

# Winchester Carbon Neutrality Action Plan 2020-2030 Up-date Report No.2

Health & Environment Policy Committee  
7 July 2020



# Up-date report No.2

## Declaration One Year On...

### Action Plan – Ten Priorities

Transport

Energy

Property & Housing

Mitigation and Bio-diversity

Business

Engagement

### Reporting and data

### COVID Challenges and Opportunities

External and Internal

Response and a green recovery

### Actions for 2020

Service plans

Engagements and Carbon Neutrality Strategic Partnership

# Climate Emergency Declaration - First anniversary



**500 +**  
TREES PLANTED

**WILDFLOWER**  
AREAS CREATED

**849 M<sup>2</sup>**   
**SOLAR PANELS**  
BEING INSTALLED AT  
**WINCHESTER SPORT & LEISURE CENTRE**

PURCHASED  
**GREEN ELECTRICITY**  
CUTTING COUNCIL'S  
CO<sup>2</sup> EMISSIONS   
**BY 19%**

Tackling the

**CLIMATE  
EMERGENCY**

 **£10M**  
TO CUT CO<sup>2</sup> IN  
COUNCIL HOUSING

A CARBON NEUTRAL  
COUNCIL   
**2024**

PLANS FOR  
**ELECTRIC CHARGE**   
POINT NETWORK

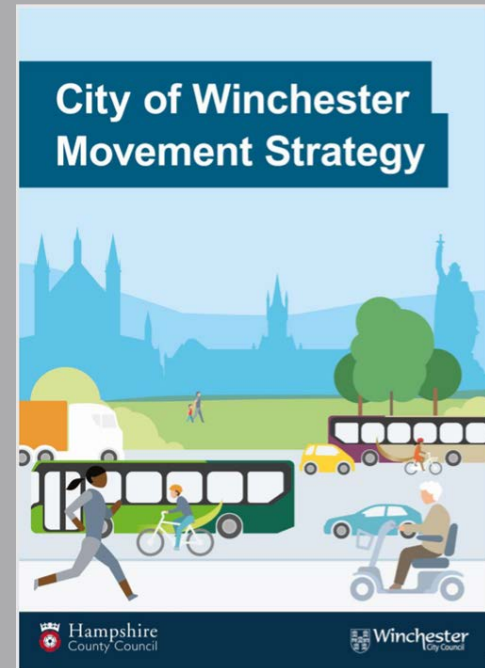
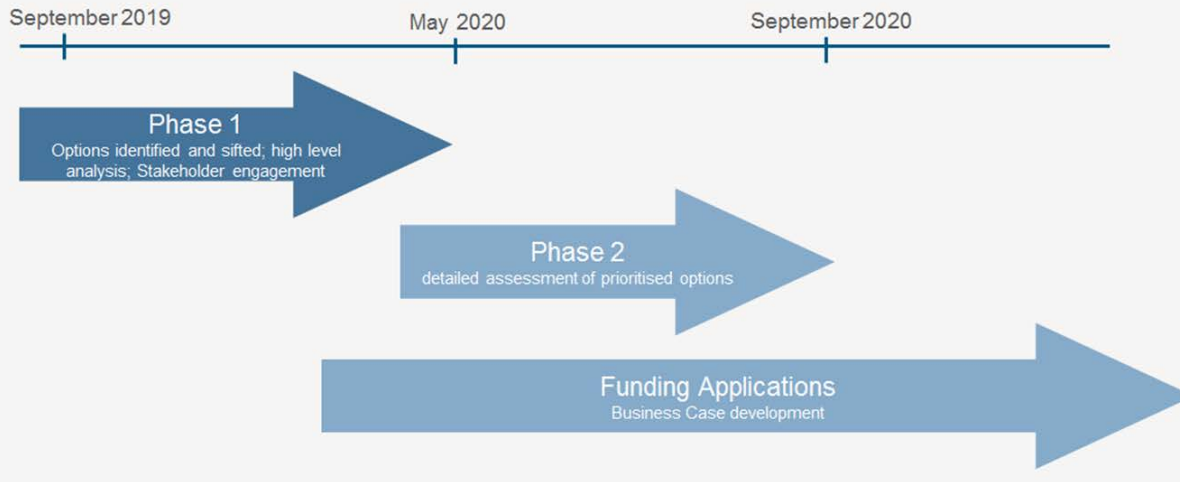
A CARBON NEUTRAL  
DISTRICT  
**2030** 

# ACTION PLAN – Ten priorities

# TRANSPORT

## 1. City of Winchester Movement Strategy

### WMS Feasibility Studies - Programme



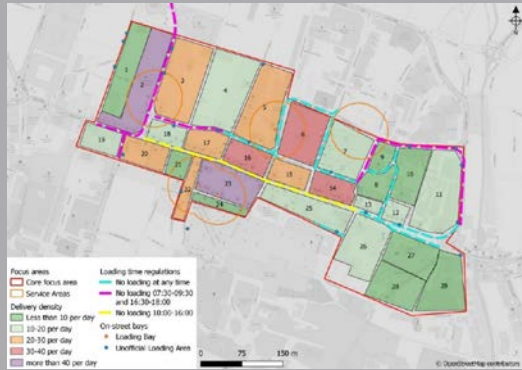
Members briefing held June 10<sup>th</sup> to summarise Phase 1

**New Parking and Access Strategy** - with differential fees and fund to invest in public transport.



## LCWIP –

Walking and cycling networks identified. These options to be advanced with further stakeholder engagement.



## Movement & Place Plan –

Working closely with the LCWIP team. Detailed analysis of potential interventions and movement designs to be undertaken.



## Freight and Delivery Strategy –

Option prioritisation with stakeholders underway to agree a preferred strategy

## Bus Provision –

Stakeholder engagement and route analysis / future capacity assessment undertaken. Working closely with CWR team.



## P&R –

High level assessment of service and demand undertaken. Private Non Residential parking survey undertaken. Assess potential site options



# TRANSPORT

## 2. EV charging points; &

## 3. Increase park and ride provision

Increased park and ride at the Vaultex site will reduce traffic on the road network, pollution and carbon emissions within the city centre and encourage more people to walk and cycle into the city centre.

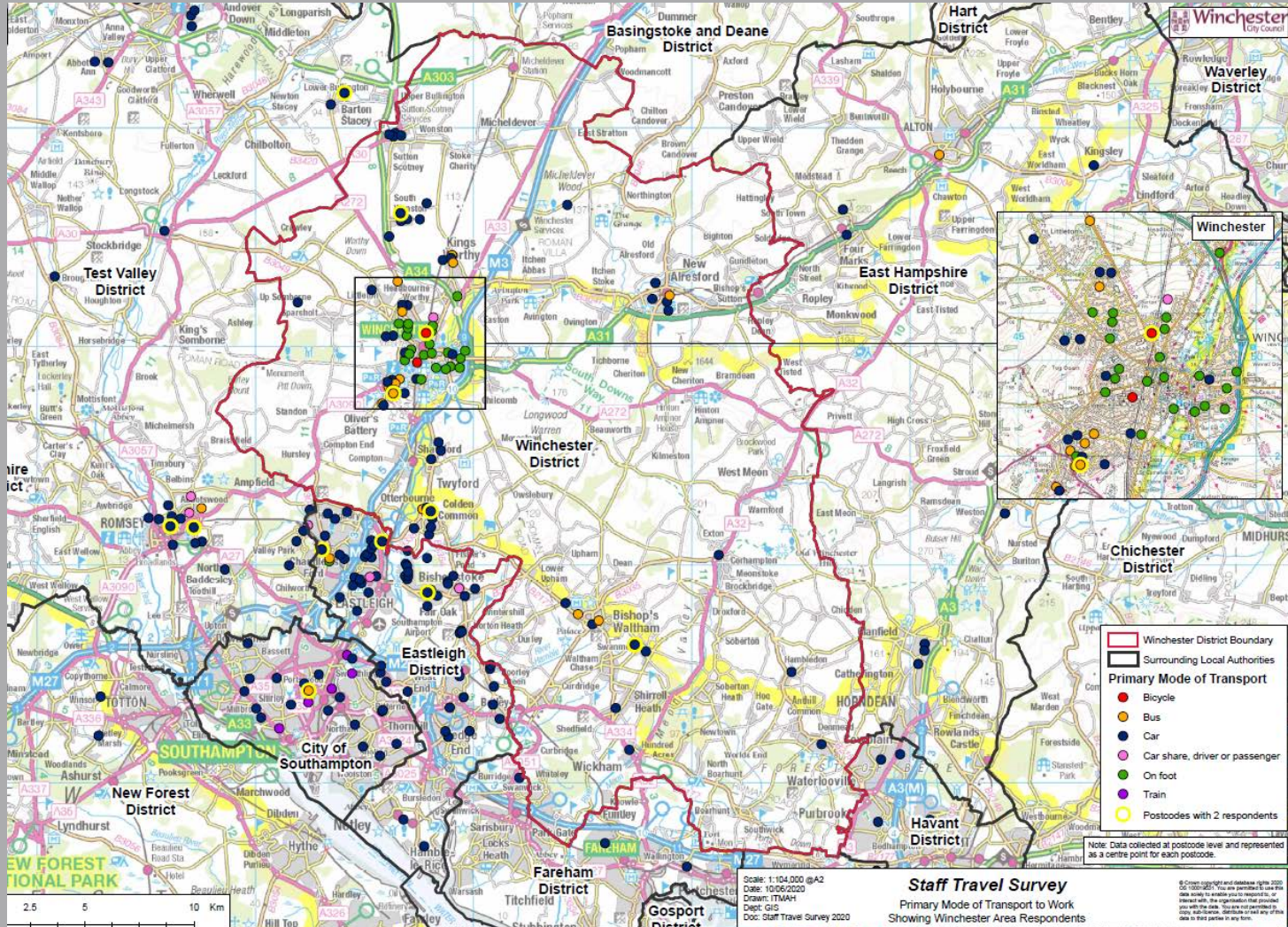
### Surface car park:

- planning permission granted for 135 space Park & Ride
- EVCP in line with EV strategy

### Decked car park:

- Business Case approved by EM3 LEP for £5.65m for design, planning and construction of a
- 300+ space P&R, potentially up to 30 double Electric Vehicle Charging Points (EVCP) and a Photovoltaic Array (PV) and battery to support the electricity demand on site

# STAFF COMMUTING SURVEY – 635 TCO2E





# STAFF COMMUTING SURVEY

## Findings / outcomes

- 62% of staff took part in this survey
- 76% of staff use a car as their main mode of transport to commute to the office
- 87% of staff work in City Offices
- Out of the WCC average annual emissions - 90% is produced by cars, 5% from getting the bus and 5% from the train
- Just over a fifth of staff travel over 30 miles to commute to work (round trip)

The move to working remotely and from home has significantly reduced car travel –

- 81% overall reduction of both km travelled and CO<sub>2</sub>
- 284,048km staff commuting in January compared with just 54,133km in June.
- CO<sub>2</sub> produced has dropped from 54 tonnes a month in January to just over 10 tonnes in June.



**Green recovery  
opportunity**

# ENERGY

## 4. 100% electric purchased from renewable sources

- Green tariff from 1 April – around 770 tonnes of CO<sub>2</sub>e that equals a 19% net reduction in council emissions
- In-direct Council sites still to be added (e.g. Leisure Centres - operated by third party so no direct control over supplier)

## 5. Large scale renewable energy generation

- Investigation into potential solar farm location
- Identified multiple roof-tops for medium sized roof-mounted systems
- Up to 4 megawatt of Solar PV potential in pipeline

# PROPERTY AND HOUSING

## 6. Passivhouse scheme

- Micheldever housing scheme – 6 flat scheme being designed to meet Passivhouse standards. Positive discussion with Planning team. Webinar public engagement planned for July and final business case to Cabinet by September 2020

## 7. Invest in energy and water efficiency measures

- Winchester Sport & Leisure Centre –The panels on the new leisure building will include 849 square meters of photovoltaic panels that can generate at least 140,000 kilowatt hours of green energy a year.
- Refurbishing the pavilion at Chilcomb sports ground to include energy efficient LED lighting with dimming controls and presence detection, plus installation of infrared heating.



# PROPERTY AND HOUSING

## Re:fit programme

Estimated investment and savings based on a high level benchmark of our available data:

- budgeting for a £1m investment could achieve an estimated 600tpa carbon savings

Measures include:

-  deep retro fit to council property and
-  Potential annual rooftop solar electricity generation in excess of 150,000 kWh

Asset number	Building/Site Name
1	Guildhall
2	City Offices
3	West Wing/Kings Court
4	Basepoint
5	Car Park – Brooks Underground
6	Car Park – Chesil Multi Storey
7	Danemark Court
8	Makins Court
9	Matilda Place
10	Richard Moss House
11	White Wings House
12	Meadowside Leisure Centre









# PROPERTY AND HOUSING



## 8. Local Plan up-date with emphasis on local carbon development

It is essential that the Council's emerging Local Plan is developed through the climate change lens.

Close working relationship with officers from the Local Plans team on potential policies:

-  climate intervention areas to target areas of the District that need improvement
-  higher requirements than the current Building Regulations
-  Require developers as part of the planning application process to consider the whole life carbon footprint of a building
-  A sympathetic policy approach towards energy efficiency in historic buildings
-  Require developers to consider the impact of overheating
-  Sustainable Drainage Systems (SuDS) / Rain water gardens
-  Increased water efficiency standards
-  Integrate the ability for people to grow their own food on larger development proposals

# PROPERTY AND HOUSING





**Green recovery  
opportunity**

Net Carbon Zero Development

 Members training on 23 June and 1 July

Options being considered:

-  All new development would be required to produce an 'Energy, Water and Carbon Assessment'
-  Should a development not be able to achieve carbon neutrality, a Carbon Offsetting fund could be created to decarbonise the district (last resort)

# MITIGATION / BIODIVERSITY

## 9. Plant at least 100 tree per annum

- Over 500 trees planted
- Tree survey of Council stock to identify new maintenance regime

## 10. Identify 100 acres for new habitat creation

- Bio-diversity plan – approval to commence work
- New meadow created this year at Sainsbury's roundabout Badger Farm – 400m<sup>2</sup>
- 3 schemes planned for planting this autumn



# CONTRIBUTING WORK

## Waste & Recycling

Council waste reporting starts 2020/21

New Biffa contract for 8 years; Euro 6 Diesel engines;  
67% less carbon emissions than Euro 5

## Business

- Third party solar scheme principles in advanced discussion
- Sustainable Business Network webinars
  - April 3rd Webinar - Net Zero Carbon for SMEs - 35 attendees
  - July 10th Webinar - Sustainability in Fashion - 100 booked inc. UoW students



**Green recovery  
opportunity**

## Engagement

- Greening Campaign with Parishes
- Green Week 2020



# REPORTING AND DATA

## Council Carbon Footprint report 2018/19

- **4.3%** reduction of compared to the previous year and 26.9% reduction when compared to the baseline year.
- Saving of 182 tonnes CO<sub>2</sub>e

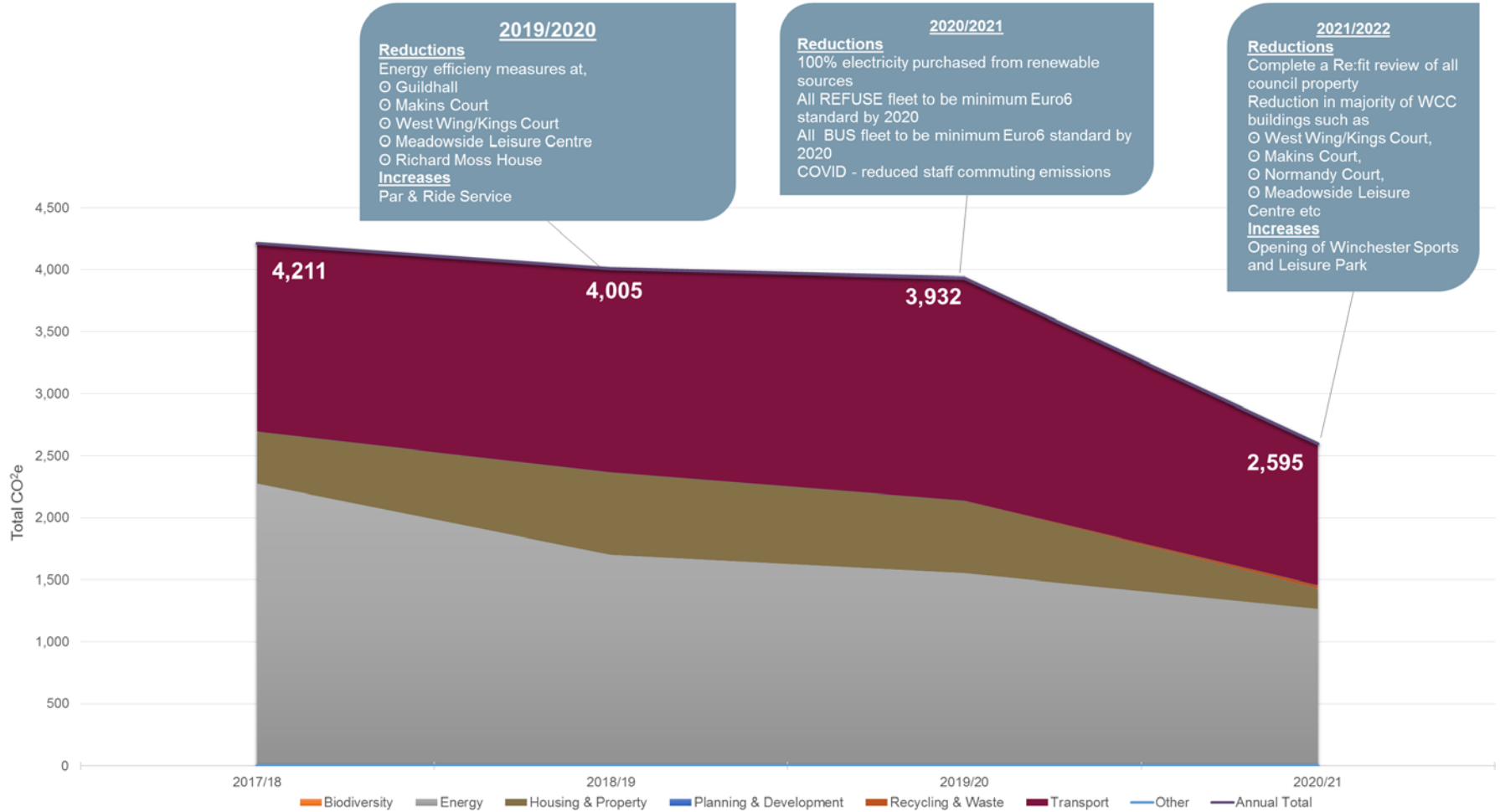
## Council carbon footprint report 2019/20

- Provisional report expected in August
- Expected to show a small reduction, due to increasing scope

## Council carbon footprint 2020/21

- Detailed forecasting work underway

# COUNCIL CARBON EMISSION GRAPH





# REPORTING AND DATA


## Carbon emission mapping across the district



The work was commissioned from WinACC.

This is the evidence to support a larger / longer term programme of work in the our communities.

 By identifying the areas with highest emissions, we would prioritise

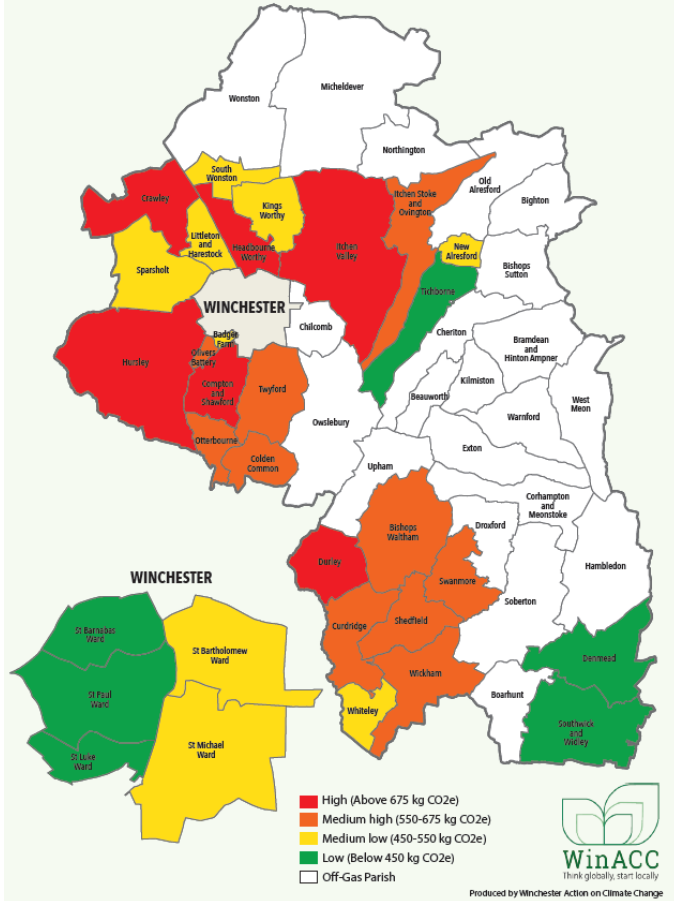
-  energy efficiency schemes in that neighbourhood
-  Give direction to help create community energy groups.

 The next phase of mapping will include

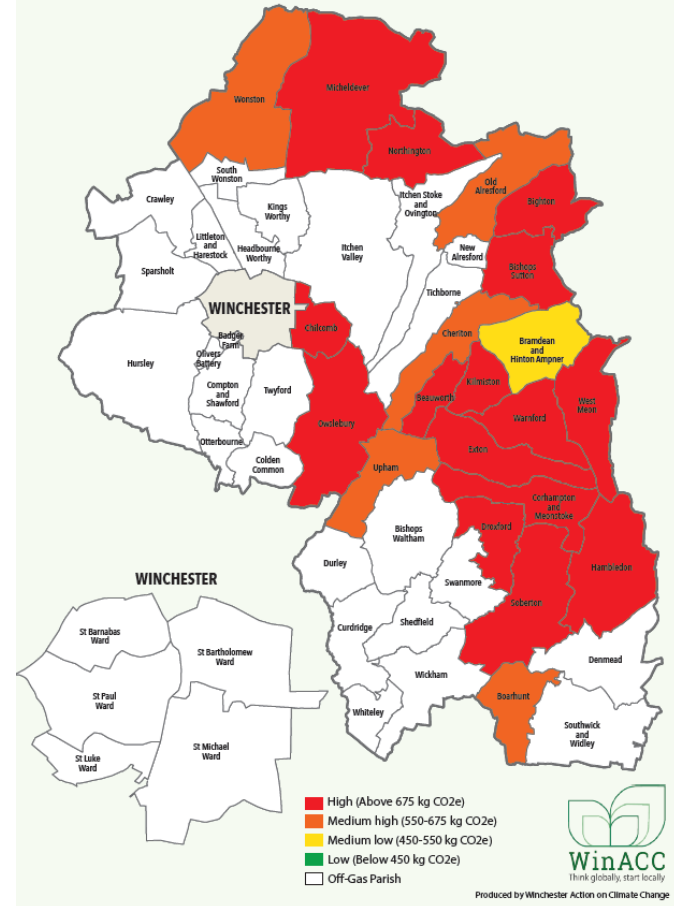
-  solid fuel data and socio-economic data to help direct our communication strategy with these communities
-  EPC data so that we know what condition the buildings are in, and what method (e.g. insulation, double glazing, solar panels) would be most effective in that area.

# PARISH LEVEL CARBON EMISSION MAPPING

Domestic electricity emissions per head in Winchester District in 2018 for On Gas Parishes (kg CO2e)

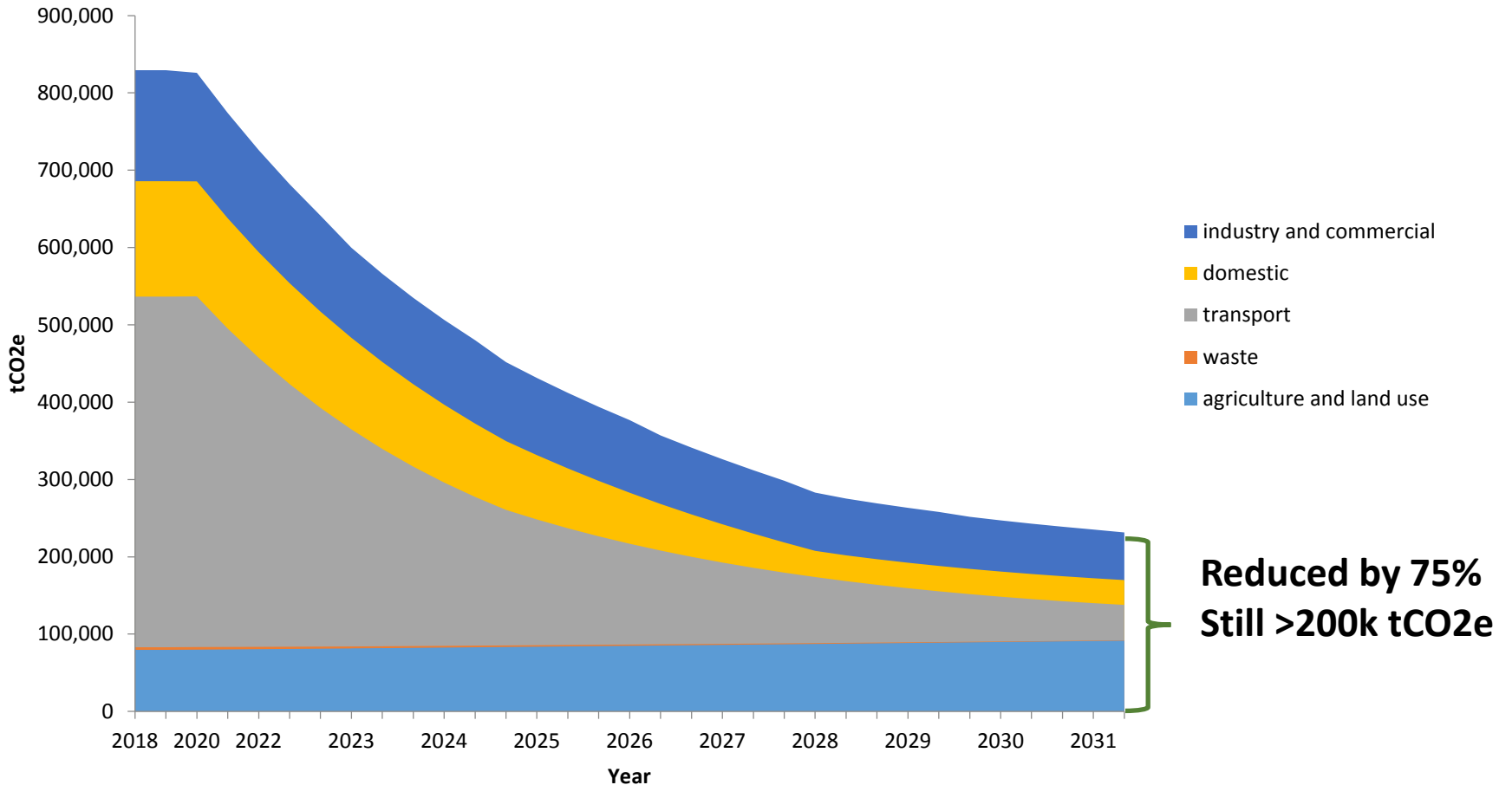


Domestic electricity emissions per head in Winchester District in 2018 for Off Gas Parishes (kg CO2e)



# DISTRICT CARBON EMISSIONS

Our projections estimated from a series of interventions  
(next slide)






# DECARBONISING DISTRICT – HEADLINE INTERVENTIONS FROM GRAPH




Agriculture and land use - Forestry	5% increase in forest cover by 2030.
Domestic space heating and hot water - New build	From 2021, 100% new-build properties are built to passivhaus standard.
Domestic space heating and hot water - Retrofit	By 2030, 10% of current stock is retrofitted to a medium level; 80% deep retrofit.
Onshore wind	Large-scale onshore wind generation grows to 1.26 MWh per hectare in 2030; 1.46 MWh in 2030.
Solar PV - Large	No change in large-scale solar generation to 2022; growing to 100 kWh per hectare in 2030 (from a baseline of 50 kWh per hectare.)
Solar PV - Small	Local solar capacity grows to allow generation equivalent to 1350 kWh in 2030 (from a baseline of 400 kWh per household.)
Commercial heating and cooling - Demand	In 2030, commercial heating, cooling and hot water demand is 60% of today's levels
Commercial heating and cooling - Technology	By 2030, majority of heating is with community-scale heat networks
Industrial processes - Efficiency	Industrial electricity consumption is 50% of total energy consumption by 2035; 65% by 2030. Output falls by 2% every year for non-heavy industry.
Domestic freight	By 2030, 22% decrease in distance travelled by road freight; 75% increase in efficiency. In waterborne transportation, 28% increase in use of waterborne transport.
Domestic passenger transport - Technology	Cars and buses are 100% electric by 2035, rail is 100% electric by 2030. Average occupancies increase to 18 people per bus km (from 12), 1.65 people per car-km (up from 1.56), and 0.42 people per rail-km (from 0.32).

# COVID CHALLENGES

## External

-  Reduced investment – concentrate on business critical
-  Unknown level and duration of impacts yet to come
-  Disrupted supply chains / available resources

## Internal

-  Diverted resources
-  Financial pressures and budget constraints
-  Capacity in contractor and supply chain

## Meeting the target

-  Major scheme / something transformational

# COVID OPPORTUNITIES - GREEN RECOVERY

## Retaining the beneficial changes



**Green recovery  
opportunity**

### More online services developed

- Businesses have created on line services, local delivery by bike, virtual tours and access – some reaching communities they have not engaged with before.

### Reduced car travel and increased remote working

- Many employees now working at home utilising digital tools and platforms – need to ensure connectivity across the district

### Increased walking and cycling

- With reduce car traffic there has been increased walking and cycling and improved air quality. Schemes to reopen district centres have included priority for pedestrians and space for cyclists – need to plan for how to retain these temporary changes.

### Increased use of local centres

- With travel restrictions people are using their local centres for goods, services and supplies - need to maintain a campaign of use local and strengthened community resilience.



# ACTIONS FOR 2020 - Service plans

## TRANSPORT

### Head of Programmes

- City of Winchester Movement Strategy
- Encouraging more active transport in the city through increasing cycling and walking
- Reducing vehicle movements in the city centre and providing increased park and ride space
- Reducing freight deliveries and vehicle movements in the city centre
- Developing an improved bus partnership to increase bus usage
- Bidding for Local Enterprise Partnership and Government funding for investment in innovative smart low carbon transport

### Regulatory

- New Taxi Licensing policy, which will change specifications, to reduce emissions in the taxi fleet.
- Install new EV charging points into Council car parks by September 2020

## PROPERTY & HOUSING

### Asset management

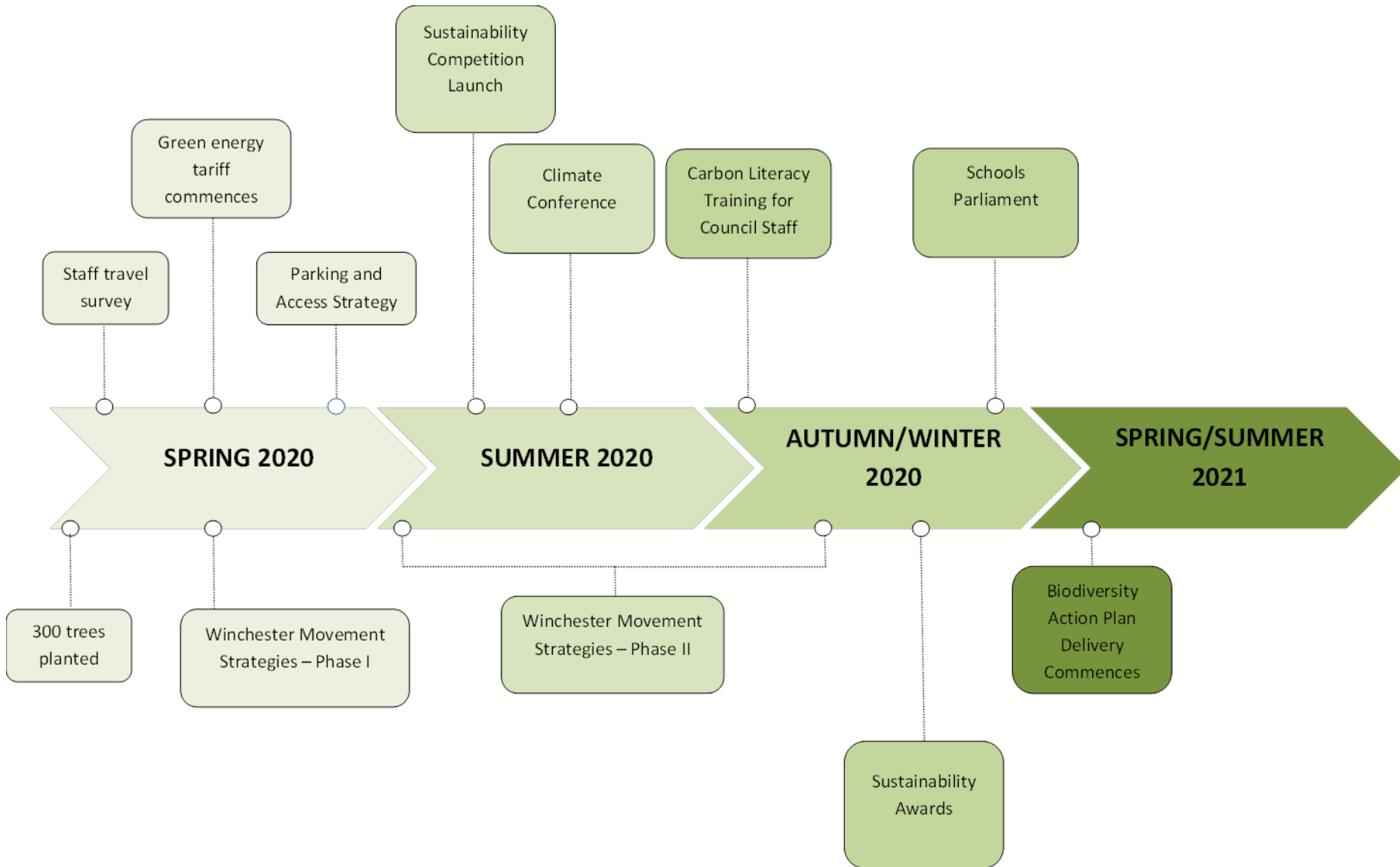
- Review Energy Performance Certificates for each building
- Manage a programme of Energy Improvement Works including the following initiatives:
  - Building Insulation
  - Solar panels
  - Window replacement
  - Energy saving lighting
  - Green Roofs

## ENGAGEMENT

### Engagement

- Grant fund projects from the sustainability / low carbon grant fund on the Crowd Funding Platform
- Sustained behaviour change campaigns – businesses, visitors and residents
- Provide information and advice and signposting through the council's website
- Provide and share information and sustainable living and on support in local communities

# Engagement



# CARBON NEUTRALITY STRATEGIC PARTNERSHIP

- COVID - green recovery and opportunity to take forward benefits gained.
- Debate and collaborate on a specific themes at each meeting, transport, energy etc.
- Link to existing regional and local networks and groups.

Aims	Goals	Organisations to be invited
<ul style="list-style-type: none"> <li>• Clearly set out the Carbon Neutrality challenge and opportunity</li> <li>• Galvanise action to deliver carbon neutrality</li> <li>• Gain commitment to work together</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate leadership and develop a collaborative approach</li> <li>• Capture expertise and knowledge and gather ideas and actions</li> <li>• Identify sources of support, funding and investment</li> <li>• Build a community of the willing to be advocates and champions</li> </ul>	<ul style="list-style-type: none"> <li>• Hampshire County Council</li> <li>• WinACC</li> <li>• Rotary Club in Winchester</li> <li>• Sustrans</li> <li>• Hampshire Chamber of Commerce</li> <li>• Sustainable Business Network</li> <li>• University of Winchester</li> <li>• St Johns Winchester</li> <li>• Winchester Green Week</li> <li>• South Downs National Park</li> <li>• Extinction Rebellion Winchester</li> <li>• NHS Trust</li> <li>• Winchester College</li> <li>• Friends of the Earth</li> <li>• Hampshire Climate Action Network</li> <li>• Transport operators</li> <li>• Utility suppliers</li> <li>• Construction/ development sector</li> </ul>

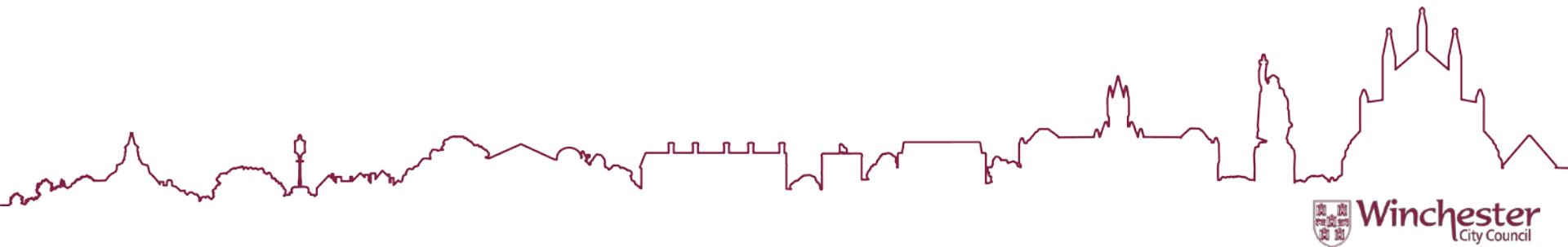
# FUTURE PRESENTATIONS

September 2020

 Council carbon footprint report 2019/20

 Longer term carbon forecasting

 Third-party solar project



Thank you  
Questions

