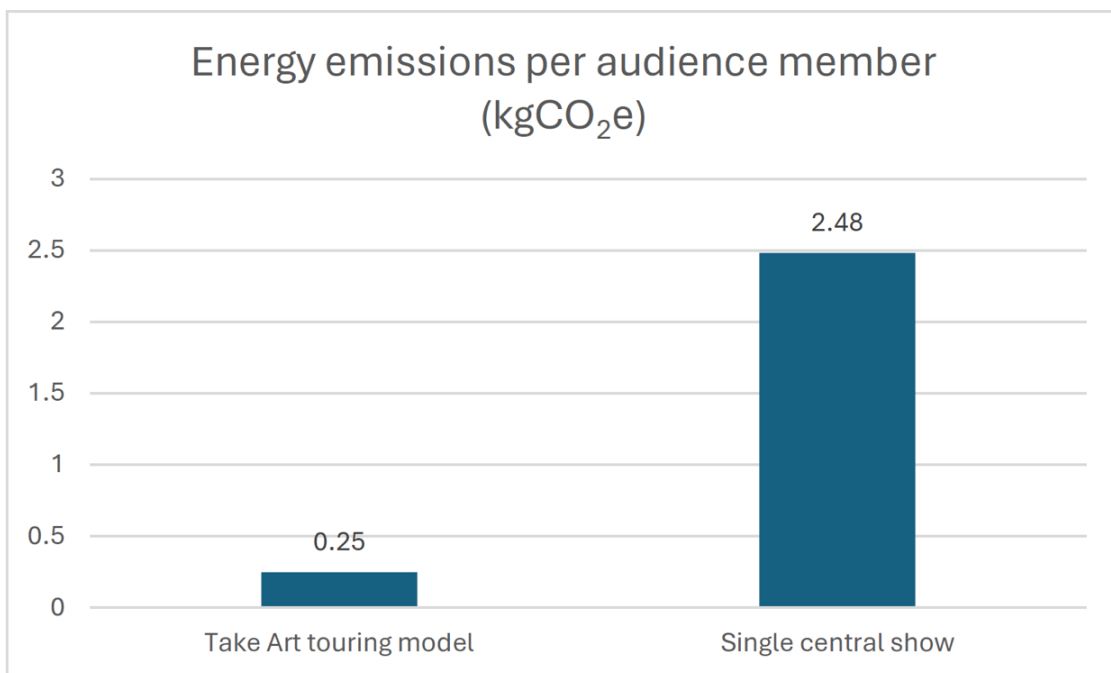
## Artist Travel - Note

This study did not separately account for the travel of the touring artist, Blair Dunlop, to ensure comparability to the representative urbanised show, for which historic artist travel data was not available.

For the Take Art shows, Blair Dunlop travelled in one petrol vehicle, carpooling with a stage manager. Volunteer promoters on the Take Art Rural Touring scheme provide hosted accommodation to artists facilitating greater cultural exchange and helping to reduce carbon emissions through local stays rather than additional travel back to a hotel.

## Energy use

There is a significant difference in the emissions from energy between the four rural shows and the single central show, when normalised to the number of audience members. In total, energy emissions per audience member were 90% lower for the rural shows.



## Analysis

This difference in energy emissions in this study reflects the excellent work the rural venues selected have made in using more sustainable energy sources. Holford and District Village Hall sources its energy from an air source heat pump, while Charlton Horethorne Village Hall has installed solar panels. Electric- powered heating systems have also helped to reduce emissions.

The difference in emissions is also in part a result of the size of the venues. A larger, central venue requires additional energy for ventilation, heating and cooling, as well as lighting. An improvement to this data analysis would be to normalise the energy data by size of each building to get a more accurate comparison.

However, it may also be true that rural venues are open for a shorter period of time for each show, which would help to minimise energy usage. This is a natural asset to a smaller venue for reducing emissions

## Conclusion

The study highlights the excellent work rural venues have done in using more sustainable energy sources. Holford and District Village Hall sources its energy from an air source heat pump, while Charlton Horethorne Village Hall has installed solar panels. Electric-powered heating systems have also helped to reduce emissions.

Rural venues are community assets and are used for many activities throughout the week; this makes the Rural Touring model quite economical as it uses pre-existing spaces. It may also be true that rural venues are open for a shorter period of time for each show, which would help to minimise energy usage. This is a natural asset to a smaller venue for reducing emissions.

## Appendix - Methodology

This study looked at a Take Art solo musician tour, Blair Dunlop, in February 2024. Take Art accurately recorded the carbon emissions of the four-date tour by collecting audience travel data and venue energy usage.

Take Art led an audience survey to understand transport mode and travel distances. Meter readings of the venues were taken before and after the performances to determine the amount of energy used specifically for each show.

To compare the Rural Touring emissions against a different model, Julie's Bicycle used audience travel and energy data from information submitted by a representative venue in a more urbanised location to the Julie's Bicycle Creative Climate Tools. To make a like-for-like comparison with the Take Art shows, the larger central show emissions figures were normalised to a capacity of 245 attendees.

This pilot study could be improved by taking a larger sample of rural and more urbanised 'central' shows in order to better understand emissions averages. Further, using the venue floor size for energy data would help to improve this analysis, but data was not available for this assessment.