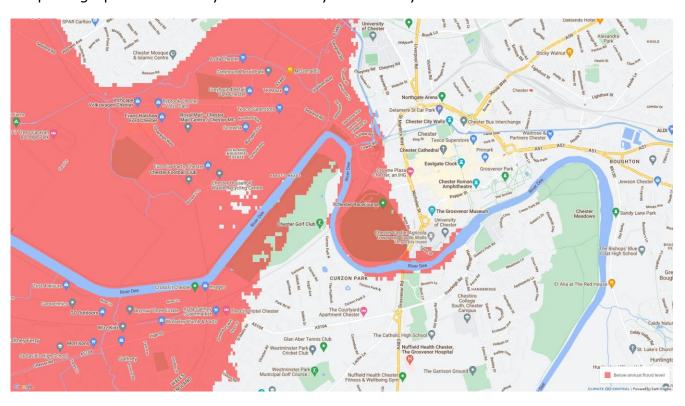


This time we have produced a walk, information about Sustainable Chester based on information kindly supplied by Simon Brown of Transition Chester, or a treasure hunt around Chester. The whole trail is just over 3 miles, and circular. Simon originally wanted a celebration of what was happening locally to make our city more sustainable, and felt that it should be recognised.

Ever wondered what our council, community groups, and large businesses are doing to make our city more sustainable? Then read on...

If you just fancy a walk, then follow the directions in blue italics. **This Trail is also** accessible on wheels.

If you want to know more about Sustainable Chester, then read the text in black, given after the directions. If you wish to participate in the treasure hunt, then look at the photographs and see if you can identify where they were taken.



Predicted flood areas in Chester in 2040 see Climate Central

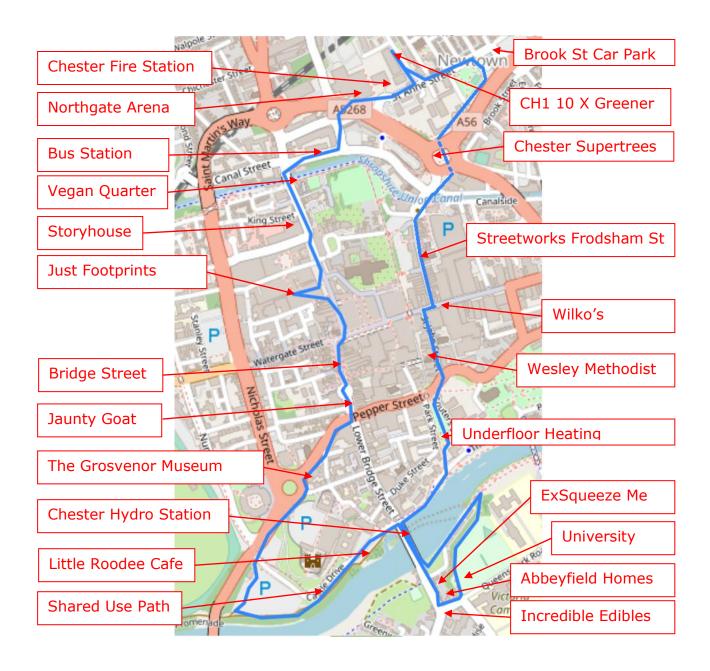
We have included a map, and, for anyone who can't get out, or is unable to do the whole route, there is a video (compressed to about 14 minutes) here: <u>Sustainable Chester Time Warped Video</u>

In the interests of greater sustainability, please try not to print this trail. Our most intrepid trailers tell me that they do it by viewing on two phones, one for the trail and one for the treasures. All research for this trail was undertaken either by bus or on foot (thank you CWAC for my shiny new bus pass!).

All aerial photos were supplied by DronePics Wales, and are their copyright. You can take a look at their other photos here: <u>DronePics Wales</u> All other photos, except where stated, © S. Foy



Map



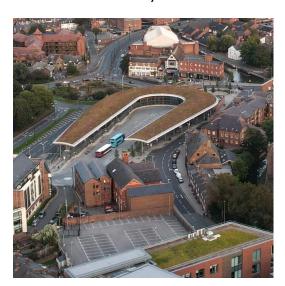


Directions

Start the walk at The Bus Station (Gorse Stacks).

The Bus Station

In addition to being a public transport hub, the most notable feature of the bus station is its living roof. As a result of increasing urban development as much as 75% of rain is running off into urban areas and causing a heightened risk of flooding. To counter this, green roofs are a terrific option, as water is stored in the plants and substrate, before being released back into the environment naturally.



Green roofs also have double or even triple the life expectancy of other solutions, and last well for decades, and have the added advantage of improving thermal performance, keeping the building cooler in summer and warmer in winter. They also support wildlife habitat and improve air quality – an estimated 24,000 people die in the UK from air pollution every year. A green roof can help reduce up to 37% of sulphur dioxide and 21% of nitrous acid.

Walk along Gorse Stacks with the bus station on your right. Carry along George Street until reaching Northgate Street. Turn left into Northgate Street and pause just after you go under the Northgate.

Vegan Quarter

There are a small cluster of businesses here promoting a plant-based and more sustainable diet and lifestyle.

Hypha is a vegan restaurant which has achieved a Michelin green star, and it has, for example, a food digester/composter that allows any food waste to be returned to the farm from which they buy their vegetables.

Osier sells dried flowers in all forms – they can create a wedding tiara for you, should you wish. Any paper is recycled and they use only soy-based inks for printing. They tell me all their products can be composted.



Fika is a vegan café, and they have a micro-bakery in which all flour used comes from Walk Mill. They also sell off any food unsold at the end of the day via Too Good To Go, a website dedicated to eliminating food waste.

All of the above are entered via the City Walls.



Koji, at the entrance to Rufus Court, is an off-shoot of hypha, and sells wines and cocktails, teas, and coffees, that are produced with a minimum of intervention and chemicals. They also have their own fermentation lab and a zero waste policy.

Since these businesses are generally only open Thurs – Sun, see videos of the interiors here: <u>Koji</u>, <u>Osier</u>, <u>Fika</u>.

Carry on down Northgate St and you will pass The Cheese Shop on the left.

At the Cheese Shop you can buy cheeses from the <u>Ethical Dairy</u> who have pioneered the cow-with-calf method of dairy farming.

Carry on down Northgate St and you will pass Storyhouse on the right.

Storyhouse



Storyhouse has solar panels on the roof, as well as two beehives, where presumably some of the bees feed from the nectar of the plantings in Newtown and Supertrees (see later in the trail).

The architects worked hard to ensure the whole building was energy-efficient, and this includes natural ventilation with opening windows; high thermal efficiency to the new building envelope; efficient cooling systems to heat high load areas; efficient under-seat air supply to the main theatre space; LED lighting throughout.

Continue past Storyhouse and just after the Information Centre, turn right into the shopping mall. Near to the end of mall you will see the shop 'Just Footprints'.

Just Footprints



Just Footprints is our local plastic-free shop, you can see a video of the inside of the shop, with a voiceover from Debbie the owner telling you about it, here: Just Footprints



Leave the mall and continue walking down Northgate Street towards The



Cross. At the end of Northgate Street, turn right then immediately left into Bridge Street (at The Cross). Walk down Bridge Street.

LED Street Lighting



On your way down Bridge St take a look at the street lighting. This was installed by CWaC Highways to replace existing energy hungry lighting. The cost of doing so was covered in a single year by the reduction in cost of electricity.



Jaunty Goat

Both the café on the left and the bakery on the right have a well-thought through program of sustainability. The flour for their bread and cakes comes from wildfarmed; their milk and coffee beans are delivered in containers that go back to be refilled; some of their profits go to Project Waterfall and One

<u>Tree Planted</u>; all deliveries to shops and cafes are made either on foot or by bike using <u>ipedalcargo</u>. They have other initiatives, and invite you to suggest more ideas for them through their website Jaunty Goat Sustainability



Jaunty Goat Bakery

Walk to the end of Bridge Street until reaching the main road. Turn right into Grosvenor Street and cross the road. Walk down Grosvenor Street until you reach the museum.

Grosvenor Museum



The Grosvenor Museum has 6 air source heat pumps and 100 solar panels (you may be able to see them at the back of the building) and has a new display on the first floor dedicated to 'Disappearing Cheshire'.





Museum air source heat pumps

Go around the roundabout and along Grosvenor Road. Walk towards Grosvenor Bridge, turn left into Castle Drive. Cross Castle Drive and go down the steps past the Little Roodee Cafe.

Little Roodee Café

In addition to having a green roof (see Bus Station), this café also offers training and work placements for adults with learning disabilities.

Continue along the shared use pathway until you reach the Old Dee Bridge.

Shared Use Path (riverside)

This path runs alongside the River Dee, to Queensferry and beyond, and is part of a growing network of off-road cycle and pedestrian routes, encouraging people out of cars and onto bikes.



You can find more information on local cycle routes here: <u>Chester Cycle Route Maps</u>

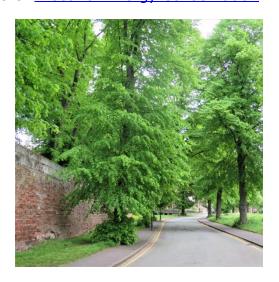
And national cycle routes here: Sustrans Routes

Continue along the shared use pathway until you reach the point where it meets the road.

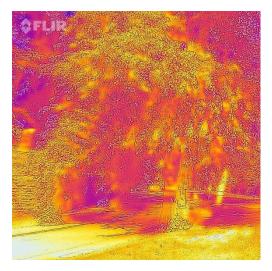
Cooling Effects of Trees

If you are walking this route on a warm day, pause for a moment under the trees and note the reduction of temperature in their environs.

You can read more about this effect here: Trees for Energy Conservation







Infrared view of approx the same scene

Chester Hydro Station

Chester generated its own clean carbon free electricity for almost half of the City's electrical needs from 1914 to 1949 from the Hydro Electric Building. This building, currently unused and redundant, is being proposed as a Hydro Hub; a focal point for residents, schools, and visitors to learn about what a low carbon world will look like and how all aspects of our lives will change as new technologies remove emissions from our industry, commerce, agriculture, homes, transport, and food.

The Hydro Hub was one of 11 projects that received funding from round one of Cheshire West and Chester Council's Climate Emergency Fund last year (2020). The fund provides money to projects that can reduce carbon emissions and contribute to the borough's ambition of becoming carbon neutral by 2045.

Turn right and cross the Old Dee Bridge to Handbridge. Continue to walk along Handbridge past the row of shops on your left.

ExSqueeze Me



Photo by kind permission of exsqueezeme

In 2017 this greengrocers was taken over by new owners determined to do something more in tune with the environment. This includes using 100% renewable electricity; juices being sold in returnable glass bottles; paper and re-used plastic bags only; as many products as possible sold loose and plastic-free; priority given to local produce (you can take in a surplus from your garden and barter); a wormery; every till roll contributes to planting trees in the UK; deliveries by electric vehicle and many more.

You can see a short video of the shop here: ExSqueezeMe

Turn left into Queens Park Road. You can see the Co-Op across the road.

Incredible Edibles

Outside the Co-Op you can see a planter, which is part of the Incredible Edible scheme. This takes unloved places and plants fruit and veg in them, encouraging people to take what they need. There are Incredible Edible sites dotted all over Chester – parks in Hoole have black- and redcurrant bushes, for example. You can find out more, and maybe even join one of the planting groups here: Incredible Edible (national website) or here: Local Information



Abbeyfield Homes

Glance left as you turn the corner and you can see solar panels on the Abbeyfield Home. They are hoping to extend this array in the future.



After about 50m take the footpath on your left.

University of Chester



If you look right here, you will see a University of Chester building with solar panels. The University has four full-time members of staff dedicated to sustainability, and has introduced a large number of initiatives, including reducing food waste on campus by 50%; running sustainability and swap shops on site; growing fruit and veg for use in their kitchens and by students; offering carbon literacy training for all; banning single use cups; installing

water refill points across all sites; encouraging staff and students to walk or cycle; a University allotment; removing/replacing gas heating; carbon emissions reduced by 50% since 2014-15 – the list goes on.

Most important though, they tell us, is their mission to educate their students in how they can contribute to a more sustainable future, in their personal and professional lives, and for those students to go out into the world and pass that on.

You can read more about what they do here: <u>University Sustainability</u>

There is a choice here.

- a) If you have problems with access, turn back the way you came and return to the Old Dee Bridge. Take the path along the river to the Fish Trap to rejoin the trail.
- b) If you have no access problems, then continue down the path. Follow it to the river (down some steps) then turn left.

You will pass the weir, created in 1093 to enable hydro power to be utilised. At one point 7 mills used the power of the river Dee, and, if you take a trip to Walk Mill in Waverton, you can see a hydro-powered flour mill in action. Bread bought from there has zero food miles.

Follow the path to the Old Dee Bridge and turn right to cross back across the river. Cross the Old Dee Bridge and turn immediately right to follow the path by the river. Turn left just before Hickory's and go up through the Roman Gardens.



Underfloor Heating



The most effective way to heat a room is by using underfloor heating, rather than hanging something on an outside wall – even the Romans knew that. It ensures that low temperatures can heat a room, and is especially effective with heat pumps.

You can watch a Chester u3a video by Mark Thompson, in which he talks about this and other ideas here:

Heating Your Home

After leaving the Roman Gardens, turn right into Pepper Street and then left into St John's Street.

Wesley Methodist

They have long term initiatives, such as housing a Fairtrade shop; twinning their toilets with ones in the developing world; and considering sustainability issues when doing their recent and all future refurbishments.

They have also gained their Bronze Eco-church award, and hope to move to silver in the near future. As far as possible all cleaning products are fair trade, and they disseminate sustainability tips throughout their network of 25 churches in Cheshire. They actively encourage members to

lead more sustainable lives, and have the environment at the heart of some of their services.

At the end of St John Street, turn right into Foregate St. Before turning left into Frodsham Street, glance at Wilko's, on the left hand side of the street.

Wilkos

Both Wilkos and the shop next door have solar panels on their roofs, as you can see below.



Walk along Frodsham Street.

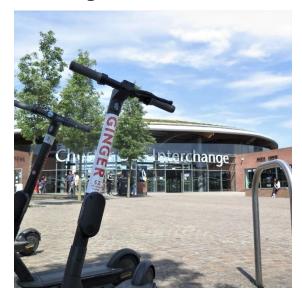
Streetworks Frodsham St

Here pedestrians have road space, vehicles are de-prioritised, and contraflow cycling makes the city centre more accessible for those on bikes.

Continue along Frodsham Street and cross the canal, passing in front of the Bus Exchange.



Ginger Scooters



Ginger Scooters have been popping up all over the place – you can read more about the ideas behind them here:

<u>Ginger Aims</u>

From the Chester Standard: Councillor Matt Bryan, Cabinet Member for the Climate Emergency, explained: "Ginger work in partnership with a local business, Dandy's Nationwide Landscape Supplies Ltd, using the latest solar panels and Tesla battery charging facilities to power and recharge the Ginger e-scooter fleet.

"This means that every scoot across the city of Chester on a Ginger rental escooter is now 100 per cent powered by the sun."

Bear right past the shops and take the underpass under the roundabout to Hoole Way.

Chester Supertrees

This is a project to highlight the need to improve biodiversity in our city centre. Planting was advised by Chester Zoo, and it has had the benefit of creating a more tranquil space and involving community in creation and maintenance. You can find out more

here: Supertrees



Walk up Hoole Way away from the town centre. Turn left into St Anne Street and follow it past Brook Street carpark.

Electric Vehicle Charging

(Brook St Carpark)

EVC is beginning to spring up all over the place, and you can see an up-todate list here: <u>Chester EVCs</u>

All sales of new petrol and diesel cars are being banned by the UK government by 2030, although there are signs that sales of EVs are currently only being held back by shortages of components.

Turn right into Trafford Street and walk up to the Community Orchard on your right.



CH1 10x Greener and Community Orchard



The Newtown Community Group thought their area had very few green spaces, and a consequent lack of wildlife. Crowdfunding was used to raise the money for a Postcode Gardener for one day a week for a whole year to seek out small spaces and make them greener. These are dotted around Newtown, and include a Community Orchard.



Turn around and come back to St Anne Street. Turn right and continue to walk, past the Fire Station.

Chester Fire Station



The new Fire Station is an outstanding example of what can be done in our public spaces. Originally budgeted as a fairly ordinary build, additional funding was allocated to build more sustainably. The result is one of the UK's first fire stations that is energy neutral and zero carbon in operation, i.e. it produces as much energy as it uses. It does this by having 580 sq. m. PV panels on the roof (see Northgate Arena photo), a high energy efficiency building standard, and an air source heat pump. You can read more about it here: Fire Station

Turn right along St Oswald's Way to Northgate Arena.



Northgate Arena



Northgate Arena, in addition to being a sports centre, is also a solar power station, with 100kW on the roof, -49kW of which was installed under the Community Energy scheme - Community Energy - Northgate Arena. With matched funding from CWAC this was increased to ~100kW. The power generated is used within the building, so next time you go swimming you will know what is heating all that water.

Use the crossing to return to the Bus Station.

Treasure Hunt Instructions

On the following page is a sheet of photos. By following the map and/or directions you should go past all of them, but not necessarily in the order in which they are shown. If you can't find them all, and get frustrated, then you can ask for our Hints sheet by emailing treasuretrails@chesteru3a.org.uk

You may also be able to see them (but we don't guarantee it!) on the video here, which reduces the trail to 14 minutes: <u>Sustainable Chester Time Warped Video</u>

Don't forget to let us know how you get on – particularly if you want us to produce more!

So, get out there, and get hunting!









































