

# WIRRAL CLIMATE EMERGENCY STRATEGY Progress report – 2019 and 2020



### Introduction

This report provides an update on local progress in the face of the climate emergency. It is the fifth in a series of public reports produced by the Cool Wirral Partnership to document local steps to address the climate crisis.

Unlike previous Cool Steps reports, this one spans the final year of the original Cool climate strategy and the first year of its replacement Cool 2. It gives a summary of some of the action undertaken to support the first strategy and an update on action taken since the adoption of the second.

It starts by setting out the context for local action, including the international and national picture. Information on local activity is then presented including some data to indicate the local position. The report concludes with some remarks on the opportunities ahead.

### **Background**

The climate emergency is a global crisis with a local dimension. Pollution from human activities, principally the burning of fossil fuels for heat, power, and travel, is polluting our atmosphere. This so called 'green-house' pollution is driving an unnatural rise in global temperatures. This excess heating is disrupting climatic patterns and contributing to rising sea levels which both present serious problems.

To avert the potentially catastrophic effects of 'run-away' global heating, we need to cut greenhouse pollution drastically and fast. We also need to adapt to the changes that have happened or are already unavoidable from past pollution. We are already experiencing more extreme weather episodes locally and across the planet driven by the 1°C of excess heating recorded since the pre-industrial period.

### The international and national picture

Cool 2 is not an isolated local strategy. It is one of many local responses around the world in support of international and national efforts. Globally, the UN's Paris Agreement on climate change came into force in late 2016. This Agreement seeks to keep average global temperature rise to well below 2°C above pre-industrial levels and pursue efforts to limit the increase to 1.5°C.

The evidence gathered in the wake of the Paris Agreement has underlined how much worse 2°C of excess heating would be compared to 1.5°C. It also highlights how quickly we may breach these thresholds without an urgent change of course. The focus is now very much on trying to avoid the higher 2°C rise. To do this, means cutting global emissions rapidly to reach 'net zero' towards the middle of this Century. 'Net zero' is the point when the amount of pollution we release to the atmosphere is less than or equal to that which is removed naturally, or by artificial means.

Under the Paris Agreement all nations must set out their Nationally Determined Contributions (NDCs) towards the global goal. The action plans submitted by countries so far fall well short of what is needed. We remain on course to overshoot both the 1.5 and 2°C targets. If ambition and action does not improve, we will end up in a much more dangerous situation.

## Cumulative emissions of CO<sub>2</sub> and future non-CO<sub>2</sub> radiative forcing determine the probability of limiting warming to 1.5°C

### a) Observed global temperature change and modeled responses to stylized anthropogenic emission and forcing pathways

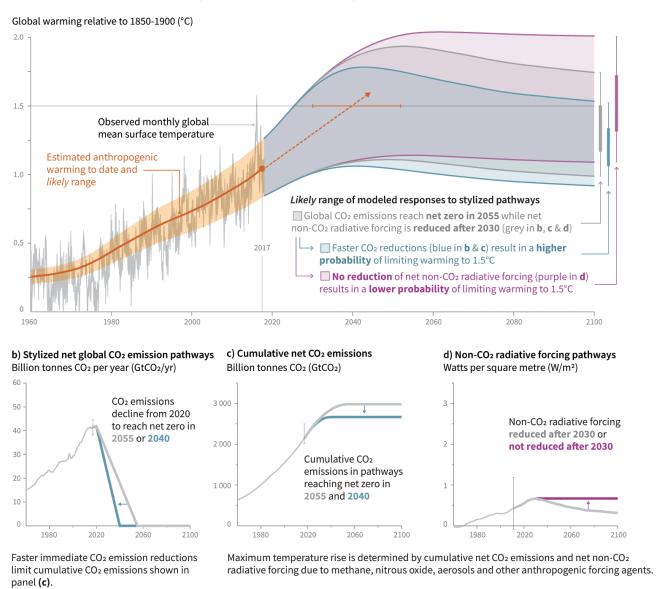
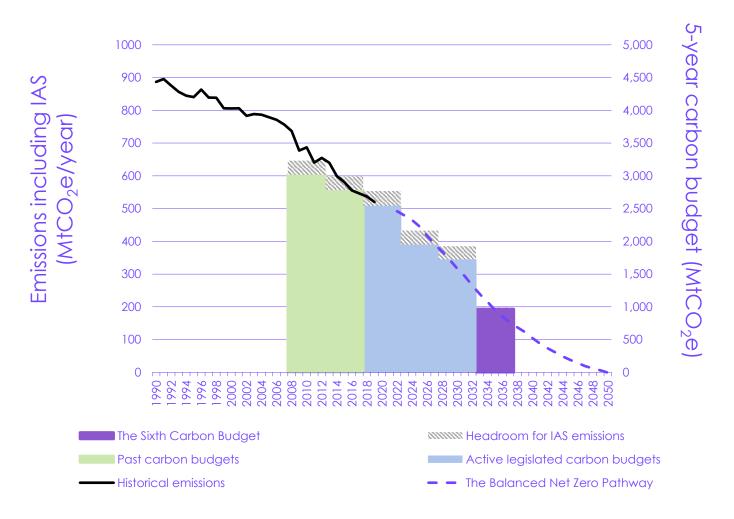


Figure from IPCC 1.5 Degree Report ©

The UK has had to tighten its own targets and bring forward new plans to be in line with the new Paris Agreement. Since the last Cool Steps report, the UK has adopted a more demanding legal target, that of 'net zero' emissions by 2050. Under the Climate Change Act, the Government is required to set out actions to achieve this target. It must indicate how it will stay within a series of five-year 'carbon budgets' on route to becoming net-zero. The Act also requires a regular assessment of risks from the changing climate in the UK and a programme of adaptation, so that we are better able to cope with unavoidable changes. Though the UK has done well with respect

to early 'carbon budgets', the Government's independent Climate Change Committee has signalled the need to bring forward action if we are to stay on course and meet the new net zero target.

### The UK recommended sixth carbon budget



From the UK Committee on Climate Change Sixth Carbon Budget Report ©

### The local response

In Wirral, the local response to the climate crisis has been developed collectively through the Cool Wirral Partnership – a multi-sector partnership tasked with championing and co-ordinating local climate-related action. The partnership was originally set up by and is supported by Wirral Council but has developed over time to provide an independent voice on local climate matters.

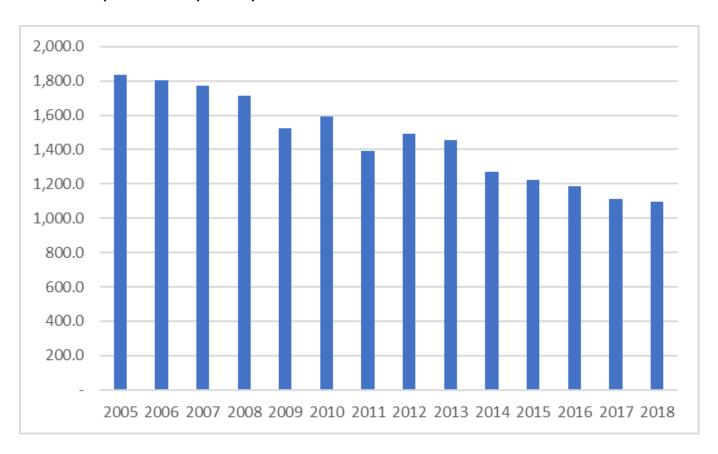
The partnership developed an initial strategy called *Cool (2014-19)*. It has since developed a new strategy to follow called *Cool 2*. The latest strategy takes on board the changing circumstance since the Paris Agreement. It updates local targets and time frames in line with the global agreement. In practice, this means local emissions need to be all but eliminated by 2041 if we are to meet our fair share of the global challenge. The remaining local emissions 'budget' for this century (the absolute maximum we can afford to emit locally as our fair share of pollution going forward) could be used up within six or seven years if we do not change course rapidly. We will need to go further and much faster than anticipated in the original Cool strategy. Whilst local

emissions have fallen over time, we now need to see reductions of around three and a half times more each year than we have seen on average.

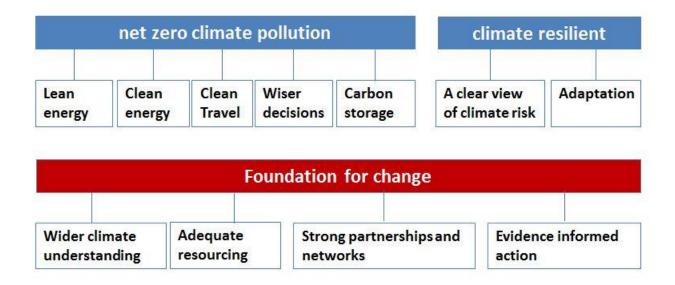
Cool 2 is a strategy for all with an interest in Wirral. The approach taken is based on the belief that we can make a bigger impact by encouraging and co-ordinating efforts. It recognises that we all have a potential role to play. For success, there needs to be widespread action from all quarters within *and beyond* the Cool Wirral Partnership. To this end, Cool 2 adopts a similar approach to the Paris Agreement in that it asks all those who support the strategy to set out what their 'Locally Determined Contribution' to it will be.

The first year of the new Cool strategy has seen the impact of another global crisis, the Covid-19 pandemic. In addition to a tragic loss of life, we have seen considerable changes in our lifestyles and activities linked to measures to control the spread of the virus and save lives. Some of the restrictions imposed have frustrated the speed of planned actions in support of the strategy. Others have brought huge shifts in behaviour that may assist in reducing emissions both now and in the longer term. Work to promote recovery from Covid-19 presents a huge opportunity to progress climate objectives. It is essential that we 'build back' in a manner compatible with the new climate reality.

### Wirral territorial CO2 emissions estimates (within the scope of influence of Local Authorities) 2005-2018 (kt CO2)



The Cool 2 strategy sets two goals: achieving net zero climate pollution and making the borough climate resilient. It also seeks to ensure the foundations are in place to achieve these goals rapidly

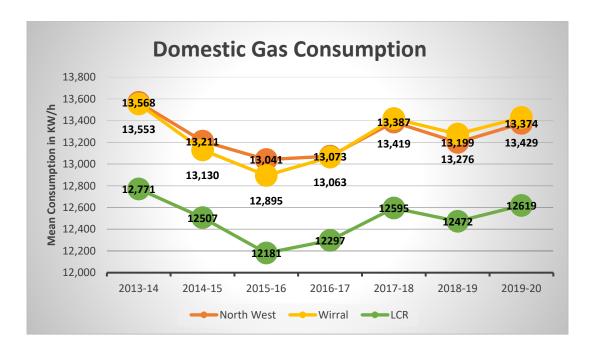


### **NET ZERO WIRRAL**

### Leaner use of energy: reducing demand for energy

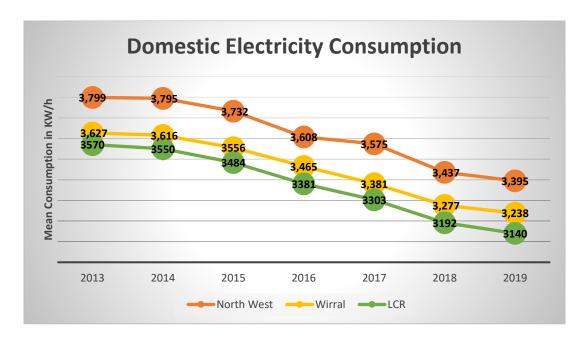
To support the net zero goal, one of the objectives in Cool2 s to reduce the overall demand for energy in Wirral across residential, commercial, and industrial sectors. For the residential sector we need to see all homes currently below Energy Performance Certificate (EPC) Band C improved to this level or better by around 2030

### Local energy consumption in focus ...



Over the period of the first Cool strategy (2014-19), domestic gas consumption fluctuated. Consumption ended slightly higher in 2019-20 than it was in 2014-15, though lower than it was in

2013-14. Similar fluctuations were recorded year by year in the northwest England and Liverpool City Region data. Local domestic consumption was very close to the northwest average but remained higher than across the Liverpool City Region. In the future, we need to see a sustained and rapid downward trend in domestic gas consumption as energy efficiency measures reduce demand for heating and we move away from the use of natural gas as a heating fuel.



The picture with respect to domestic electricity use was more promising over the period of the Cool strategy with consumption falling. Wirral consumption is lower than across northwest England but slightly higher than for the Liverpool City Region. Reductions in electricity consumption can arise from the adoption of more energy efficient appliances and lighting. They can also result from behaviour change to reduce energy waste. We need continue to promote more efficient use of power. Over time it is expected that there will be a rise in demand for power with the adoption of electric vehicles and the shift to the use of electricity as part of efforts to decarbonise heating.

In support of the first Cool strategy (2014-19):

- A street lighting strategy was adopted. Over 9000 streetlights were upgraded to more efficient LED lamps and resources were secured to invest in the upgrade a further 26,000.
- Energy Projects Plus through their Save Energy Advice Line, home visits and attendance at events provided energy efficiency advice to 6,738 Wirral households in the period 2014 to 2020.
- The Cosy Loans scheme has provided 317 interest-free loans for replacement boilers in Wirral between 2014 and 2020.
- Solid wall insulation programmes were delivered to upgrade several hundred properties including houses in selective licensing areas and those owned by Magenta Living
- An 'Energy Champions' training programme for staff of front-line organisations including Wirral Council and Magenta Living was delivered by Energy Projects Plus.
- Major energy efficiency programmes were implemented by Wirral Met College and Wirral University Teaching Hospital Trust utilising combined heat and power systems delivering savings of thousands of tonnes of CO<sub>2</sub> per annum

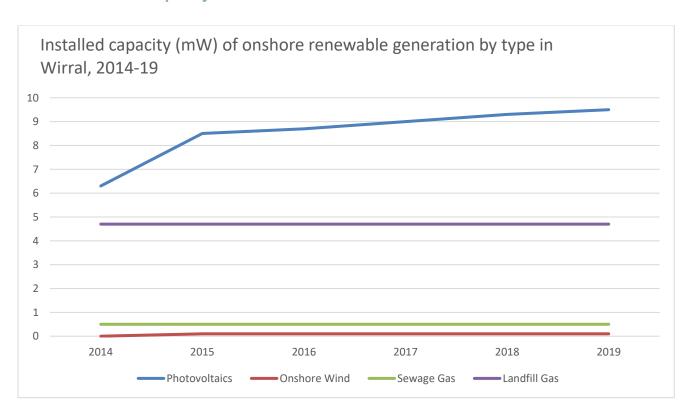
Progress with household energy efficiency measures was more limited than anticipated over the course of the Cool strategy. The Government's Energy Company Obligation (ECO) was expected to be a bigger source of housing investment than it proved to be. The 'Green Deal' mechanism put in place by Government to help finance energy efficiency upgrades through loans ultimately failed to meet expectations too.

During the first year of the new Cool 2 strategy, we have developed a clearer view about the nature of building improvement challenge. We now have a better understanding about opportunities to make improvements in residential properties which is helpful to target support and to encourage investment by owner occupiers and landlords. The number of buildings that need to be upgraded is substantial. It is considerably more than is being improved through known improvement programmes. The effort to decarbonise buildings requires continued investment from owner occupiers and landlords. Around £800 million investment is needed in housing just to raise property performance to Energy Performance Certificate (EPC) C.

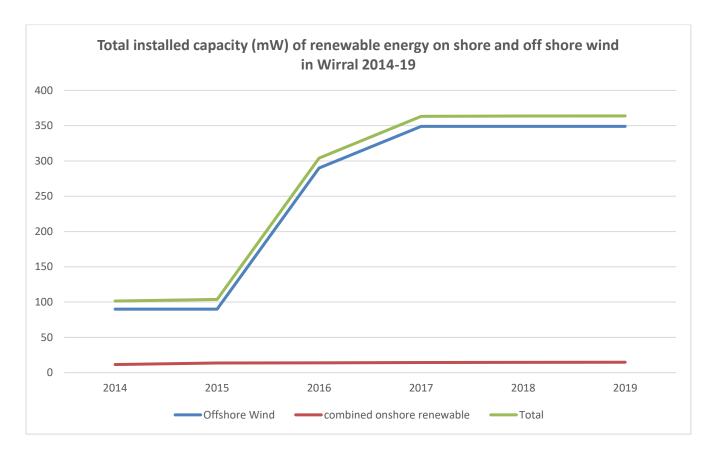
# Clean energy: meeting local energy needs from zero carbon and renewable sources

Another objective in support of the Net Zero goal, is to generate and/or source all our local energy needs from zero carbon and renewable sources by around 2041

### Local renewable capacity in focus ...



Over the period of the first Cool strategy (2014-19), local renewable energy capacity rose onshore driven by growth in solar power generation. This initially grew sharply, then more gradually. Capacity for 'on-shore' wind generation and sewage and land fill gas remained stable.



Total onshore renewable generation capacity in Wirral is eclipsed by local off-shore wind which has seen a significant recent increase in installed capacity.

### Recent steps...

In support of the first Cool strategy (2014-19):

- The designation of Liverpool City Region as a centre of excellence for offshore renewable energy helped encourage investment to support wind energy and related supply chain businesses. A new £6m offshore wind farm operations base for Ørsted was built in Seacombe.
- Wirral Community Renewables was established as a community benefit society to promote
  local community renewable energy developments. It secured funding for a feasibility study
  looking at potential local sites for community owned solar and contributed to a wider study
  looking into the potential use of solar power for rail traction. No local sites have been
  developed yet by Wirral Community Renewables. However, the rail traction study was
  progressed. It resulted in the first pilot installation of solar for rail traction in the world at
  Aldershot station.
- Four schools installed solar panels with a total of 372 kWp generation capacity
- Wirral Council installed 571 kWp of solar PV across 24 council buildings,

Progress with local renewable energy has been influenced strongly by government policies. Offshore wind has expanded and thrived with government support. On-shore wind however has remained negligible without such support and with more hostile national planning policy in place. On-shore solar capacity initially grew sharply, then more gradually after the ending of the Government's feed-in-tariff (FiTs) incentive scheme. The withdrawal of FiTs impacted the opportunities for viable community owned solar developments too. During the first year of the new Cool 2 strategy, we have developed a better understanding of the local opportunity for, and constraints on, local clean energy development. As part of a study completed to inform a new Local Plan for Wirral, an assessment was made of the local clean energy opportunity. The assessment concluded that there is some potential for ground mounted solar PV, biomass energy, district heating and building-integrated technologies, but little potential for onshore wind:

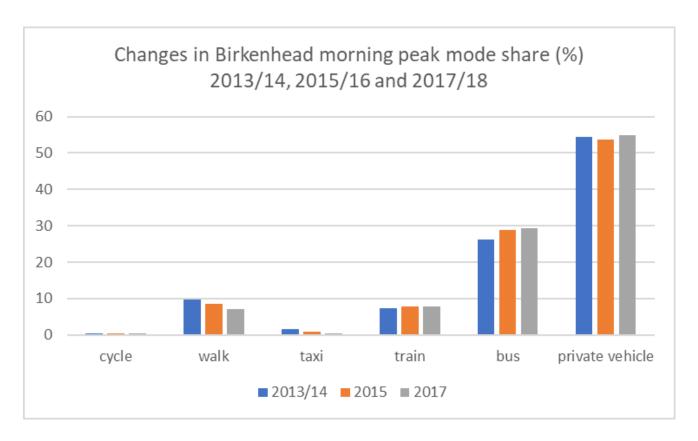
- Opportunity areas for ground mounted and floating solar could theoretically generate an
  estimated 106GWh renewable electricity and save 192 ktCO2e for the period 2020 to 2050
  if fully utilised. However, with much of the opportunity being in the green belt it is unlikely to
  be realised even if special circumstances can be demonstrated to allow such development.
  If green belt land is not developed, there is theoretical opportunity to install around 117
  mWp capacity elsewhere.
- Opportunity areas for energy crop growth and acquisition of forestry residues could make a modest contribution to the Borough's carbon reduction targets
- There are several areas across the Wirral with sufficient spatial heat density to support commercially viable heat networks.
- It is hard to assess the Boroughwide potential for building integrated clean energy technologies, but such technologies are expected to make an important contribution to decarbonising both heat and electricity in the borough.
- Whilst proximity to existing properties and planning constraints limit opportunities for wind developments, there are some potential opportunities in the green belt. If fully utilised, these could theoretically generate an estimated 67 GWh and save 121 ktCO2e for the period 2020 to 2050. However, it is very unlikely such development can take place without a change in national planning policy or support from all those living nearby. The investigation concluded there may be scope for a few single moderate sized turbines.

A significant recent step forward has been the completion of a feasibility study that has confirmed the potential for a major low carbon district heat network in Birkenhead. A bid for funding to progress necessary detailed delivery planning work has subsequently been submitted. The opportunity is recognised as catalyst project to enable low carbon regeneration in line with strategy objectives.

### Clean travel: transitioning to fossil fuel free local travel

To support the net zero goal, the objective for travel is to see a complete transition to fossil fuel free local travel by around 2030. This will require a rapid shift from car use to walking, cycling and public transport use. It will also require as major shift in the vehicle fleet away from internal combustion engine vehicles fuelled by petrol and diesel, to electric and hydrogen powered ones.

### Local composition of journeys in focus...



From the limited information available, we have not yet seen a move in the right direction with respect to a shift to active travel. Information is periodically collected on the 'modal share' of traffic entering a defined cordon around Birkenhead. Comparing surveys since 2013/14 during the morning peak, walking has dropped, and cycling has remained but a minute fraction of all traffic. More positively, both bus and train have seen a small increase in modal share, though private vehicle use has seen a marginal increase too.

### Recent steps...

In support of the first Cool strategy (2014-19):

- A cycle network map was produced, with investment in cycle lanes and routes focused on the A41 corridor and routes serving the Wirral Waters regeneration area around Birkenhead docks
- Secure sheltered cycle stores were introduced at all bar one local Merseyrail electric stations on the Wirral line
- Over 30 'Dr Bike' cycle maintenance events were held at various local employers
- Over 20 workplace travel plans were developed
- Living Streets worked with over 70 schools to promote walking
- Electric vehicle charging facilities were installed at three public car parks and at several depots and workplace car parks.

- Funding was secured for around 40 on-street charging points for a pilot project to serve residential areas with limited off-street parking.
- Merseytravel, Arriva and Stagecoach made a new five-year Bus Alliance agreement to deliver millions of pounds of investment in bus services

Local interventions to support active and sustainable travel have suffered from 'stop-start' funding with several local travel support programmes ceasing over the life of the first Cool strategy.

During the first year of the new Cool 2 strategy, there has been some disruption and delay to planned work:

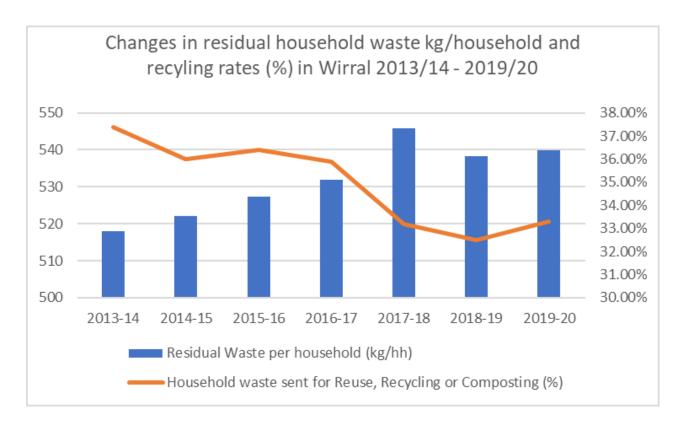
- Additional support was secured during the year to engage communities and develop several low traffic neighbourhood schemes.
- Work began on the Dock Road shared pedestrian and cycle way.
- Work commenced on the Tower Road civilised street scheme in Wirral Waters, designed to provide more space for pedestrians and cyclists and to slow motor traffic.
- Council has received additional funding to deliver Emergency Active Travel Schemes to support the COVID response. Schemes have included enhanced segregation for cycle lanes.
- Funding was secured for an e-cargo bike pilot project

The pandemic has clearly had a major impact on travel patterns with working from home encouraged and the non-essential use of public transport discouraged. Walking and cycling is likely to have increased.

# Wiser decisions: using resources - materials, land and food - in a sustainable way

Beyond measures that directly reduce emissions, Cool 2 also seeks to promote use of resources - materials, land and food - in a sustainable way so that our collective decisions do not add *indirectly* to the burden of climate damaging pollution in Wirral or elsewhere.

Local household waste in focus



Over the life of the first strategy, residual domestic waste has increased, and recycling fallen. Whilst this is only part of the wider waste picture, it is the one where members of the Cool Wirral Partnership have statutory responsibilities for collection and disposal

### Recent steps...

In support of the first Cool strategy (2014-19):

- Merseyside Recycling and Waste Authority launched the Liverpool City Region Circular Economy Club
- A Wirral Waste Strategy was developed setting out Wirral Council's aim of recycling 50% of household waste by 2020
- Cheshire and Wirral NHS Partnership Trust, Wirral Council, Community Action Wirral and Wirral schools introduced online portals to encourage the re-use of surplus furniture
- There was a significant increase in the proportion of local schools recycling 50% or more following a 'big bin challenge'.
- The 'Better Food Wirral' campaign supported local food initiatives
- Meatless menus, originally pioneered at St. George's Primary School, were taken up at schools across the borough promoted through the local eco schools network.

Local efforts did not move domestic waste statistics in the desired direction. Over the life of the first strategy, the range of materials accepted by domestic recycling services remained the same, with no introduction of a separate food collection and no restriction of household waste capacity – both of which are proven to encourage waste prevention, reduce household waste arisings and increase reuse and recycling. The Government's 2018 Resources and Waste Strategy set out plans for mandatory food recycling collections by 2023 and to widen the range of materials that must be collected separately for recycling to include other plastics (such as pots, tubs and trays) and possibly also include food and drink cartons, aerosol cans and foil.

Some progress has been seen with respect to promoting the climate benefits of local and seasonal food and reduced consumption of meat. However, the 'Better Food Wirral' programme ended in March 2018.

During the first year of the new Cool 2 strategy:

- The Loop: Wirral 'circular economy' initiative was launched in January 2020
- Wirral Council worked closely with Merseyside Recycling and Waste Authority and the other Merseyside Districts to prepare for changes signalled in Government's 2018 Resources and Waste Strategy.

The Covid-19 pandemic has had a detrimental impact on waste arisings, both in relation to household waste and waste from street cleansing. More people working from home and taking exercise outdoors in their local areas has resulted in an average increase of household and street cleansing waste arisings of 15% over the past year.

Whilst the statutory focus of local waste interests represented on the partnership is on domestic waste, there is recognition of the need to sustain activity in areas beyond, for example, efforts to 'design out waste' and promote the development of a 'circular economy'.

The pandemic has also meant the work to establish a food forum/network has not progressed.

### Storing more carbon:

The initial Cool strategy did not focus on increasing carbon storage. Cool 2, however, includes an objective is to capture more carbon naturally by increasing woodland cover in line with national recommendations and by protecting soils and natural habitats. To this end the strategy identifies the development of a tree strategy as a key early step.

#### Recent steps...

In the first year of the Cool 2 strategy:

- A tree, woodland and hedgerow strategy was established by Wirral Council
- Plans were in place to ensure over 20,000 trees were planted before the end of the 2020/21 tree planting season.

### **CLIMATE RESILIENT**

### Climate risk and adaption

Cool 2's objectives in support of the goal to make Wirral more climate resilient are to identify vulnerabilities in the face of present extreme weather and further unavoidable changes this century, and to put in place policies, practices and infrastructure, including natural 'green and blue' infrastructure, that help limit negative impacts from existing and future changes in the climate. The

Cool 2 strategy envisages the formation of a climate adaptation group to develop a local adaptation programme.

### Recent steps...

In support of the first Cool strategy (2014-19):

- · Wirral's local climate impact profile was updated
- Wirral's Joint Strategic Needs Assessment 'Climate and Health' evidence paper was produced and updated several times
- A resilience workshop for small and medium enterprises was delivered and a local resilience guide for businesses produced.
- The Wirral Resilient Parks project was completed. This looked at five sites that already
  experience weather related issues. The project developed a toolkit for climate resilient
  parks management. It also generated management ideas for the case study sites
- Further detailed work was undertaken at Coronation Park culminating in a successful bid for funding to support a natural sustainable drainage scheme.

Progress in relation to climate risk and adaption has been patchy. For some issues where there are statutory requirements to act such a in relation to flooding there are active programmes of work. During the period of the first Cool Strategy, support for local co-ordinated work was cut with the closure of the Environment Agency's 'climate ready' programme and the withdrawal of support for regional climate action programmes.

During the first year of the new Cool 2 strategy, there has been no progress on the formation of a climate adaptation group to develop a local adaptation programme. However, a significant step forward has been the development of a draft green and blue infrastructure strategy commissioned by Wirral Council.

### **FOUNDATION FOR CHANGE**

### Wider climate understanding

Cool 2's objective is educate and raise awareness about the climate emergency and about the opportunities and benefits of taking climate action and the risks and threats of inaction and to make sure we have the right skills in place to do what needs to be done.:

#### Recent steps...

In support of the first Cool strategy (2014-19):

- A Cool Strategy launch party and annual events to celebrate local climate action were held
- Web pages for Cool Wirral were created
- A @CoolWirral twitter feed was maintained
- School 'Climate Challenge' events were held in 2015, 2016, 2017 and 2018
- Transition Town West Kirby and partners held annual Wirral Earth Fest events.
- A series of environment and climate e-bulletins were sent out.

- The 'light's out' project involved 15 schools working with artists to create artworks to highlight local species under pressure from climate change and habitat loss.
- Planet Heswall produced the Heswall Green Map
- Faiths4Change organised climate change events as part of Interfaith Week
- Wirral Council declared and Environment and Climate Emergency in July 2019

Wirral has benefited from a well-established local eco-schools programme. It also enjoys an above average belief in climate change with a clear majority of the public wanting to make lifestyle changes. Despite progress with some objectives, the Cool Wirral Partnership recognised the importance of the need for wider engagement activity still when reviewing progress with the original Cool strategy.

In the period since the adoption of Cool 2, efforts to promote wider engagement have been impacted by Covid 19 restrictions limiting face to face activity and limiting opportunities for public information which has been dominated by public health messages instead, nevertheless:

- Faith communities have been engaged with the Cool Places of Worship programme
- Community groups/organisations have been engaged with the Cool communities.
   programme
- Several partner organisations have had staff/volunteers complete recognised Carbon Literacy training including Wirral Council, Energy Projects Plus, Wirral Environment Network. Faiths 4 Change and Planet Heswall
- In January 2020, Planet Heswall showcased the latest version of the Heswall Green Map at the 'Science Under The Stars' event held at Heswall Primary School
- In June 2020, Planet Heswall, in collaboration with Together Films and Rethink Now CIC, screened an award-winning environmental film (2040) online to over 100 Heswall residents simultaneously. Following the film, an interactive panel Q&A session was held,
- In November 2020, Planet Heswall, working in partnership with Transition Liverpool and Climate Psychology Alliance, held the first virtual Climate Café in the Liverpool City Region, to a pilot audience
- In December 2020, Wirral Environment Network organised the online Wirral Speaks on Climate Change event featuring speakers from the Cool Wirral Partnership

### Adequate resourcing

Cool 2 introduced a new objective to secure increased investment to match the scale of the challenge.

In the period since the adoption of Cool 2:

- Wirral Council has allocated an extra budget of £250 thousand each year to support the environment and climate emergency response
- There have been multiple bids for financial support to progress projects associated with climate strategy themes

### Stronger partnerships and networks

Cool 2's objective is to ensure climate action is given the priority it needs and is developed in a coordinated way with key organisations, interests and networks involved to provide mutual support.

### **Recent steps**

During the period of Cool (2014-19):

- The Wirral Climate Change Group became the Cool Wirral Partnership with new terms of reference and an independent chair.
- A new local group 'Planet Heswall' was established. The group registered as part of the Transition Network as a Transition Initiative, becoming the second Transition Town on the Wirral, after Transition Town West Kirby
- Wirral Chamber launched the new Wirral Energy & Environment Forum and organised a programme of events and activities bringing businesses together
- Faiths4Change established the Merseyside Climate and Faith Network following on from an initial interfaith week climate event held in Birkenhead

### Since the Cool 2 strategy:

- The Cool Wirral Partnership has maintained its meeting programme and expanded participation to include youth ambassadors
- Partners involved in progressing Cool 2 with schools, places of worship, businesses, communities and homes, met informally as a 'cool family' online to collaborate to share experience and resources using online tools
- A new zero carbon community group has started arising from participation in the Cool Communities programme

### **Evidence informed action**

Cool 2's objective is to build a better picture of where we are at, what needs to be done and the impact of our actions through the collation and examination of the evidence and data available. This report refreshes data sources to present a more detailed picture of the current situation across Wirral

### Looking ahead

2021 will be a critical year for local and wider climate action. Understandably eclipsed by a global pandemic during 2020, the climate crisis has not gone away. As we recover from the pandemic, there is a pressing need to do so in a manner consistent with the climate challenge.

With the UK government due to host and chair the UN's delayed conference of the parties in Glasgow, it is likely the climate crisis will enjoy a much higher profile during 2021. Locally we need to take advantage of this to encourage wider local action in support of Cool 2. As the UK government, and governments around the world, bring forward new plans in support of achieving

the global goal of stabilising temperature rises to 1.5°C, it is vital that all those with an interest in Wirral bring forward their Locally Determined Contributions in support of Cool 2's goals.

Success depends on the combination of actions from well beyond the Cool Wirral Partnership. Share this report. Share the Cool 2 strategy too. Think what it means for you. Identify the actions you are going to take at home, in your community, and in your workplace if you have not already done so. As this report highlights, we have started the journey but still have a mountain to climb:

- Read the strategy available at: <a href="www.wirral.gov.uk/climatestrategy">www.wirral.gov.uk/climatestrategy</a>
- Join the free mailing list to keep in touch via <u>www.wirral.gov.uk/coolwirral</u>
- Follow @CoolWirral on twitter.

