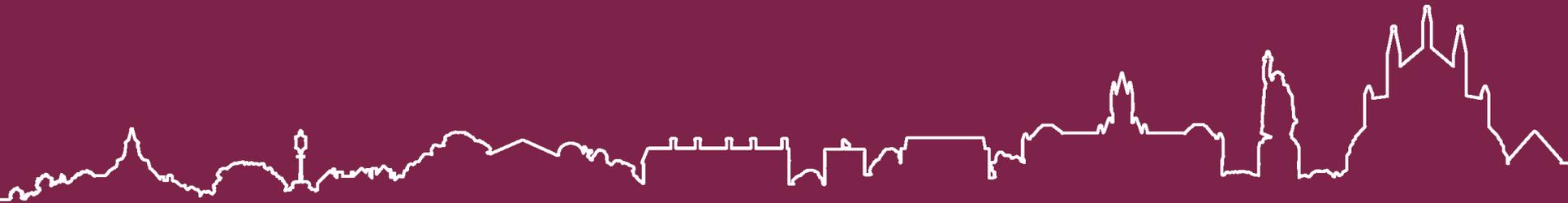


Climate Emergency Action Plan

Health & Environment Policy Committee

9 October 2019



OVERVIEW

Context

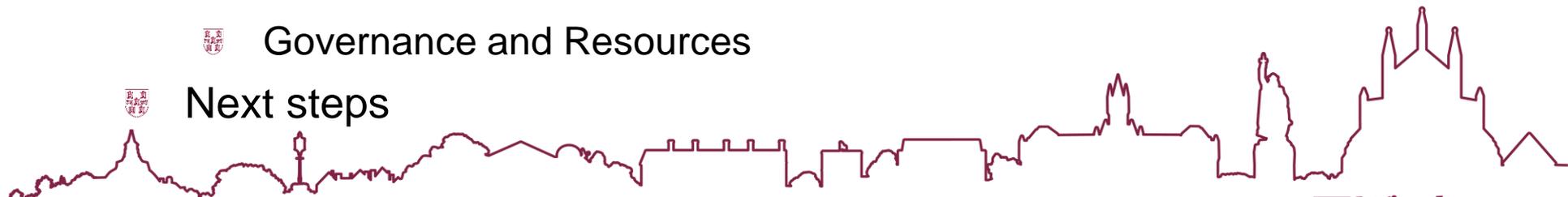
-  the Climate Emergency Declaration, risk and challenges
-  UN Sustainable Development Goals and other policy
-  History and process so far

Action Plan

-  Framework, vision, definition and scope
-  Trends and legislation
-  Evidence base, case studies and starting point
-  Framework Action Plan
 -  Council direct control
 -  Council policy and influence
 -  District

Governance and Resources

Next steps



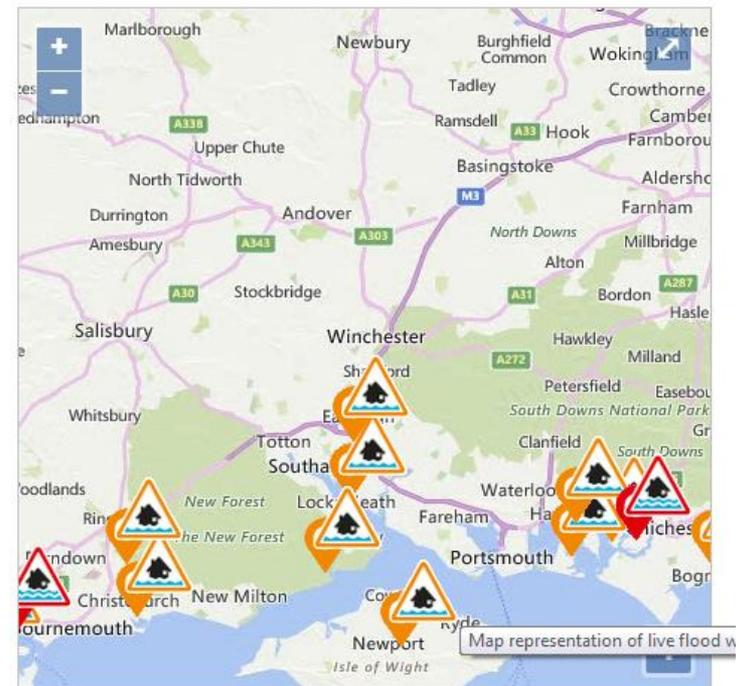
CONTEXT

Climate emergency declaration

-  Commit to the ambition of making the activities of Winchester City Council carbon neutral by 2024, taking into account both production and consumption emissions (scope 1, 2 and 3 of the Greenhouse Gas Protocol, GHG) and the district of Winchester carbon neutral by 2030 (scopes 1 & 2 of GHG protocol).
-  Publish a report within six months setting out the immediate actions the Council will take to address this emergency and a plan to measure annual district progress towards meeting the 2030 target.
-  Work with partners across the district to deliver this new ambition throughout all relevant strategies and plans, drawing upon local and global best practise.

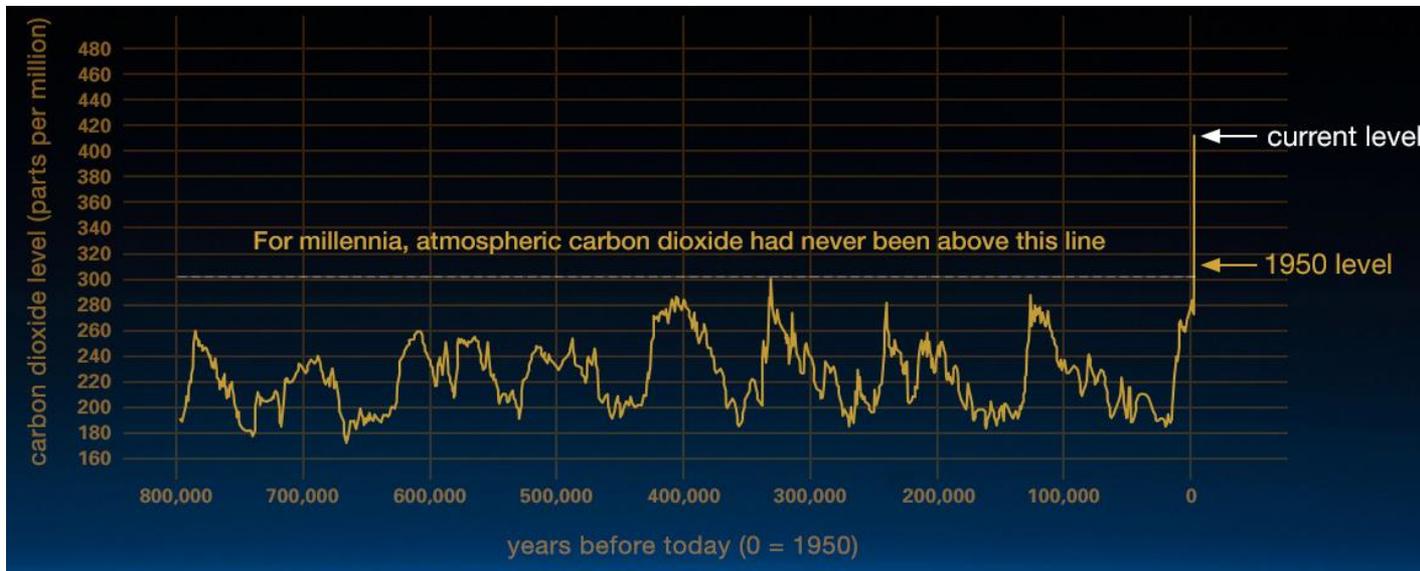
IMPACTS OF CLIMATE CHANGE

- Increased extreme weather events
- Flooding – damage to property, disruption to business, health and wellbeing of displaced residents etc...
- Heat and cold – health risk for vulnerable people, pressure on emergency and health services etc...
- Drought – pressure on river system health, depleted aquifer/reservoir volumes; negative impact upon agriculture; fire risk
- Many terrestrial, freshwater, and marine species will shift their geographic ranges, seasonal activities, migration patterns, abundances, and species interactions in response to ongoing climate change



CLIMATE CHANGE - CHALLENGES

- Oil likely to be used as a transition fuel; e.g. planes likely to be powered by oil.
- Agriculture will need to reduce fertiliser use, reduce emissions, capture methane and carbon.
- We will need to consume less and repair more of our products.
- The ratio of anthropogenic carbon released into the atmosphere needs to be better balanced by the amount the land and seas absorb

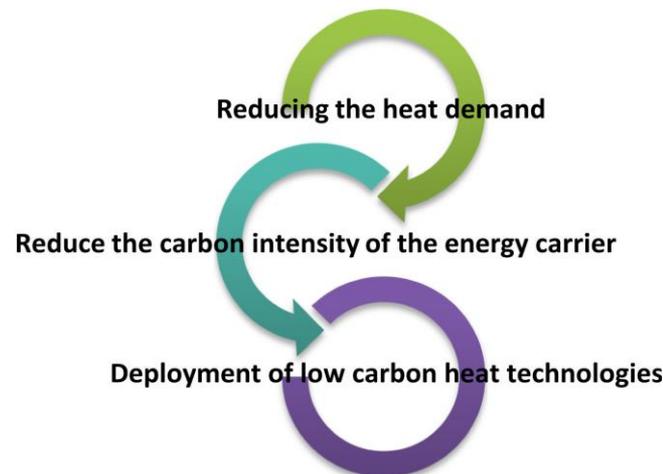


Graph: Nasa https://climate.nasa.gov/climate_resources/24/graphic-the-relentless-rise-of-carbon-dioxide/

CLIMATE CHANGE - CHALLENGES

Delivering a carbon-neutral district will vary across sectors and include:

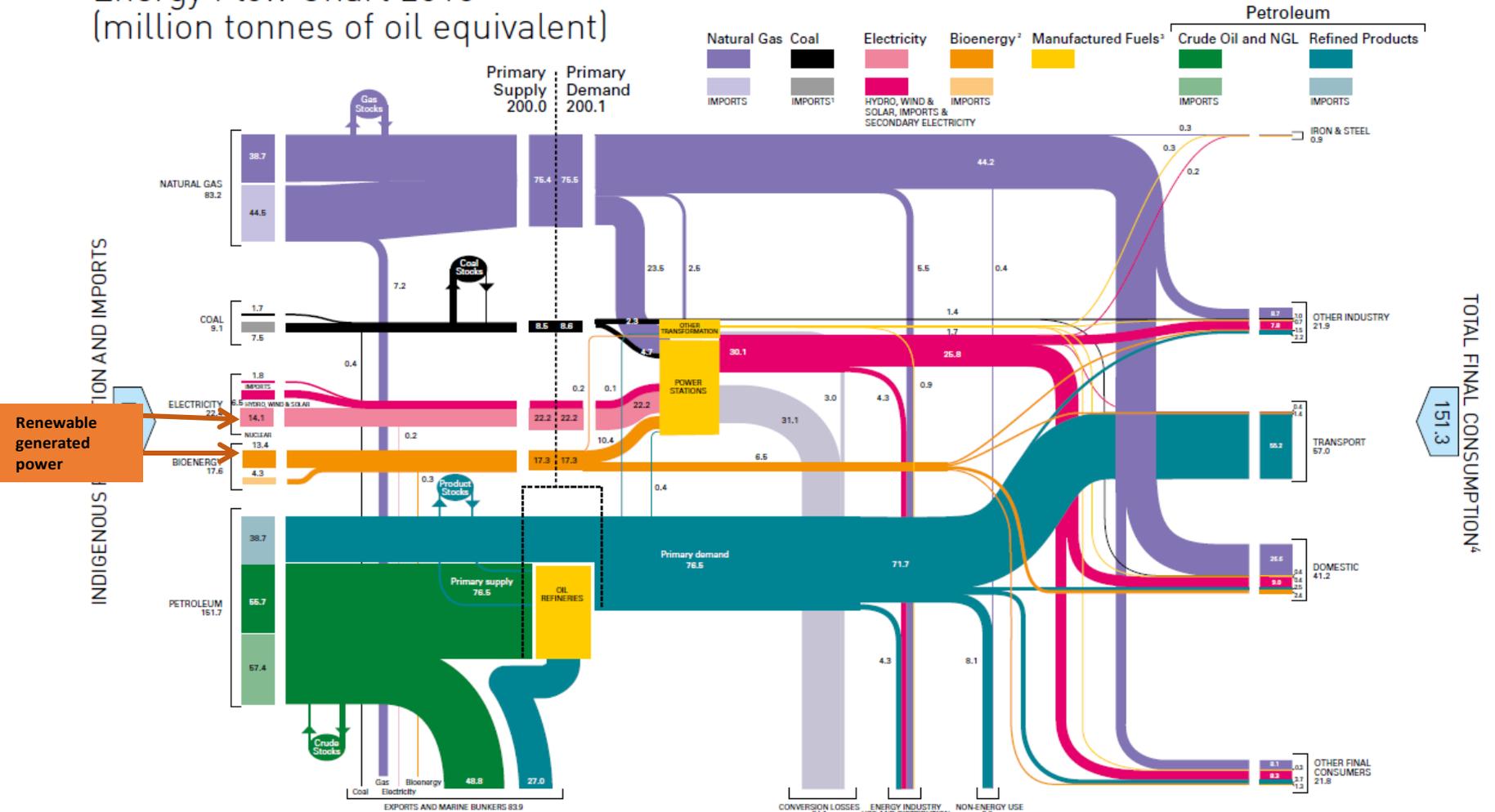
- Electricity will need to be generated from renewable sources
- Road vehicles will need to be running on near zero carbon fuel-types (electric, bio-methane or hydrogen)
- Retro-fit of buildings currently being heated by oil, gas or coal
- When heating and transport is electrified, greater strain will be put on the electricity grid increasing demand and the need for additional renewable generation



Choudry et al., 2015 Decarbonising heat in the UK; 3-fold approach

UK Fuel use by type 2018

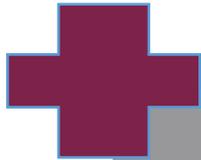
Energy Flow Chart 2018
(million tonnes of oil equivalent)



FOOTNOTES:
 1. Coal imports and exports include manufactured fuels.
 2. Bioenergy is renewable energy made from material of recent biological origin derived from plant or animal matter.
 3. Includes heat sales.
 4. Includes non-energy use.
 This flowchart has been produced using the style of balance and figures in the 2019 Digest of UK Energy Statistics, Table 1.1. (Gross calorific value basis)

CONTEXT

 Factors effecting growth (+) and reductions (-) in emissions



Population growth
New developments: housing
and commercial buildings



Shift to more efficient car
engines
Increase in electric vehicles
Increase in renewable
generation in energy
production / supply
More energy efficient
buildings (new & retro-fitting)

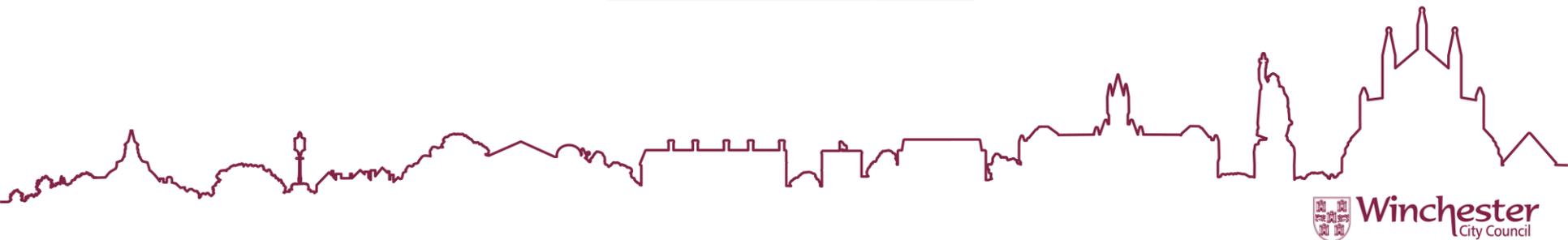
CONTEXT – A GLOBAL ISSUE & RESPONSE

SUSTAINABLE DEVELOPMENT GOALS



CONTEXT - POLICY

- International – The Paris Agreement
- Government – UK Industrial Strategy challenge of Clean Growth
- Enterprise M3 LEP – Local Industrial Strategy
- South2 East Energy Strategy
 - Three LEPs – Coast to Capital, Enterprise M3 and the South East LEP – have worked together to create an Energy Strategy for the South East, an area spanning all the way from Harwich to Winchester.



WHAT OTHERS ARE DOING

-  **UK Government** - declared climate change emergency and net zero carbon by 2050.
-  **Hampshire County Council** – Pledge to make Hampshire carbon neutral by 2050, taking into account both production and consumption emissions;
-  **East Hampshire** - Pledge to make East Hampshire District Council carbon neutral by 2030
-  **Eastleigh Borough** – Aim to be carbon neutral by 2025 and to support communities and businesses across the Borough to achieve carbon neutrality by 2030
-  **Oxfordshire County Council** - the council has been working on a new action plan to accelerate the climate action programme to become carbon neutral by 2030

HISTORY

- Local Carbon Board attended by:
 - University
 - WinACC
 - Winchester Walking Group
- 12 Actions to a Low Carbon Council
 - Reduction of 20% on 2015 CO2 levels
 - Achieved a reduction of 24%
- Route map to a low carbon economy in Winchester District - Actions approved by Cabinet (CAB2586)
 - Provide low carbon leadership and support the growth of the green business sector
 - To increase inward investment in renewable energy and energy-saving measures

Appendix 2: Twelve Actions for a Lower Carbon Council

1. We buy the most energy-efficient latest equipment and fittings for our buildings.
2. Our staff and Councillors will be trained in eco-driving that increases miles per gallon.
3. We are working with our waste collection service to review routes to reduce emissions from their lorries.
4. We install solar panels on the Council estate whenever this makes financial sense and the location and structures are suitable.
5. Sustainability underpins the Local Plan Parts 1 and 2.
6. In planning, specifying, assessing or making decisions on new major developments, we always ensure that one of the criteria is the development's contribution to cutting the carbon footprint of the District and shifting from fossil fuels to renewable sources of energy.
7. We will reduce the carbon footprint of the proposed new leisure facilities to as close to zero as financially and technically feasible, in respect of the use of the whole site, its construction, running emissions and user travel emissions.
8. We will facilitate the introduction of renewable energy initiatives, including solar and hydro-power, whether Council-owned or as community projects.
9. Where the City Council is responsible for commissioning public transport, we specify reduced emissions whenever a new contract is advertised and agreed.
10. We will carry out a mid-term review of the parking policy in 2016, seeking to align it more closely with the Council's economic strategy including its aspirations to build a local carbon economy.
11. We encourage other organisations, both public and business, to reduce their carbon footprint and shift from fossil fuels to renewable sources of energy.
12. We require organisations that are awarded grant aid and / or commissions to make a commitment to reducing their emissions in the Winchester District, and to report on their progress.

PROCESS SO FAR

 Reviewed evidence base

 Carbon footprint report

 WinACC report

 Looked at others

 Neighbouring LAs and leading places

 Enagements

 Council Service leads and managers

 Stakeholders and interested parties

 Members

 Residents

 Established project team

Climate Emergency Action Plan

Insert logo and brand from comms

CARBON NEUTRALITY - DEFINITION

“Carbon neutrality, or having a net zero carbon footprint, refers to achieving net zero carbon dioxide emissions by balancing carbon emissions with carbon removal (often through carbon offsetting) or simply eliminating carbon emissions altogether”

-  Carbon removal (beyond natural processes) through carbon offsetting, or the process of removing or sequestering carbon dioxide from the atmosphere.
-  Eliminating carbon emissions altogether through the use of wind and solar power - renewable energy that does not produce carbon emissions at all; making changes to industrial and agricultural processes to eliminate carbon production and carbon dioxide can even sometimes be prevented from entering the atmosphere entirely (such as by carbon scrubbing).

SCOPE

To cover Greenhouse Gas Protocol Scopes 1-3

 1 = direct emissions from owned or controlled sources

 2 = indirect emissions from the generation of purchased energy

 3 = all indirect emission in the value chain

and:

- Habitat Degradation
- Air Quality
- Biodiversity
- Health & Wellbeing

SCOPE

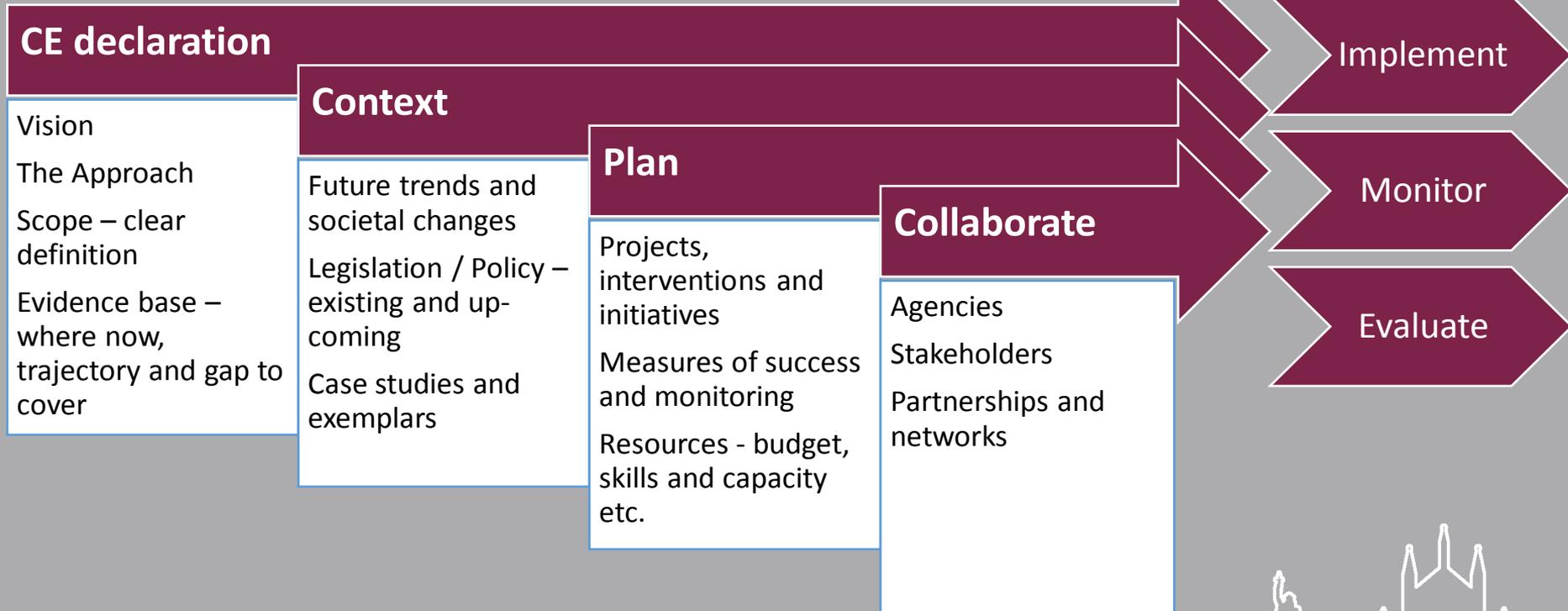
Figure 1: Assessment boundary

Scope 1 Direct Emissions	Scope 2 Energy Indirect	Scope 3 Other Indirect
<u>Fuel combustion</u> Natural gas, gas oil, petrol	<u>Consumption of purchased electricity, heat steam and cooling</u> Electricity	<u>Purchased materials and fuels</u> Water
<u>Owned Transport</u> Council-owned car and van travel		<u>Transmission and distribution of energy</u> Electricity
<u>Process emissions</u> None		<u>Leased assets outsourcing and franchising</u> Contractor emissions – van and lorry travel, Park & Ride service, leisure centres
<u>Fugitive emissions</u> Refrigerants		<u>Transport related activities</u> Rail travel, grey fleet & cash opt out car travel, flights
		<u>Sold goods and services</u> None
		<u>Waste Disposal</u> Residual & Recyclable

Key:

Within the assessment boundary	Not included within assessment boundary
--------------------------------	-----------------------------------------

ACTION PLAN - Framework



VISION (Stakeholder event)

What sort of place will Winchester district be in 2030:

-  A safe, comfortable, energy secure district
-  Health rivers and further improved bio-diverse habitats
-  Clear air and low pollution
-  Easy and affordable to get around
-  Livable places – dense with all you need within reach
-  Integrated and informed society – where action is the norm
-  Regulation and standards allow technology to support improvements and efficiencies
-  Commerce – green services and products / sharing and circular economies

THE APPROACH (Member engagement)

Policy

Incentivise rather than penalise

-  Reward actions and make people feel like they are gaining rather than having things taken away

Risk

-  Trial and test projects before large scale application
-  Be prepared to experiment and learn for later delivery – an evolving plan

Engagement

-  Universities – centres for research and student resources
-  School -children as future stakeholders and influencers
-  Leading businesses – e.g. Marwell
-  Landowners
-  Support communities to collaborate –share services and joint purchase
-  Electricity and gas network operators

THE APPROACH (Member engagement)

Off-setting

 Now / later

 Local / international schemes

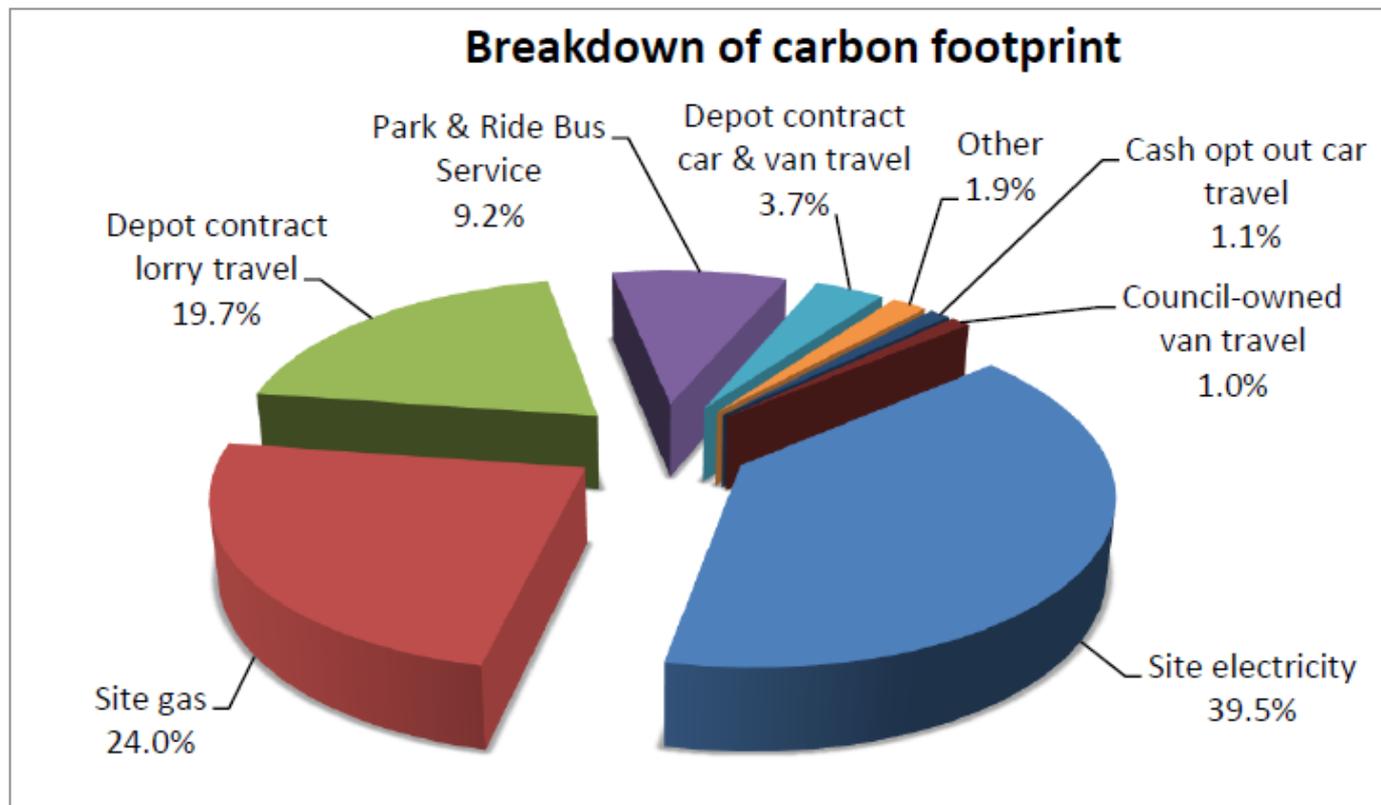
 Carbon elimination and / or reduction

 An example to achieve the Carbon Neutral Gold Standard and 'UN Climate Neutral Now' recognition would be initially offset 100% of your carbon emissions grant support from One Carbon World -if carbon the cost would be £600 + £1.20 per ton/CO₂ over 300 tonnes = £5,160

 Variety of projects available for offsetting- including tree planting, preventing deforestation, providing clean water and developing renewable generation sites overseas range of costs from £1/tonne CO₂ to £9/tonne CO₂ (range ~£5,000 to £45,000/annum)

EVIDENCE BASE – Council performance

 WCC Carbon footprint report 2017/18

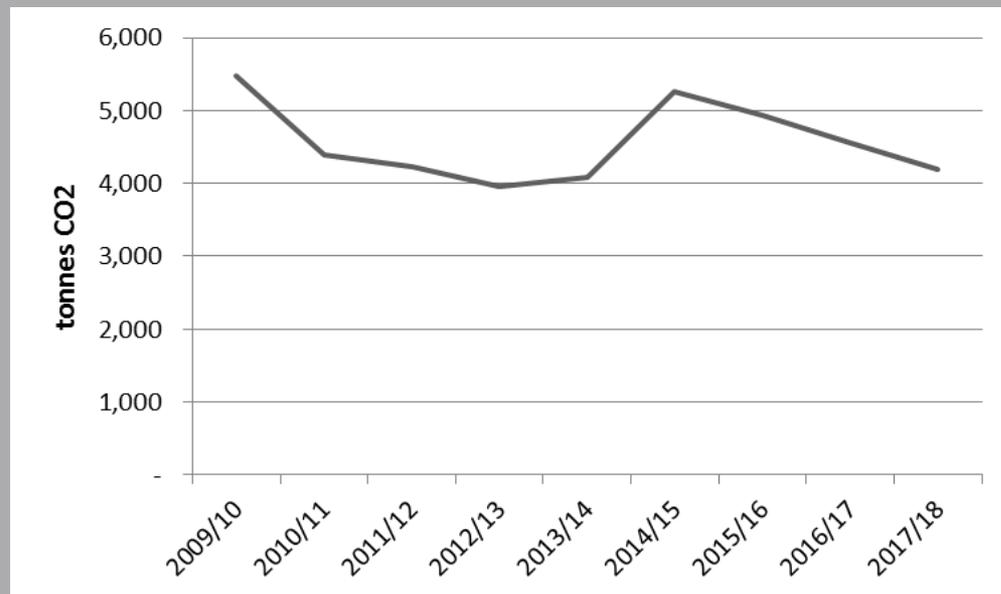


* 'Other' includes: Council-owned & employee-owned car travel, petrol & gas oil use, refrigerants, water, rail travel and air travel.

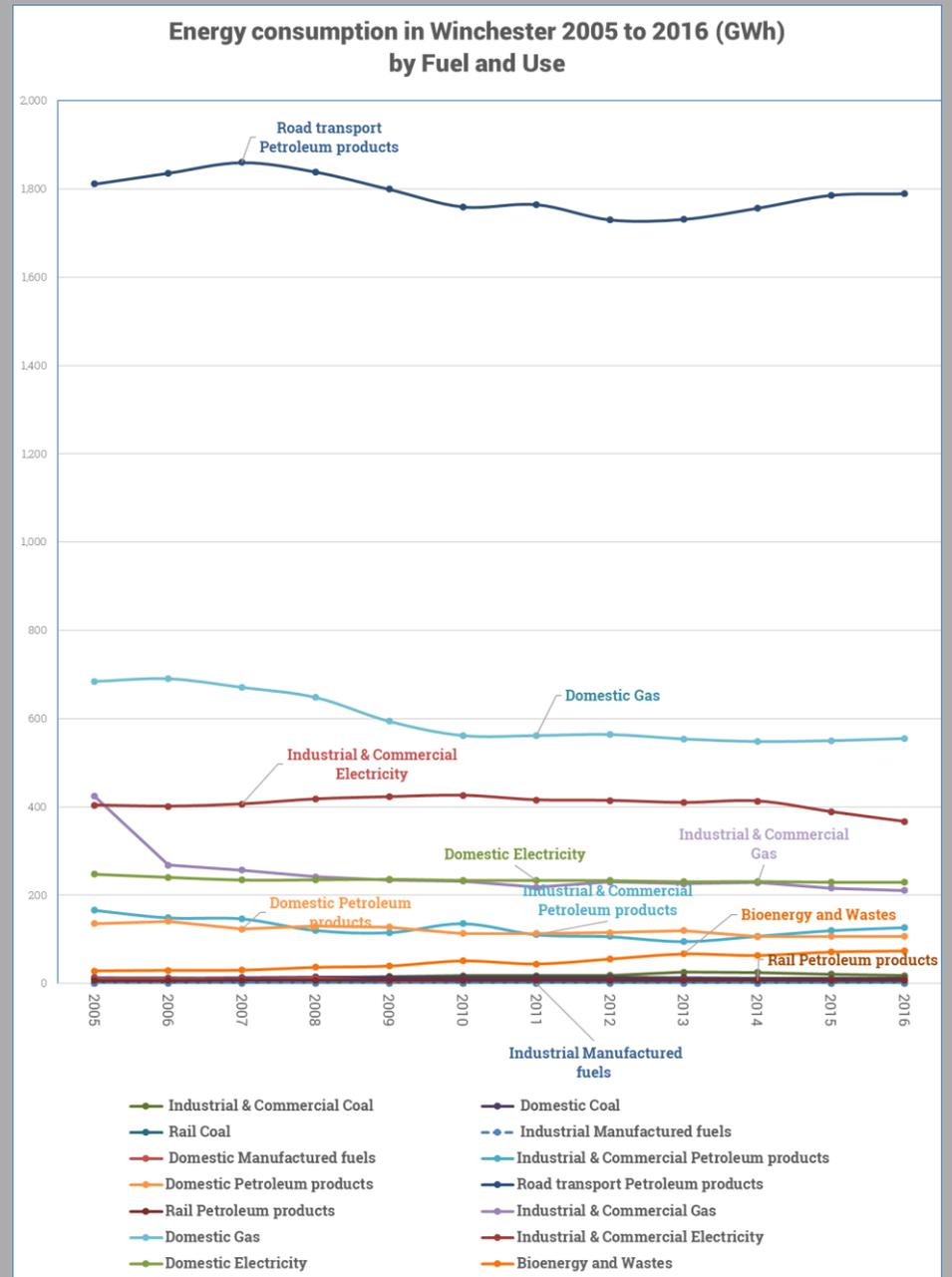
COUNCIL PERFORMANCE

What we have already achieved:

- 🏰 A decrease in absolute emissions by 8.0% compared to the previous year (2016/17) and 23.6% compared to the baseline year (2009/10).
- 🏰 A decrease in emissions per employee by 10.7% since the baseline year.



DISTRICT PERFORMANCE



Source: WinACC's Winchester District Climate Emergency Action Programme Discussion

CASE STUDIES & EXAMPLES FROM OTHERS

Energy generation

-  West Suffolk Council; Toggam Solar Farm; total income generated since it was installed in 2016 is £4 million.

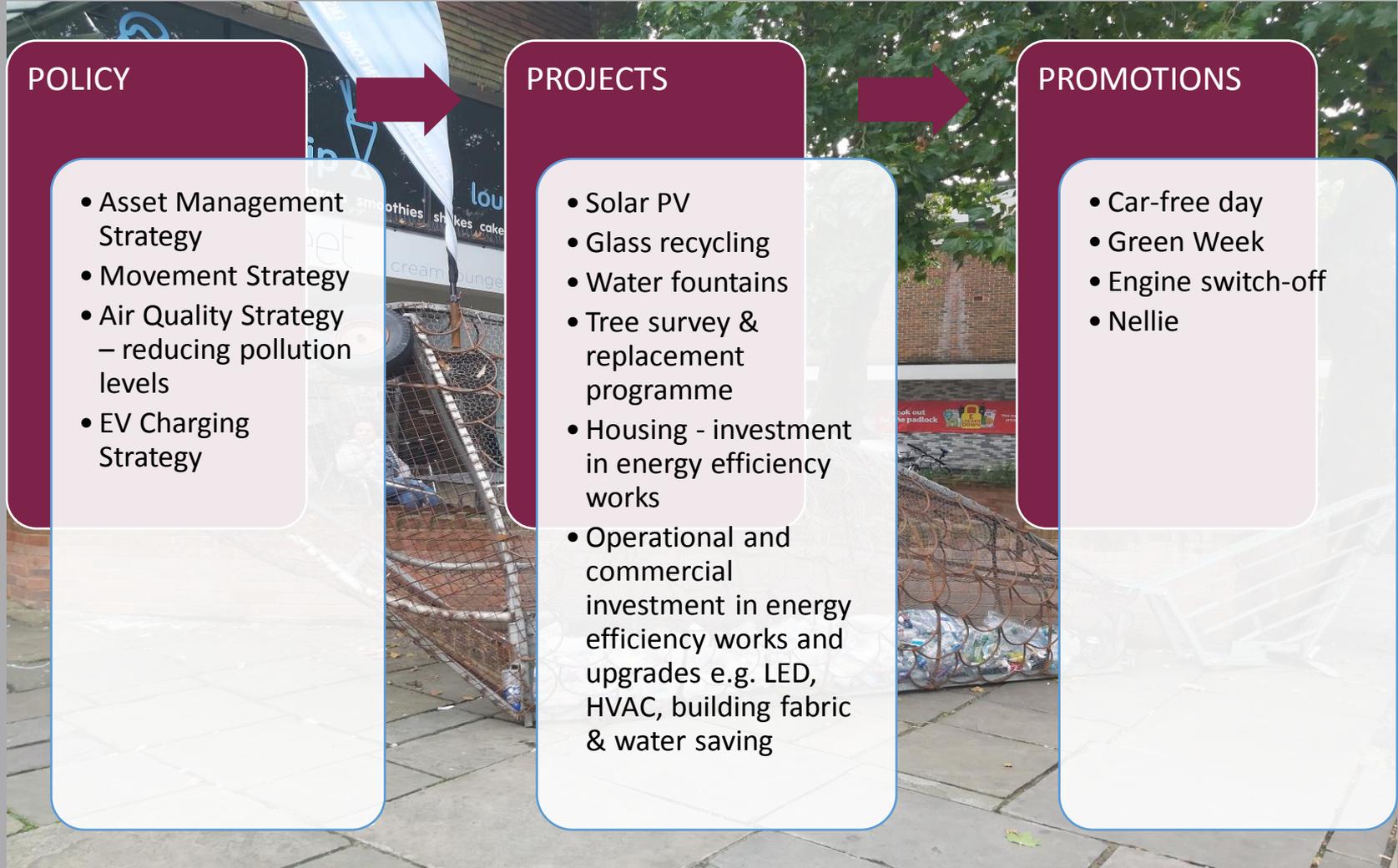
Electric vehicles and charging points

-  Leeds City Council have fitted 30 varying speed charging points across their corporate estate, totalling 74 charging points. LCC currently operate 43 electric vehicles across their corporate estate.

Off-setting – tree planting

-  Cherwell District Council – acquisition of 108 acres from Countryside Properties Ltd for new woodland in Southwest Bicester.

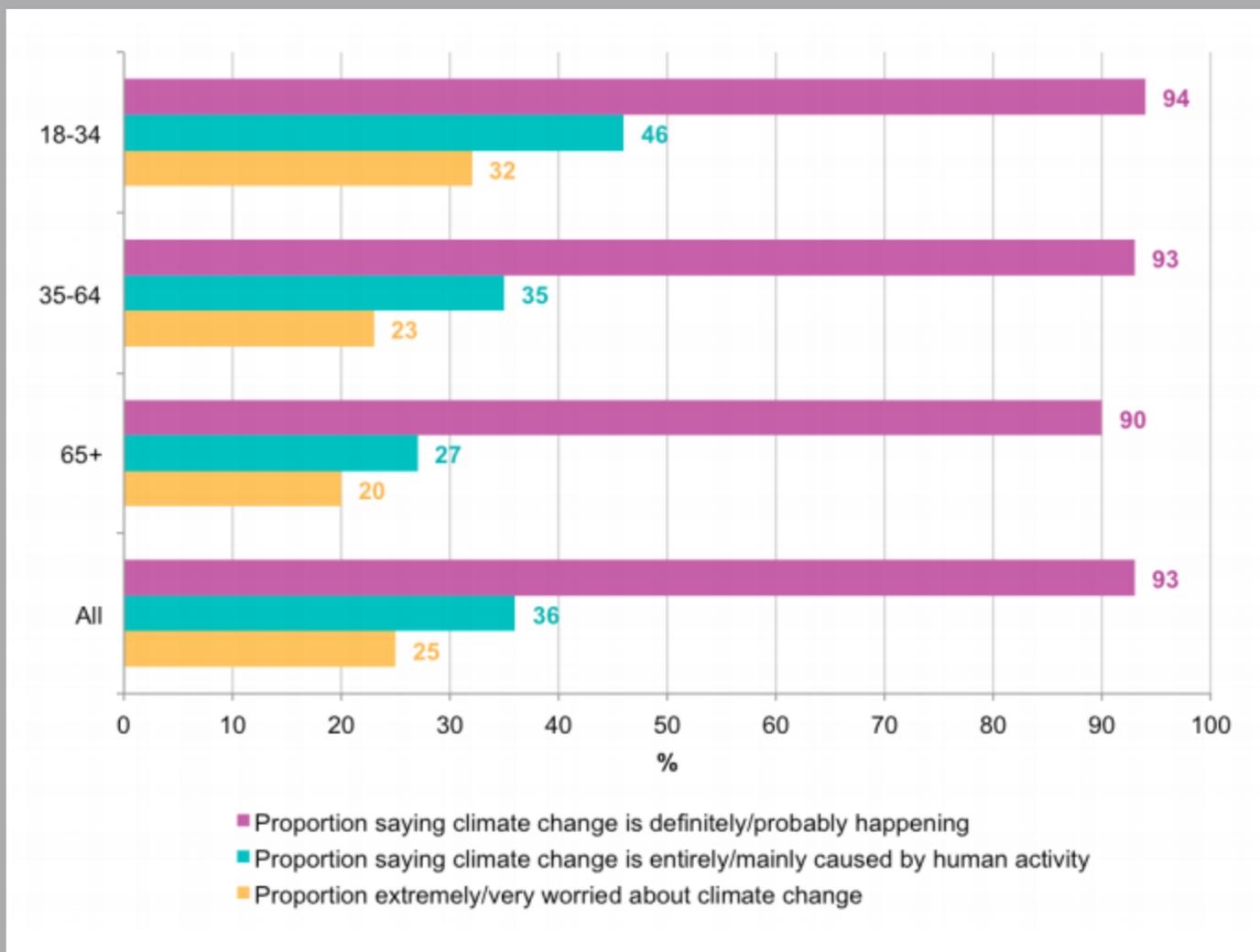
STARTING POINT - what we have been working on



STARTING POINT - what we have been working on...



TRENDS AND SOCIETAL CHANGES



Phillips, D., Curtice, J., Phillips, M. and Perry, J. (eds.) (2018), *British Social Attitudes: The 35th Report*, London: The National Centre for Social Research

LEGISLATION & POLICY

-  Air Quality Management Plan
-  Biodiversity Action Plan
-  Green Infrastructure Action Plan
-  Movement Strategy
-  Local Plan

THE PLAN FRAMEWORK

Programme

Asset Management

Transport

Planning

Energy

Waste

Green Infrastructure

Procurement

Operations

Business & commerce

Dimensions

New & existing Council housing and commercial estate / Land and open spaces

Fleet vehicles / EV & charging / car parking / public transport

Local Plan policy / development standards

Tariffs / generation / distribution / consumption

Recycling / treatment / energy

Biodiversity /habitat creation / species protection / afforestation

Supply chain policy / product specifications

Employees/ working practices / decisions / communications

Raw materials and supply chain / energy use and processes / products and services / waste

THE COUNCIL – DIRECT CONTROL

Programme	Aspect	Current / Short -term Activities	Future / Long-term Activities
Asset management	Housing & Commercial estate	Assessment of estate for energy efficiency measures under the RE:FIT programme	Implement a programme of improvements (subject to finance)
	Development sites	Aim of BREEAM excellent on all construction projects	All new-build and retrofit projects to meet BREEAM excellent. Use urban design to minimise use of fossil fuels by encouraging low-carbon transport and developing highly energy efficient buildings.
Transport	Vehicles	Refuse and P&R vehicles are euro 6 rated. Short leases to allow flexibility for adoption of low carbon alternatives.	Electric pool cars and zero-carbon council fleet vehicles: P&R, Special Maintenance, refuse and landscaping
	Parking	Reviewing car parking policies with HCC	
Energy		Solar panels on City Offices, Cipher House, West Wing, depot sites and car parks Energy efficiency works: lighting refurbishment, MEES, building fabric upgrades, HVAC upgrades	Energy generation projects: solar farms, low carbon heating, solar-battery car ports, wind-farm, anaerobic digestion from food waste. Purchase green electricity
Waste		Glass kerb-side recycling	Food recycling

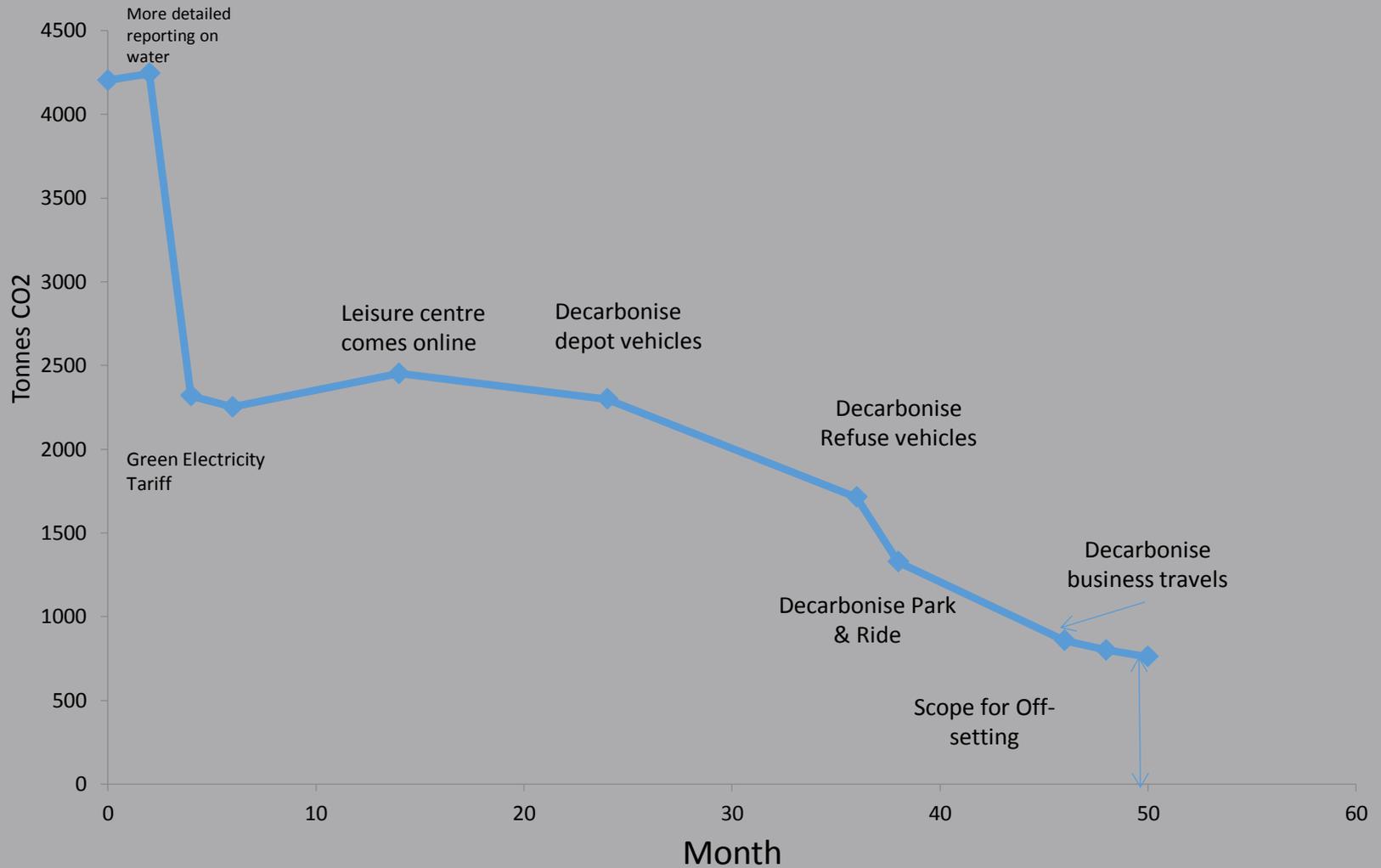
THE COUNCIL – DIRECT CONTROL, CONT.

Programme	Aspect	Current / Short -term Activities	Future / Long-term Activities
Green Infrastructure		Create green open spaces in new housing and regeneration developments Environmental improvements to play areas	Plant new woodland (off-setting) Council ban use of some pesticides/herbicides Green roofs/green corridor schemes Wild flower meadows to enhance biodiversity Living Walls project with Sparsholt College
Operations	Decisions	All reports and decisions must have a sustainability assessment detailing carbon emissions	All schemes/projects must be graded with sustainability/carbon emissions as a viability factor
	Work Practices	Working from home Digital transformation project - paperless offices New purchase/lease of energy efficient printers	Remote working in other /partner locations across the District Purchase/lease of only highly energy efficient/low carbon technologies/materials
	Staff engagement	Information and ideas shared on intranet Recycling education	Staff training modules on sustainability and reducing energy usage
Resources	Investment	Review ethical investment strategy Council and Town Forum Crowd funding platform includes sustainability projects	Investigate potential of Climate Change Bonds - creates investment bonds to raise capital Use S106 payments for carbon neutral initiatives
	Staff	Recruited Sustainability Officer & specialist environmental legal advice /Project Board set up	

THE COUNCIL – POLICY & INFLUENCE

Programme	Aspect	Current / immediate Activities	Longer term Activities
Planning	Applications	Incorporating environmental measures in schemes now on-going Validation requirement list- refreshing to include contribution to tackling climate change	Promote what homeowners can do without planning permission to help reduce carbon
	Local Plan Review	Review policies for development standard and land use.	
Procurement		Environmentally focused Procurement Strategy Sustainability in all tender specifications Prioritise e-procurement All award criteria have a % allocated to environmental sustainability Promote working with SMEs and local procurement	Supply chain development and support Promote partners with sustainable objectives
Leadership & Communications	Campaigns	Drinking fountains Green Week Car free Day Plastic Free Winchester	Develop engagement strategy with partners

EXAMPLE OF PROPOSED REDUCTION OF COUNCIL EMISSIONS



THE DISTRICT

Programme	Current / Short-term Activities	Future / Longer-term Activities
Business & Commerce	Greener festivals and event planning – e.g. Boomtown Support business improvement programmes – e.g. green impact scheme	Develop sharing economy initiatives – resource libraries Support circular economy initiatives – resources from waste Business support programme for green technology development and deployment
Housing	Campaigns to reduce energy consumption, Help tenants switch energy supplier and energy advice for the home	Educating residents on how to live more sustainably (particularly older residents) Reducing fuel poverty campaigns and supporting vulnerable tenants
Transport	EV Charging Strategy Movement Strategy Parking Strategy Vaultex and Northern P&R Cycling Walking Strategy for Winchester	Electric bus fleet Smart mobility projects Differential parking charges Off Street Charging Network Increase stations on rail network Use rail for freight
Energy	Roof-top solar panel projects, energy efficiency projects and warmers homes funding	Anaerobic digester, wind farm, hydropower, deep retrofit of housing stock, disconnect from gas grid
Waste	Reduce incinerated waste	Food waste collections, better recycling, closed loop economy
Green Infrastructure	Meadows, open spaces	Green corridors acting as community off-setting
Campaigns	Reduce energy consumption in home tips, walk/cycle to work	Switch energy providers, double/triple glazing, remove coal fires

GOVERNANCE

Climate Emergency Board

- Portfolio Holder - Environment
- Strategic Director - Services
- Corporate Head of Service - Engagement

Implementation Group

- Service Lead - Community and Wellbeing
- Sustainability Officer
- Programme Manager
- Project Leads / Officer(s)
 - Transport
 - Energy
 - Green Infrastructure
 - Council Estate
 - Others etc....

Climate Emergency Open Forum

- Public engagement, information sharing, reporting



PROJECT MANAGEMENT

PROJECT TEAM

Cllr Lynda Murphy

Cabinet Member

Provide direction and guidance for strategies and initiatives

Richard Botham

Programme Sponsor

Ensures the programme is focused on achieving its objectives

Susan Robbins

Programme Manager

Responsible for the overall integrity and coherence of the programme

Alex Venables

Project Manager

Ensures that the project deliverables are consistent with agreed methodology

Neil Aitken

Finance Lead

Gareth Morris

Communications Lead

Michael Woods

Legal Lead

Steve Lincoln

Service Lead for Communities

Simon Finch

Transport Lead

Naomi Wise

Sustainability Officer

Paul Cooke

Energy Project Manager

James Salvini

Project Coordinator

Available resource to support the delivery of all aspects for the project.

SUB-PROJECT LEADS

Julie Mahoney
Procurement

Sue Croker
Green Infrastructure

Kevin Warren
Council Estate

Dave Ingram
EV Charging Strategy
Air Quality

COLLABORATION

Climate Emergency Partnership

Public	Business	Environment	Community	Education	Rural
<p>Hampshire County Council</p> <p>Enterprise M3 LEP</p> <p>Parish / town Councils</p> <p>Partner LAs (Eastleigh / East Hampshire...)</p> <p>Hospital</p> <p>Utility companies</p>	<p>Sustainable Business Network</p> <p>Business Improvement District</p> <p>Hampshire Chamber of Commerce / Winchester Business Strategy Group</p>	<p>WinACC</p> <p>Extinction Rebellion</p> <p>Friends of the Earth</p> <p>Hampshire Climate Action</p> <p>Winchester Green Week</p> <p>Sustrans</p>	<p>Housing Associations</p> <p>Residents Associations</p> <p>Older Persons Partnership</p> <p>Health & Wellbeing partnerships</p>	<p>Universities</p> <p>Colleges</p> <p>Schools</p>	<p>NFU</p> <p>South Downs National Park</p> <p>Action Hampshire</p>

RESOURCES

 Financial

 Staff

 Expertise

NEXT STEPS

- Finalise action plan
- Cabinet approval of plan
- Devise detailed project list
- Rank projects in terms of: finances, planning, carbon footprint, social impact and detail timeframe
 - Use Project Drawdown for ranking projects impacts upon carbon reduction program

PROJECT DRAWDOWN

THE WORLD'S LEADING RESOURCE FOR CLIMATE SOLUTIONS.

View the solutions

MEETING THE 1.5°C CLIMATE AMBITION

Just released: The 2019 Exponential Roadmap shows how to accelerate 36 solutions to reduce greenhouse gas emissions 50% by 2030.

GET THE ROADMAP

Questions