

# Zero Carbon 2038 Strategy 2020 - 2025





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#### 1. Introduction

Southway Housing Trust has made a pledge to become a zero carbon organisation by 2038. This Strategy sets out why we have made this pledge, where we are starting from, and our priorities for action to reduce our carbon emissions over the next 5 years, 2020 to 2025.

#### 1.1 Global context

In October 2018, the world's leading scientists on the Intergovernmental Panel on Climate Change (IPCC) released research indicating that Greenhouse gas emissions must be reduced on a pathway that keeps global temperature from rising above 1.5°C by 2050.

The goal of the global Paris climate agreement, which was signed in 2015, was to keep the world's temperature from rising more than 2°C over pre-industrial times (as a minimum). The research indicates that impacts are already occurring and will be much worse at 2°C than previously projected. Globally, based on current policy and performance, we're on-track for a 3.1°C – 4.8 °C degrees of warming. Rapid and transformative change is therefore required.

#### 1.2 Regional context

A Greater Manchester Green Summit took place in 2018, attended by 500 agencies and individuals with an interest in reducing carbon. Following this, in May 2019, the GM Mayor made a commitment that the region will become zero carbon by 2038. The Vision is for the conurbation to become one of the healthiest, cleanest and greenest city regions in the world and there is a call to arms against the encroaching threat of climate disaster.

On 14th November 2018, Manchester City Council adopted new science-based carbon reduction targets specific to Manchester, based on independent analysis and recommendations by the Tyndall Centre for Climate Change Research at the University of Manchester.

As part of the Manchester Climate Change Board (MCCB), organisations are collaborating to develop a Draft Zero Carbon Manchester 2020-2038 Plan.

#### This includes: -

- 10 sectors/partners committed to zero carbon
- 60 organisations
- 20% of Manchester's CO2 emissions + influence on some of the 80%
- Over 80,000 buildings
- Over £1bn investment required to become zero carbon
- Over 1,450 vehicles







• Over £36m investment required to become zero carbon

Manchester Housing Provider Partnership (MHPP) members, who jointly own around 70,000 homes in the city, are responsible for approximately 5.5% of Manchester's carbon emissions through their assets and operations.

## 1.3 Southway Housing

Southway Housing Trust is a member of the MCCB through the MHPP and has signed the Commitment to Act. This includes a pledge to commit to becoming a zero carbon organisation by 2038.





#### **Our Current Position** 2

#### 2.1. Establishing a Baseline

To enable the Trust to measure and monitor its carbon reductions a key priority is to establish our current position as a baseline. Southway has worked with consultants Anthesis across our stock and operations, as well as considering strategic barriers and enablers identified through a variety of stakeholder interviews.

The baseline position for the organisation is outlined in section 3. This helps us to measure the impact of measures as they are implemented and provide Board, tenants, staff and stakeholders with an indication of progress against the strategy.

A number of key priority areas for action have been identified (outlined in figure1) below) and form the basis of this strategy and accompanying action plan.

The action plan reflects key high level actions within each of the priority areas that are deliverable within the 5-year time frame. Other operational actions will be developed by individual teams and monitored through the Trust's Zero Carbon Group.

#### Figure 1 Priority Areas for Action



#### Strategy & Governance

- Re-evaluate strategic priorities
- Invest sooner rather than later
- Formalise and incentivise low carbon decisions
- Give communication on the climate crisis better direction



#### Stock & Existing Assets

- Align the next stock condition criteria w/zero carbon agenda
- Accelerate and scale up work on void properties
- Continue to explore grant opportunities
- Ensure full lifecycle costs associated with upgrades are considered
- Use of smart technology to understand customer energy



#### **Operations**

- Electrify your Fleet
- Incentivise a modal shift away from car for regular Head Office commuters
- Significantly increase the number of on-site charging points
- Procure green energy for your operations
- Maximise Head Office energy efficiency



# Collaborating with Others

- Lobby more strategically & meaningfully Develop a MHPP skills register / skills share
- Engage our communities in changing cultures
- Better utilise MHPP purchasing power





#### **New Build**

- Move off gas well in advance of 2025
- Assess cost implications of zero carbon standard
- A 'fabric first' approach is more important than ever No 'one size fits all' with regards to low carbon technology
- Engage more with the DNO
- Look at ways to cross subsidise through commercial activities



#### Natural Capital

- Better articulate the value from Green Infrastructure
- Encourage improved tenant tree preservation and much more tree planting

Investment plans will require a carbon reduction approach to future expenditure on assets as will our broader activities as a landlord, employer, business, and community organisation.





Current investment plans are based on stock condition and like for like life cycle replacements, however a re-profiling on investment plans is required to consider the wider implications of the move away from fossil fuels and specifications that exceed current performance standards in terms of fabric and technology.

Whilst the need to act cannot be ignored, we recognise there are a number of key challenges which will need to be addressed as part of the journey to reach zero carbon. These are not exclusive to Southway and will form the fundamental considerations of all Housing Providers embarking on this journey.

#### 2.2 Key challenges

- 99% of all our homes are heated using fossil fuels, including our sheltered schemes.
- Current alternatives such as ground and air source, whilst being lower cost to run are considerably more expensive to install and may not be popular with tenants.
- There is no certainty of grant support from Government for renewable technologies.
- High capital costs makes the viability of zero carbon new build challenging.
- We have a fleet of over 40 vehicles which all run on diesel.
- There is a high reliance amongst staff on personal vehicles to travel to work.
- Staff and tenants are not currently engaged at scale in behaviour change activities that support carbon reductions.
- Operational costs of new ways of working may have increased revenue impacts.
- Southway Housing currently emits 30,000 tonnes of carbon through its properties and operations – 99% through the homes we own





#### 3. Emissions Baseline

3.1 This section provides an estimate of greenhouse gas emissions for the financial year 2018/19 following works undertaken by Anthesis. The results are based on data provided by the Trust and estimates where data was not available. This is the first year that greenhouse gas (GHG) estimates have been made.

#### 3.2 Overview of emissions sources and accounting boundary (Table 1)

The carbon footprint covers all activities and facilities in which we operate. For 2018/19 emissions 'Scopes' 1 and 2 cover the Trust's offices plus the communal areas of properties. Scopes 1 and 2 also includes fuel purchases for owned or leased vehicles and mileage claims for personal cars.

Scope 3 emissions primarily relate to emissions from our housing stock, where our tenants have operational control of gas and electricity consumption and manage their energy bills, but it also includes some areas within our operation such as staff travel and transmission and distribution losses.

Table 1

Scope	CO <sub>2</sub> e, tonnes	%
Scope 1	179	0.56%
Scope 2	101	0.31%
Scope 3	31,900	99.13%
Total	32,180	100.00%

#### 3.3 Stock Emissions

Emissions have been modelled using a dynamic stock modelling platform, and uses the SAP (Standard Assessment Procedure) 10.0 (2012) emissions methodology. SAP Calculations are used to demonstrate the energy performance of dwellings in the UK and are a key part of building regulations compliance. Our current average SAP is calculated at 73 and the majority of our properties are C or above.





Table 2 below provides a breakdown of our current CO2 emissions based on our housing portfolio. Numbers include leaseholders and private rented portfolio.

Table 2

	Current Usage		
Total CO <sub>2</sub> (t)			31,900.56
Average CO <sub>2</sub> (t) per property		5.20	
Total Energy Use (kWh)	143,972,865.33		
Average Energy Use (kWh)		23,475.11	
Total Energy Cost (p/a)	£	5,086,143.35	
Average Energy Cost (p/a)	£	829.31	

As we update our own stock records this will be updated within the model and may result in a reduction in the calculation of overall carbon emissions

Following the completion of this work, we will be able to interrogate the data via an online portal, where system developments, updates and assumption refinements will auto upload (including the modification to the new SAP scoring system later this year). This will allow modelling based on different measures and will provide estimates for carbon reduction plans and potential investment requirements.

### 3.4 Operational Emissions

Table 3 shows the operational emissions of the total stock owned by the Trust where we have responsibility for the operational costs. These buildings equate to less than 1% of our total carbon emissions.

Table 3

Scope	Fuel / source	CO <sub>2</sub> e, tonnes	%
Scope 1	Natural Gas	39	13%
Scope 1	Diesel - fuel purchases	133	44%
Scope 1	Air-con (refrigerant losses)	7	2%
Scope 2	Electricity (location based)	101	34%
Scope 3	Mileage	11	4%
Scope 3	Electricity - Transmission & Distribution	9	3%
	Total	300	100%





**Travel** - Emissions from travel come from fuel purchases for owned and leased vehicles and from mileage claimed for personal vehicles:

Table 4 - Emissions from travel.

Scope	Fuel/source	Units	Quantity	CO <sub>2</sub> e, tonnes
Scope 1	Diesel - fuel purchases	litres	49,500	133
Scope 3	Mileage	miles	38,464	11
	Total			144

Fuel purchases are estimated using total expenditure for the year on fuel cards, plus an average of fuel prices for the year from a sample of fuel card statements.

The fuel purchases are equivalent to about 372,500 miles in an average diesel car or 240,500 miles in a Class III (1.74 to 3.5 tonnes) van.

Using broad assumptions of a five-year-old Class III van travelling 10,000 miles on inner-city roads, annual savings are estimated to be in excess of £5,000 per year







after switching to an electric motor, as well as saving approximately 9 tonnes per vehicle per year.

**Buildings and services -** Emissions from buildings form 52% of total emissions. The majority of this comes from electricity use. Table 5 below shows the breakdown by source:

#### Table 5

Fuel/source	Units	Quantity	CO <sub>2</sub> e, tonnes
Natural Gas	kWh	212,268	39
Air-con (refrigerant losses)	kg	3	7
Electricity, including T & D	kWh	357,599	110
Total			156

Building Type	Building		CO <sub>2</sub> e, to	onnes	
		Gas	Electricity	Air-con	Total
Head Office	Southern Gate	8	58	7	73
Library	Burnage Library	6	4	-	10
Community Centre	Westcroft Rd	5	1	-	6
Sheltered Scheme	Various	18	21	-	39
Depot	Minden Close	-	1	-	1
Commercial	MerseybankAve	1	1	-	2
General Needs	Various	-	3	-	3
Communal					
Stock - communal areas	Various	-	21	-	21
	Total	39	110	7	156





## 4. Key Priority Areas for Action

This section identifies actions that can be taken over the next 5 years across the 6 areas identified by Anthesis.

#### 4.1 Strategy and Governance

**Re-evaluate strategic priorities** – zero carbon priorities need to be embedded within the Corporate Strategy. From board members and employees through to tenants, this agenda needs to be given more importance. This will help encourage stakeholder buy in and influence investment decisions and behaviours. While this is partly about communications (see below), more fundamentally, it is about how we define social impact and the extent to which investment is allocated to low-carbon change programmes.

Invest sooner rather than later –International emissions targets are being missed. Leaders are needed throughout the public and private sectors to keep the city on track and build skills capacity both locally and nationally. While early investment to reach zero carbon is significant now, the costs of deferring until later are likely to only increase over time, not least if retrofit is required prematurely due to regulation. The UK's recently declared 'Climate Emergency' and the recent commitment to adopt a legally binding Net Zero by 2050 target by UK government are both strong signals that costs and actions are a matter of 'when', rather than 'if'.

**Formalise and incentivise low carbon decisions –** From procurement policy to new build decisions, until now, this has largely been driven by cost. By formalising 'zero carbon' within policy, process, job responsibilities and appraisal, it will drive actions that are aligned. While emissions are still considered at present, it is often ad-hoc, with understandable caution about deviating from the lowest cost and/or known, reliable options.

**Give communication on the climate crisis better direction** – A communications strategy needs to be developed and delivered through various channels, such as Intranet, print media, direct contact with tenants. Tone may be important to more effectively stimulate the nature and extent of action required (comparable with the response in any other emergency).

The intended outcome will be to stimulate a meaningful response i.e. staff, partners and tenant behaviour changes.

#### 4.2 Operations

**Electrification of fleet** –A trial of 5 lease vehicles was undertaken in 2017/18 and running costs significantly outperformed the diesel fleet offering a relatively short payback when considering the capital cost (3 to 6 years). However, operationally it did highlight logistical challenges. To make this viable at scale 100% of fleet will need to be electric by 2025.





We propose to undertake a number of actions to enable us to be in a position to move to a fully electrified fleet by 2025 in line with our proposed lease arrangements. This will include a review of the current and future infrastructure and fleet requirements.

**Significantly increase the number of on-site charging points** - Fuel costs for grey fleet EV drivers would significantly drop if more employees owned EVs, and emissions from employees who drive to the office could be reduced to keep pace with a transition away from petrol / diesel vehicles. Further options will be considered to make charging more accessible to staff members.

Incentivise a shift away from car use for regular Head Office commuters There may also be a number of opportunities to reduce travel or travel more efficiently that supports the change to EV in the first place. For example, employee car sharing, cycling, public transport. Development of the company green travel plan will form part of the overall operational action plan.

**Procure green energy for operations** – There are now numerous suppliers of renewable electricity. This can easily help reduce our footprint and should be specified in the procurement policy for energy. There are various green energy providers, such as the <u>Big Clean Switch</u>, local to GM. Similarly, the 'quality' and 'additionality' of green tariffs will be explored during procurement.

**Maximise Head Office energy efficiency –** Whilst our Head Office exceeds the average Greater Manchester office efficiency, there are still opportunities to increase this further. A full asset management plan of the head office will be undertaken to assess the cost implications and technology available.

Maximise Operational Energy Efficiency Through Working Practices.

Carbon reduction should be part of the daily running of the business to ensure strategies, policy, process and procedure consider the impacts of all decisions. Within the day to day management of existing services we will need to take immediate action to make the fundamental changes to embed an operational shift.

Areas of action will include:

- Procurement review of all procurement activity to ensure the carbon footprint of all purchasing, from fabrication through to delivery has been considered.
- Waste review current recycling arrangements to ensure recycling is maximized and adhered to. Both in terms of office waste and construction waste.
- Printing undertake a review of all large scale printing activities and consider alternatives.

#### 4.3 Stock and Existing Assets

Align the next stock condition survey criteria with the zero carbon agenda -





The previous stock condition survey was focused on maintaining operational performance and maintaining the Decent Homes Standard. With the next stock condition survey due in 2020, we will use this to better inform the magnitude of cost to plan the nature and timing of low carbon measures. The criteria could be influenced by the output from the stock modelling (Section 3), which may take a more pragmatic approach to combinations and/or sequence of measures to implement. This represents a huge opportunity to move beyond asset compliance and truly embed zero carbon into future stock maintenance and management plans.

Accelerate and scale up work on void properties –There is an opportunity to understand and implement 'quick win's' in the property turnover process. Void periods present a significant opportunity to avoid tenant disruption while improving the energy performance of buildings. The void programme represents around 200 properties per year.

**Use of smart technology to understand customer energy demand**. Greater understanding of usage may help target investment decisions. There are a spectrum of activities that could then be trialled in order to progress low carbon investment and behaviour change.

Continue to explore grant opportunities and innovative partnerships – Over recent years there has been an increase in the level of grant funding to support innovation and investment. Southway will continue to explore the options to bring in additional funding to help accelerate the work required to meet its 2038 target. Southway will use the learning from potential pilots to influence future investment decisions. An ongoing ERDF application for a zero carbon community could form the basis of longer term plans, however it is important that technology is tried and tested before major changes are made to programmes.

Ensure full lifecycle costs associated with upgrades are considered – As newer technologies or installations are trialled and implemented, there is often an elevated risk associated with their maintenance and management. Contract management and building additional resource capacity within finance and operations teams may be required to ensure costs are included in future resource planning.

**Develop the Workforce** – as technologies change so will the skills required to install and maintain. An opportunity exists within the current operational workforce to install and maintain this new technology. This not only has financial benefits in terms of our own stock, but a potential to outsource services elsewhere.

#### 4.4 New Build

**Move off gas well in advance of 2025** – While regulation is on its way (i.e. UK Government: Net Zero by 2050, Committee on Climate Change: no gas by 2025 and Greater Manchester Spatial Plan: Net Zero new build by 2028) this needs to be accelerated. With plans to decarbonise the grid, shifting from gas heating and cooking to electrified heating makes 'zero carbon' more feasible at a later date.







Recent estimates predict that the National Grid supplied electricity is not likely to be decarbonised until after 2030 (accordingly to the various <u>Future Energy Scenarios</u>).

This will add increased costs to new build, which may need to be absorbed, until legislation comes into force. Once this happens, early investment may then present significant opportunity and reward depending on the level of indirect (or direct) carbon tax that is applied within the energy system.

Assess the cost implications of a zero carbon standard - In order to improve performance, it is likely that the costs of development will increase. A full review of average build costs for a zero carbon standard needs to be fully understood and the implications on the wider programme considered.

As for the existing assets the development programme will need to be appraised based on the anticipated unit costs and the development programme assumptions.

A 'fabric first' approach is more important than ever —This will help reduce energy required from electric sources and keep costs for tenants down. As a minimum, we should be aligning with a level of new build performance that keeps electric heating costs lower than for gas central heating and achieves a reasonable comfort level required by tenants.

Alignment with <u>PassivHaus</u> standards are seen as a benchmark at the maximum, highest performing end of the spectrum.

No 'one size fits all' with regards to low carbon technology — Both demand side (insulation/fabric) and supply side (electricity/heat generation) technologies are constantly evolving. It is important to listen and learn from the industry experiences of others (e.g. within the MHPP group) and be open to build up views and experiences through of 'pilot' projects.

While getting off gas for heating is clearly one consistent theme throughout this agenda, the various efficiencies and cost savings per technology are also critical, and need to be tailored accordingly to suit the location and building.

**Engage more with the Distribution Network Operator (DNO)** - As demand for electricity increases across Manchester (and other cities), there are instances where grid connection costs of new developments will bear the brunt of upgrades and grid reinforcement works. This highlights the importance of both demand reduction (fabric first & design), and dialogue with the DNO at an early stage.

Look at ways to cross subsidise through commercial activities – Through commercial activities the principal of profit for purpose could be extended to carbon reduction. Additionally, given the high demand for property in Manchester, and changing consumer attitudes, the value of 'Green credentials' for a building has not been tested and could represent an opportunity to fund higher standards in sale and private rent properties.





#### 4.5 Collaborating with others

**Lobby more strategically & meaningfully –** There are various zero carbon barriers and enablers that may be addressed or influenced more effectively via collective action. However, collective action still needs co-ordination, active participation and leadership. Examples of such barriers and enablers are as follows:

**Homes England (HE)** – Increased incentives for low carbon new build. As the national housing and regeneration agency and regulator of social housing, they could do much more to 'level the playing field' across social housing providers.

**Greater Manchester Combined Authority (GMCA) –** More robust, consistent low carbon planning requirements: This would help maintain commercial competitiveness. Developments that are more ambitious in both low-carbon design (and operation) than more carbon intense alternatives others, should be given priority.

**Mortgage providers –** Improved valuation to methods to consider bills: At present, most 'Green mortgage' products only offer marginally improved rates, that would impact the monthly (or periodic) repayments. Southway believe the biggest barrier to future tenants is actually getting a mortgage of sufficient size (not least if the cost of property is likely to increase due to increased building costs).

**Southway Communities** – engage communities at an early stage on the 'journey'. Early buy in will help to create a culture of acceptance of the crisis and the need for both technological and behavioural change.

**Making the lobbying more meaningful –** A big element is gaining access to the right individuals within the above organisations and understanding their current barriers (influence/control/awareness/finance). Better use of existing partnerships within Manchester and GMCA may provide a collective voice to highlight the potential barriers to carbon reduction.

#### 4.6 Natural Capital

Better articulate the value from Green Infrastructure – Recently published performance against national tree-planting targets highlighted that drastic action is needed in this space (England fell 71% short).

It is important to understand our green infrastructure. There is a need to ensure that our electronic tree stock records are up to date to enable the team to:

- More accurately demonstrate the value of green assets that Southway currently possess;
- Measure the impact of progress that is made as a result of ongoing activities in this area; and,
- Enhance the business case for further action and build on the momentum generated.

Impacts may include the quantification of environmental and social benefits and can currently be improved upon.







To further develop this area discussion, we will explore potential carbon modelling through City of Trees and consider technological solutions to help enhancing the accuracy of the tree profile across our stock.

**Encourage improved tenant tree preservation and more tree planting –** While Southway are nearly at maximum capacity for available tree planting space in our green spaces, there are opportunities for tenants to plant more in their own gardens. Tree planting is critical to support decarbonisation.

Educational initiatives, financial incentives (albeit minor incentives), innovative communications and better tree stock monitoring, may help drive change in this area.





# 5. Financial Implications

- 5.1 A major investment decision for the Trust, over the lifetime of this strategy, will be whether to replace gas heating with electric heating ahead of decarbonisation of the grid. This section explores the financial implications.
- 5.2 Our Current 30-year stock investment plans are based on stock condition and like for like life cycle replacements. The next replacement cycle for boilers is 2021-26 which broadly falls within the strategy timeframe. To reach a zero carbon 2038 we need to consider the costs of switching to renewable technologies, as part of the next replacement cycle.
- 5.3 Boilers and Heating Distribution represent a significant cost within the planned maintenance profile as can be seen in tables 6 and 7.
- 5.4 Table 6 shows the renewal profile for domestic boilers based on the 2015 stock condition survey. Domestic boilers have an assumed lifecycle of 15 years and the majority will require renewal between 2021-2016. An investment of around £9m

Table 6

Element	2016/21	2021/2026	2026/2031	2031/2036	2036-2041	2041/2046
Boiler	£290,400	£9,085,890	£898,425	£290,400	£9,085,890	£898,425

5.5 Table 7 shows the renewal of heating distribution which includes the radiators and pipework and assumes all distribution systems are replaced once over the 30-year period.

Table 7

Element	2016/21	2021/2026	2026/2031	2031/2036	2036-2041	2041/2046
Heating Distribution	£556,800	£752,400	£3,711,600	£585,600	£22,800	£1,248,000

In reality it is likely that some form of smoothing will be undertaken to avoid replacement of boilers and pipework at separate times to maximise efficiency.

For the purposes of this report it assumes 50% are done in line with each boiler replacement programme and therefore £3.5m expenditure during 2021-26

Total expenditure for like for like boiler replacement and 50% distribution is therefore £12.5m during 2021-26.

5.6 To shift to renewable heating the capital costs are currently considerably more. Based on recent tender prices provided through Procure Plus, a North West Procurement Consortium, the cost of Air Source Heating including distribution system is approximately £6,100. Therefore, the total capital expenditure in years 2021-2026







- would be around £35m (based on 100% renewal), an additional £22.5m based on renewal of gas boilers.
- 5.7 Currently Domestic Renewable Heat Incentive (RHI) funding is available to promote the use of renewable heat in homes which makes renewable heating more affordable with a significant payback over a 7-year period (around £4,500 per unit).
- 5.8 RHI runs until March 2021 and there are no indications of whether it will continue, however the above is included to give an indication of the significant impact on investment programmes and the level of uncertainty should we decide to move towards renewable heating.
- 5.9 Further technologies are being developed all the time and it likely that investment plans will need to be constantly reviewed to ensure that the appropriate technology is implemented that meets both the aspirations of Southway and the requirement of tenants to ensure they are not financially burdened in any way.





# 6. Summary and Next Steps

- 6.1 Developing the baseline and strategy sets out the current position for Southway Housing, however it is important that going forward we are able to set clear, affordable targets that will help us reach zero carbon by 2038. The next steps will be to set and agree some measurable and deliverable targets over the lifetime of the strategy.
- 6.2 In addition to the high level actions below an operational action plan is also in place. Delivery and progress will be overseen by a cross organisational Zero Carbon Project Group. Officers will also report to the MHPP and GM Low Carbon groups and represent the MHPP on the Climate Change Board.
- 6.3 We will look to submit an application for ERDF funding to pilot a zero carbon community on the Arrowfield Estate that will include retrofit measures to properties (including renewable technologies) and carbon literacy / behavioural change to residents. The project will provide significant learning and help shape some of our future investment decisions.
- 6.4 Whilst operations only account for less than 1% of emissions, which equates to around 300 tonnes of carbon per year, we will focus our actions on ensuring we make changes to our buildings, fleets and ways of working so we are able to demonstrate our commitment.
- 6.5 With regard to our housing stock a reduction of around 5 tonnes per property will require significant investment and will impact on other priorities within the trust, however as demonstrated above, fundamental change to the way we heat our properties and store energy is needed.
- 6.6 Technological advancement means investment plans will need to be flexible and the optimisation of grant will be critical in order to maximise external funding. It will also be important to work in partnership with others to benefit from learning elsewhere and avoid the potential mistakes of early adopters.
- 6.7 We will undertake a stock condition survey in 2020 with the added requirement to model component replacement to reflect our aspiration for all properties to be zero carbon by 2038. This will inform the first 5 years of our financial plan for years 2021-26. The Arrowfield Zero Carbon Community Project, if successful will give reasonable time to assess the success of such a switch and move around 7% of our stock towards zero carbon.





# Appendix 1

The following actions will be brought to Board on an annual basis to monitor our progress and outcomes achieved.

	Task Description	Actions and Outcome(s)	Target
	Strategy and Governance		
1.	Zero Carbon commitment to be part Corporate Strategy	All business decisions must demonstrate a measureable carbon reduction.	Q3 19/20
2.	Review current levels of carbon literacy training within the workforce.	New and existing staff to receive carbon literacy training / refresher training as appropriate.	Q4 19/20 – review Q1 20/21 implement
3.	Focus communication on the climate crisis.	Develop a communications strategy to be delivered through Southway's various channels.	Q1 20/21
	Operations		
4.	Replace all fleet vehicles with alternative electric vehicle.	Assess current infrastructure and lease arrangements and move to a fully electrified fleet.	Q4 2023/24
5.	Procure green energy for our operations	Ensure all electrical energy procurement is through suppliers of renewable electricity.	Q2 2020/21
	Stock and Existing Assets	3	
7.	Include zero carbon target in new investment plan.	Include measures for carbon reduction in stock condition survey and office stock and produce modelled investment plan.	Q1 20/21
8.	Apply for ERDF funded zero carbon community project	Submit application to march fund Arrowfield Zero Carbon Community Project	Q2 2019/21





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	Task Description	Actions and Outcome(s)	Target			
9.	Arrowfield Zero Carbon Community Project (if bid successful)	Develop and deliver project to shift 7% of homes within one community to zero carbon.	Q4 2022/23			
10.	Develop the Workforce	Implement training to equip current workforce to install and maintain new technologies.	Q1 21/22			
	New Build					
11.	Change from Gas to electric heating for all new developments.	Consider renewable heating for all developments where Southway have full control of design.	Q4 19/20			
12.	Assess the cost implications of a zero carbon standard	Consider the costs of zero carbon standards as part of scheme appraisals.	Q4 19/20			
	Collaboration with Others					
13.	Establish Southway as key sector representative.	Engage within sector and across wider city and Greater Manchester region to influence decision making processes.	Q4 19/20			
14.	Community Engagement	Develop communications strategy and action plan for targeted engagement.	Q2 20/21			
	Natural Capital					
15.	Encourage improved tenant tree preservation and more tree planting	Develop communications strategy and action plan for targeted engagement.	Q2 20/21			
16.	Measure the impact of progress made so far	Investigate and Identify tool for measuring impact of planting activities within core area.	Q4 20/21			





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