



Arun District Council
Social Housing Decarbonisation Strategy
2022-2025

Version	Draft 4.0
Date of Issue	31 st May 2022
Author	Steve Turner, Housing Decarbonisation Project Manager
Circulation	Moh Hussein Philippa Dart Finance Legal William Page
Status	Drafted for internal review prior to issue to Committee. Technically complete. Member, Tenant, Executive and Housing commentary to add. Requires proof reading and amplification of key messages for publication.

Contents

Foreword	3
Executive Summary	4
1. Introduction & Background	5
1.1 The Size of the Challenge	5
1.2 Decarbonisation	5
1.3 Domestic Energy Efficiency	7
1.4 Decarbonisation	8
1.5 Retrofit.....	8
1.6 Fuel Poverty	9
2 Our Housing Stock	10
2.1 Energy Efficiency.....	11
2.2 Summary Information	13
3 Strategic Aims	14
3.1 Carbon Management	14
3.2 Strategic Goals.....	14
3.3 Affordability.....	15
3.4 Provisional Timeframe	15
3.5 Other Strategic Considerations	16
3.6 Consequences of Doing Nothing	16
3.7 Tenant Communication	16
3.8 Leaseholder Engagement	16
4 Budgeting and Financial Modelling.	17
4.1 Current Provisions	17
4.2 Latest Modelling Estimates	17
4.3 Refining the Estimates	17
4.4 Financial Planning.....	17
5 Strategy & Action Plan Review	18
5.1 Risks and Challenges	18
5.2 Governance.....	19
Appendix 1: Programme of Work	20

Foreword

Tenant Representative

To be added

Member Representative

Role

To be added

Philippa Dark

Director of Services

To be added

Moh Hussein

Head of Residential Services

To be added

Executive Summary

Arun District Council has an ambitious “Zero Carbon” objective for the Council’s own activities with a target to achieve this by 2030 as it’s contribution to the Environment and Climate Emergency, which the UK Parliament declared on the 1st of May ,2019 (*Arun District Council Carbon Neutral Strategy 2022-2030*).

The Council’s strategy excludes the carbon emissions related to occupation of our social housing stock. Heating and lighting homes in the UK is one of the biggest carbon-generating activities. Across the Council’s c. 3400 properties, around 8,500 tonnes of CO2 are produced, each year, to keep homes warm and lit.

The UK has some of the oldest housing stock in the developed world. Arun District Council’s properties are a typical representation of these properties, with 500 now over or approaching 100 years old. Many of these homes will still be here beyond 2050; it is, therefore, essential that the energy efficiency and carbon emissions of all homes is tackled if the UK is to meet and sustain its carbon reduction and fuel poverty targets.

Rapidly increasing energy prices have worsened the number of households enduring fuel poverty. Our tenants are disproportionately affected. Fuel poverty can have several serious negative effects on health and well-being. Fuel poverty is in part due to houses that cost more to keep warm than they should due to poor insulation or inefficient heating systems.

Tackling decarbonisation (and fuel poverty) demands a thorough approach to the energy efficiency of Arun District Council’s housing stock. By making each home more energy efficient, we reduce the consumption of gas, oil and electricity. By moving away from fossil fuels we reduce carbon emissions. Every action we undertake as a Council has multiple benefits for the local area, environmentally, socially and economically.

Collaboration with other councils and registered providers across Sussex can extend the impact into the owner occupier and private landlord sectors. Planning controls can help ensure future homes are better insulated, cheaper to heat, and less carbon intensive.

This strategy:

- Determines the amount of carbon generated in heating and lighting our social housing stock today and provides other baseline information.
- identifies the opportunities for decarbonisation through long term planning at the individual property level to maximise value for money.
- identifies local, regional and national initiatives where Arun District Council can access support, advice and funding.

This strategy compliments the *Energy Efficiency and Fuel Poverty Strategy 2020-2025* focusing on Decarbonisation and reflecting new demands and approaches to Energy Efficiency in Housing.

There is an annual action plan which describes future activities and ambitions for decarbonisation of our housing stock which is a supplement to the Council’s overall plans for Net Zero. Governance and oversight are undertaken by the Climate Change Committee who maintain the overall Carbon Neutral Strategy and the *Climate Change and Biodiversity Action Plan*

1. Introduction & Background

This document sets out Arun District Council's strategy in relation to decarbonisation and energy efficiency in the housing stock for the period 2022-2050.

The strategy sets out the overall task that we face, beginning with a brief overview on decarbonisation and how Arun district compares to the rest of the UK.

1.1 The Size of the Challenge

The UK has an older housing stock than most European states, with nearly 38% of its homes dating from before 1946. Studies suggest that the greatest housing risk to people's health in the UK is from excess cold.

Energy use in domestic properties accounts for a large and increasing proportion of national energy consumption. It now accounts for 28-31% of UK energy consumption just to heat and light our homes.

Generally, the existing housing stock in the UK has poor energy efficiency and most of these properties will still be in use for the next 50 years. It is therefore crucial that the energy efficiency and carbon emissions of these buildings, is tackled if the UK is to meet and sustain its carbon reduction and fuel poverty targets.

1.2 Decarbonisation

The UK Government is committed to a low carbon economy with a target of "Net Zero" in 2050. Parliament declared an Environmental and Climate Emergency in 2019. Legislation and regulation including updates to building regulations and tighter standards around materials and work on existing properties are being introduced. Recent experiences of poor quality design and installation are being addressed through new British Standards.

Methods of decarbonisation include:

- Introduction of low carbon heating systems, such as heat pumps.
- Use of photovoltaics (solar panels), wind turbines etc. and battery storage systems to harvest energy from these technologies and to supply energy when needed.
- Hydrogen fuel cells, heat pumps and other innovations.

The continual decarbonisation of the National Grid will reduce the carbon used in heating and lighting our homes.

Energy Efficiency measures also have an impact on the amount of energy, and hence carbon used. Typical measures are:

- New insulation, including external wall insulation and under floor insulation.
- Replacing poorly insulated doors and windows.
- Renewing cavity wall and roof insulation with better thermal properties.
- Replacing inefficient lighting with LEDs
- Replacing inefficient domestic appliances.

Legislative Obligations

The Council's current legislative obligation as a landlord is to ensure properties have a valid Energy Performance Certificate (EPC) that is "E" or better for any new letting.

By 2030 that standard will be “C” or better for all lettings as far as reasonably possible. Exceptions include listed buildings or properties that are too expensive to improve.

Properties are also expected to meet the decent home standard including being warm as laid out in the Housing Regulator’s Home Standard.

New build properties cannot have a gas central heating system by after 2025, and from 2035, existing gas boilers cannot be replaced with a new gas boiler.

The Warm Homes and Energy Conservation Act 2000 placed a duty on Government to have a strategy for tackling fuel poverty. The Fuel Poverty (England) Regulations 2014 were then produced. The Regulations created a fuel poverty target to ensure that as many fuel-poor homes as is reasonably practicable achieve a minimum energy efficiency standard of C, by 2030.

There were interim targets as follows:

- As many fuel-poor homes in England as is reasonably practicable to SAP-E by 2020
- As many fuel-poor homes in England as is reasonably practicable to SAP-D by 2025.

Other Directives

The Government has published a Net Zero Strategy which sets out the ambitions for all aspects of the economy, including housing.

The targets for housing are further articulated in the Social Housing Decarbonisation programmes announced in 2021, managed by the Department for Business, Energy and Industrial Strategy (BEIS).

Arun District Council has developed a Carbon Neutral strategy for all of the Council’s own activities. This does not include the heating and lighting of tenants’ homes.

Smart Controls

Arun District Council has used National Energy Action (NEA) grants to install innovative technology in properties such as thermostatic radiator valves and better heating programming controls.

Smart meters help people understand when and how they are using energy. Arun District Council promotes Smart Meters to tenants.

The Government wants smart meters rolled out across the UK and is obliging energy companies to upgrade all meters.

Incentives

Social Housing Decarbonisation Grants

The Government is encouraging providers to start programmes of work with funding through the Social Housing Decarbonisation Fund (SHDF). Introduced as a pilot in 2021, with grants made to early applicants in early 2022, the next round of funding is open to bids late in 2022.

Warmhomes

There have been a number of initiatives to replace old and outdated heating systems with more up-to-date efficient ones. Arun District Council has used a number of these initiatives over the last several years to install gas central heating in place of

electric space heaters. Future rounds of Warmhomes funding may address reducing carbon as well as improving heating.

LAD Funding

A number of Local Area Development funding rounds have enabled private landlords and owner occupiers to replace inefficient heating systems. Arun District Council has not used LAD funding on its own housing stock as yet, but other registered providers have done so. Future LAD funding from July 2022 on is yet to be advised.

ECO Energy Company Obligation funding

Local Authorities (LAs) can access funding through the Energy Company Obligation (ECO). This is an obligation on energy providers to fund energy efficiency improvements. Grants are typically awarded based on the occupier’s personal circumstances. Many of ADC’s tenants would qualify.

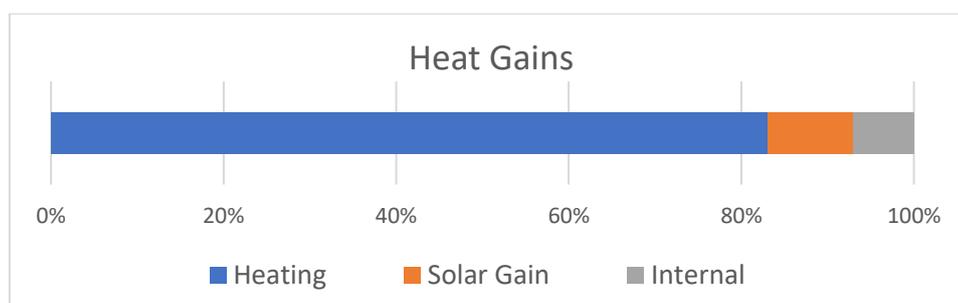
1.3 Domestic Energy Efficiency

We want to use the least possible amount of energy to provide warmth and light.

Key Aspects of Energy Efficiency for Domestic Housing

Heat Gains (typical)

CHART 1: TYPICAL SOURCES OF HEAT GAINS



The majority of our heating systems are gas boilers. These are high producers of CO₂. Nationally, the long-term aim is to replace these with low CO₂ consuming heating systems such as heat pumps and network heating systems.

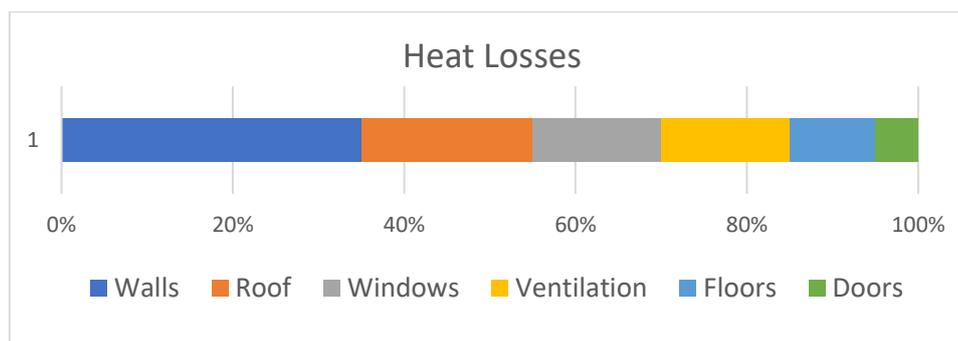
Legislation will prevent the Council replacing traditional gas boilers beyond 2035, and from installing gas boilers in new properties from 2025.

Solar Gain includes heating through conservatories, roof windows, etc. and represents an overheating risk for some vulnerable tenants.

Internal includes use of appliances and from lighting.

Heat Losses (typical)

CHART 1: TYPICAL CAUSES OF HEAT LOSSES



Well insulated properties reduce heat losses. The risk of poorly designed work is inadequate ventilation leading to mould and excess condensation. The newly introduced Retrofit standards directly address this. Applications for funding will be subject complying with these standards with designs meeting PAS2035 and PAS2030 (Publicly Available Specifications, produced by the British Standards Institute.)

PAS 2035:2019 provides an end-to-end framework for the application of energy retrofit measures to existing buildings in the UK and provides best practices for their design, installation, and monitoring. PAS2030:2019 covers installers specifically with standards of materials, work, and warranty.

There are several different ways to improve energy efficiency, such as:

- Reducing the amount of energy required to maintain warmth in our houses through better insulation.
- Matching heating patterns to lifestyle more effectively.
- Recycling heat generated from day-to-day activities.
- Adopting more energy efficient technologies, such as LED lighting.

Energy efficiency can help households either reduce their utility costs or keep their home warmer.

1.4 Decarbonisation

Decarbonisation is seeking ways to replace carbon-intense fuels such as LPG and oil with sustainably generated electricity, biogas, hydrogen, etc.

For housing, decarbonisation embraces insulation and also further involves:

- Reducing the reliance on fossil fuels through replacing gas heating with heat pumps by 2050
- Introducing technologies such as turbines and PV (solar) with battery storage to generate and store electricity for domestic use.

1.5 Retrofit

Retrofitting is a term now synonymous within the housing sector for the works that needs to be done to reduce CO2 emissions.

The Government has reacted to poor results in previous programmes by introducing two standards for retrofit works.

- **PAS2030** sets standards for installation of retrofit measures.
- **PAS2035** sets standards for designing and approving retrofit measures.

PAS2030 and PAS2035 are monitored by Trustmark.

The principles of retrofitting under PAS2035 are to have a right-first-time approach delivering a medium term (25 year) whole house plan, doing fabric improvements first and avoiding issues such as poor ventilation.

Future Government Grants and funding will require adherence to these standards. Therefore, Arun District Council will need to adopt these standards to deliver sustainable building improvements to qualify for grant funding, which has already been made available through the Social Housing Decarbonisation Fund through to 2024/25.

1.6 Fuel Poverty

The poverty line (income poverty) is defined as an equalized disposable income of less than 60% of the national median⁵. Fuel poverty is defined using the Low-Income High-Cost indicator of fuel poverty.

A household is in fuel poverty if it has:

- an income below the poverty line (including if meeting its required energy bill would push it below the poverty line); and
- has higher than typical energy costs.

The Government sets targets for reducing fuel poverty. In essence, the Government expects registered providers to achieve a C rating for all properties where it is practical to do so by 2030.

Any work undertaken to deliver decarbonisation will all contribute to reducing energy costs. Other initiatives and reporting on fuel poverty are covered in Arun District Council's *Energy Efficiency and Fuel Poverty Strategy 2020-2025*.

2 Our Housing Stock

Past changes in building regulations and construction approaches make the age and the construction characteristics (or archetype) highly indicative of thermal performance.

For instance, cavity walls became more and more common from the early 1920s, but the size of cavity and the best way to insulate it depends upon the prevalent building methods over the last 100 years.

Housing Stock Characteristics

Arun District Council has the following housing stock by age band and archetype.

TABLE 1: HOUSING STOCK BY BUILDING STYLE AND AGE

Property Characteristics	pre-1900	1900-1929	1930-1949	1950-1966	1967-1975	1976-1982	1983-1990	1991-1995	2007-2011	Grand Total
Bungalow	2	21	206	4	114	10	1			358
Detached		3	1							4
End Terrace		6	62	2	38	4				112
Mid Terrace	2	3	43	2	34	6				90
Semi Detached		9	100		42		1			152
Flat		27	307	79	1033	155	47	10	32	1690
Detached		5	64	34	310	53	12		20	498
Ground		1	23	16	135	17	7		8	207
Mid			1	6	32	4			4	47
Top		4	40	12	143	32	5		8	244
End Terrace		12	72	15	210	29	10	4	8	360
Ground		4	31	5	71	12	3	1	4	131
Mid		2	2	3	27	6		3	2	45
Top		6	39	7	112	11	7		2	184
Mid Terrace			73	17	382	26	15	3	2	518
Ground			33	6	150	10	7	3	1	210
Mid				2	55	5			1	63
Top			40	9	177	11	8			245
Semi Detached		10	98	13	131	47	10	3	2	314
Ground		2	42	4	45	18	4			115
Mid		2		3	12		2	1		20
Top		6	56	6	74	29	4	2	2	179
House	42	409	402	5	259	64	17		31	1229
Detached		11			3		1			15
End Terrace	6	115	87	1	89	23	5		12	338
Mid Terrace	32	155	101		153	40	9		12	502
Semi Detached	4	128	214	4	14	1	2		7	374
Maisonette	2			8	69	4				83
Detached				2	12	1				15
End Terrace				5	16	2				23
Mid Terrace	1			1	41	1				44
Semi Detached	1									1
Grand Total	46	457	915	96	1475	233	65	10	63	3360

2.1 Energy Efficiency

The most prevalent measure available is the EPC SAP rating (Energy Performance Certificate, Standard Assessment Protocol) rating which we have for the majority of our homes.

We have estimated EPCs for properties where we are missing a current certificate, using a proven modelling system.

EPCs are revised over time. The Government target for the Council is to have properties at SAP rating of C, or higher, by 2030.

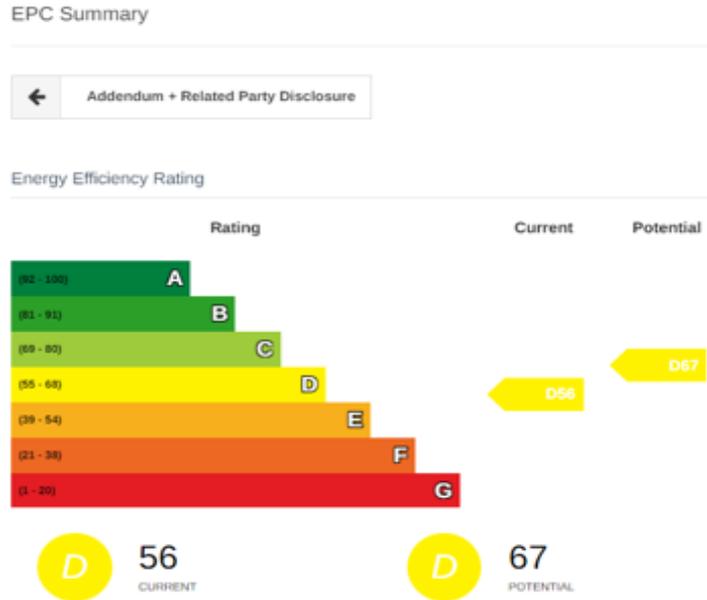
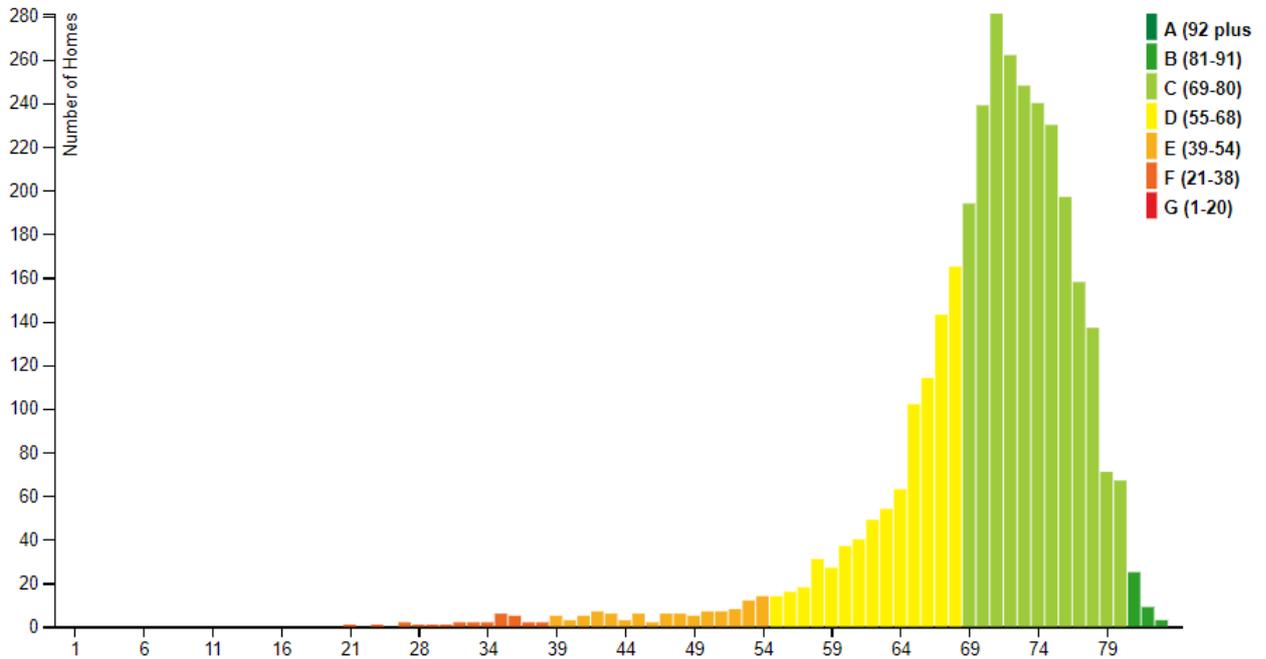


CHART 3: TYPICAL EPC CERTIFICATE

CHART 4: EPC SCORES AND BANDINGS

Current EPC/SAP Performance

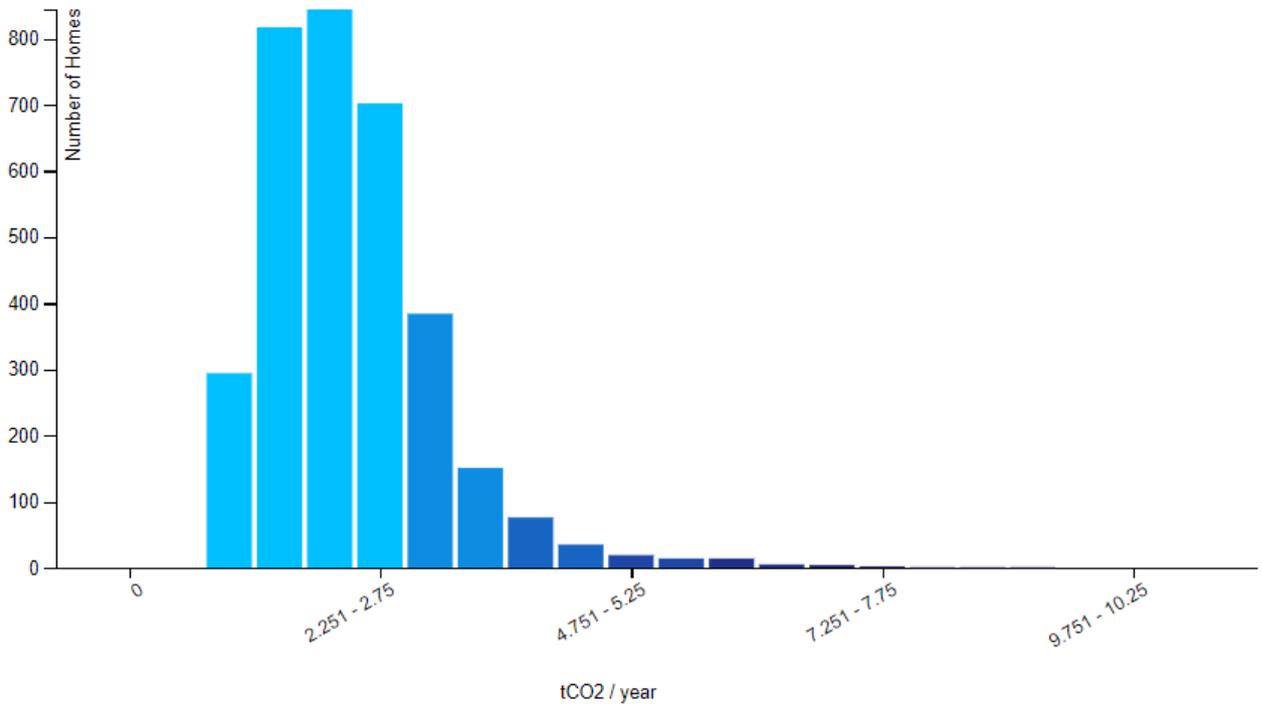


Source: Parity Projects Arun District Council Database.

Housing Stock Carbon Emissions Data

The same analysis tool gives us an analysis of CO2 used by each property.

CHART 5: NUMBER OF PROPERTIES BY CO2 EMISSION BAND



Source: Parity Projects Arun District Council Database.

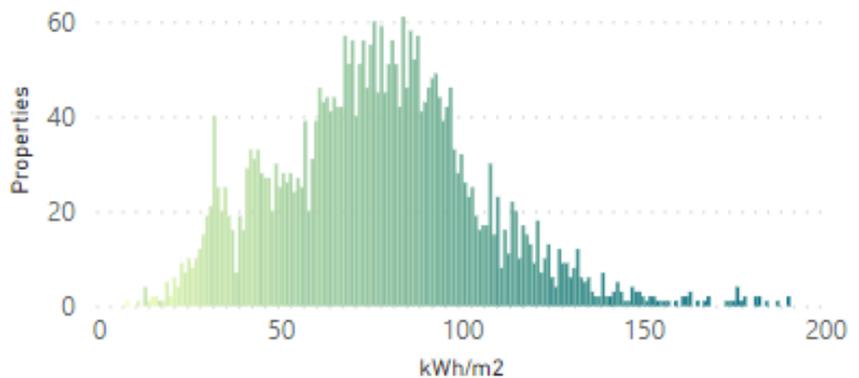
Heating Requirements

The Government’s second metric for grant funding is to achieve a “heating requirement” target.

This is based upon typical usage for the type of house and is measured in Kilowatt Hours per Metre Squared.

The current grant funding target is 90 kWh/m2, as well as SAP Rating C or above.

CHART 6: HEATING REQUIREMENTS ACROSS OUR STOCK



Energy Costs (2012 values)

CHART 7: HEATING COSTS IN 2012 VALUES ALL ADC STOCK

This is relative heating costs for properties. Note that fuel costs are now significantly higher than the base date of 2012, but the relative profiles are still pertinent

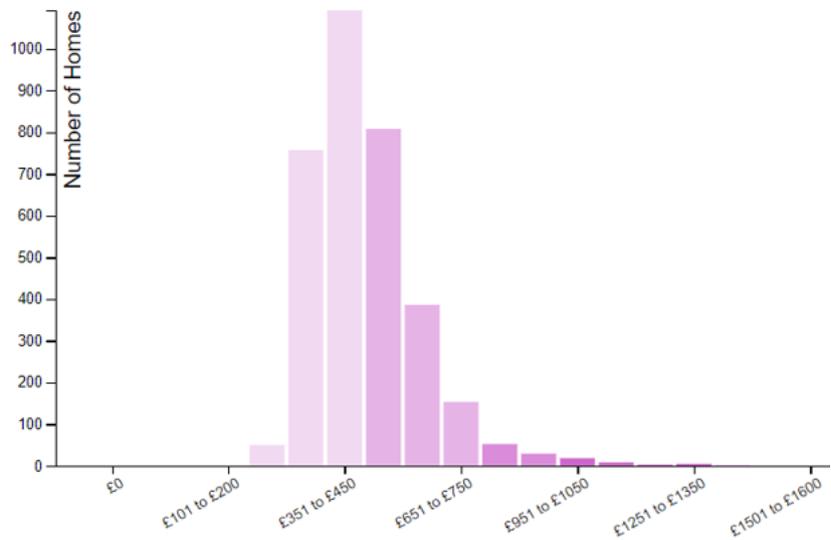
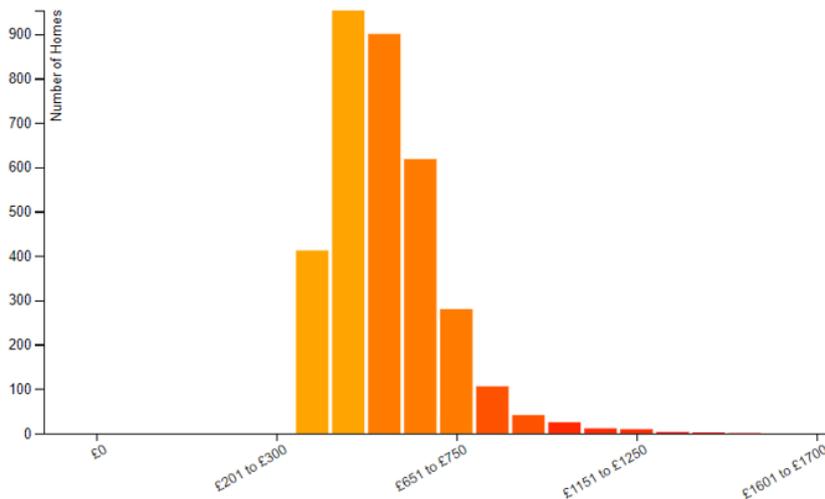


CHART 7: ENERGY COSTS IN 2012 VALUES ALL ADC STOCK



This includes any other costs, lighting, appliances etc.

2.2 Summary Information

Dashboard

The Parity Projects database provides a valuable dashboard for reference.



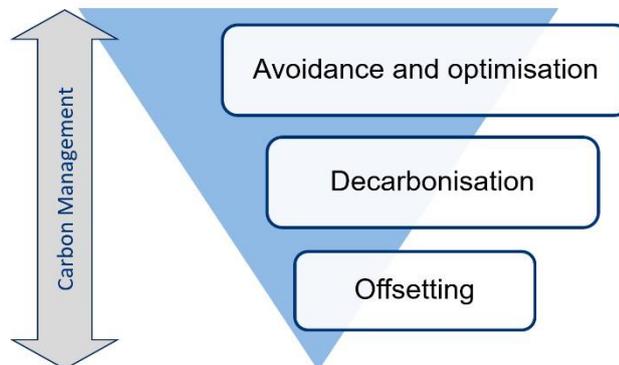
Data as at 31/12/2021.

These numbers have been reported to the Climate Change Committee and form our basis for monitoring progress.

3 Strategic Aims

3.1 Carbon Management

The Carbon Trust (ref) identify three aspects of “Carbon Management”.



For Residential Services this involves

- Educating our tenants on how they can help reduce the impact on the climate
- making our properties better insulated, so they need less energy to heat.
- Replacing carbon-intense heating systems (such as gas boilers) with less intense systems (such as heat pumps)
- Offsetting remaining CO₂ with for instance, solar panels on our homes where possible.

3.2 Strategic Goals

With regards to our housing stock:

- To reduce the amount of energy required to heat the Council’s housing stock
 - To achieve a minimum SAP rating of C for all properties by 2030
 - To achieve higher SAP ratings of A or B for as many properties as possible by 2050
- To move heating systems to low carbon systems by 2050 for as many properties as possible, including district heating schemes where feasible
- To refurbish and retrofit properties in accordance with PAS2035/PAS2030
- To maximise the value of works undertaken by developing improvement plans for each property (in line with PAS2035)
- To do all works in an order that minimises re-work and improves the buildings fabrics as quickly as we can.

With regards to the District and County, we intend to:

- Support collaborative ventures with other councils to deliver value for money, such as the Lewes and Eastbourne/Arun/Greater Brighton Economic Board programme
- Promote planning controls that ensure new build meets stringent energy efficiency targets
- Ensure private landlords meet the Housing Health and Safety Requirements Specification (HHSRS) in particular with regards to warmth through our HHSRS inspections.

3.3 Affordability

Our current best estimate of the costs of achieving zero carbon across all our housing stock by 2050 is, in current terms, going to cost in the order of £3,000,000 per year from 2023/4 onwards.

The Capital Works programme includes allowances for planned works, around windows, doors and roofing, and all other external works. These works now need to be planned in accordance with an overall carbon reduction plan. This plan needs to be developed from individual medium term (25 year) property plans as

Such grants as have been available to date offer match funding (SHDG, for example) and we intend to apply for funding of £3,000,000 through to 2024/2025. There is no visibility of grants or incentives beyond 2025m however, we can reasonably expect further Government support.

3.4 Provisional Timeframe

For our housing stock, we have set provisional targets as follows:

Threshold (% of properties)	Now	2025	2030	2040	2050
SAP rating C or higher	60%	80%	100%*	60% B	90% A
kWh/m2 below £90/year	30%	40%	50%	75%	100%
kWh/m2 below £50/year				50%	90%
CO2 below 1 tonne per year	40%	50%	70%	90%	100%
New Build SAP rating A		90%	100%	100%	100%

*: Statutory obligation.

Programmes	Approach to Carbon Management	Provisional Timeframe
Manage usage	Educate our tenants	2022-2030
	Install smart meters	2022-2025
Reduce heat losses	Improve insulation	2022-2035
	Reduce drafts	2022-2035
	Renew windows	2022-2042
Improve heating systems	Replace gas boilers with alternatives	2025-2040
	Develop network heating	2025 on
Build to higher standards	Adopt new building regulations and standards	2022, 2025
	Retrofit during renovation to PAS2030 standards	2022 on
Property plans	Develop a medium-term plan for each property	2022-2032
Offsetting	Installing wind turbines and solar/pv systems to generate offsetting electricity as part of the overall Net Zero programme	Council-led

3.5 Other Strategic Considerations

Whether or not some of our sheltered or supported schemes can achieve low carbon outcomes is unknown.

Many of our properties are within blocks, with one or more leaseholders present. The impact of energy efficiency measures that address properties rather than the entire block risks affecting leaseholders adversely which may in turn create claims against the Council. Leaseholder engagement in Zero Carbon is essential.

These are all medium to long term activities

*: Alternatives such as heat pumps etc are still in their infancy. Installation costs, material costs etc are expected to decline in the medium term similarly to the experience of the solar panel industry.

3.6 Consequences of Doing Nothing

For reference, if Residential Services did nothing to reduce CO₂ in our housing stock, then by 2050, Arun's housing stock would account for around 5,000 tonnes of CO₂ per annum.

Our average CO₂ production per house would fall from 2.2 tonnes to 1.5 tonnes, due to planned decarbonisation of the electricity network in particular.

For reference, per capita emissions from domestic properties fell by over 35% from 2010-2017 due to higher use of wind power and renewable sources to generate electricity and the introduction of biogas into the gas network.

3.7 Tenant Communication

Residential Services will use Arun At Home to explain our approach to carbon management for our tenants. This will be supported by a web page carrying programme updates.

Individual programmes of works will be communicated to tenants in advance of work starting and supported by briefings at drop-in meetings etc. to maximise tenant engagement.

Each programme will be undertaken within the remit of PAS-2035. Tenant liaison will be a dedicated aspect of each project, in accordance with PAS-2035 requirements. Leaseholders will be consulted in accordance with Schedule 20 requirements.

Individual project communications plans will be agreed and monitored by the Project Board.

3.8 Leaseholder Engagement

Full leaseholder engagement will be essential to ADC's targets. We cannot achieve low carbon housing in blocks where only partial works are completed, as we will need to improve the entire 'external envelope' to reduce heat losses. Furthermore we may have liabilities in future as a consequence of impacts of part completed works.

4 Budgeting and Financial Modelling.

4.1 Current Provisions

The 2021 HRA Forecast had the following scenarios. All costs are in current terms.

Scenario 1 Single stage, SAP C and Zero Carbon

Measure	Outside current Business Plan	Within current Business Plan	Total
SAP C	£4,223,498	£2,827,939	£7,051,437
Net Zero Carbon	£9,393,639	£22,569,912	£31,963,551
Total	£13,616,137	£25,397,851	£39,014,988

Scenario 2 Two stage, SAP C then Zero Carbon

Measure	Outside current Business Plan	Within current Business Plan	Total
SAP C	£1,376,064	£1,167,319	£2,554,383
Net Zero Carbon	£12,663,763	£24,230,523	£36,894,286
Total	£14,050,827	£25,397,842	£39,448,669

4.2 Latest Modelling Estimates

Based on modelling undertaken in Parity Projects the following costs are now estimated (in current terms)

Measure	Total Cost to achieve
SAP C Only	£5,164,981
Sap C and Heating costs below 90 kWh / m2	£6,912,858
Zero Carbon	£78,629,269

4.3 Refining the Estimates

ADC has commissioned PAS2035-standard retrofit assessments for a set of common archetypes. These will refine the estimates we have based on Parity research.

To conduct retrofit (ref) works under PAS2035, each property will in time require a retrofit assessment compliant with PAS2035.

Each property will then have an individual plan of works to improve energy efficiency from which collective programmes can be built around each work strand, be that insulation, doors and windows or heating system changes.

4.4 Financial Planning

The Capital Works programme will be reviewed in the autumn to include retrofit works in heating system replacements, structural works, and renewing of doors and windows. These programmes already account for around £50,000,000 of the total Capital Works budget that is outside the amount within the current business plan for decarbonisation. Currently then we are confident that the budget will meet the requirements.

A full detailed analysis will be completed in the upcoming review.

5 Strategy & Action Plan Review

This strategy sets out Arun District Council’s intentions regarding decarbonisation and energy efficiency measures on our housing stock.

The Action Plan covers 2022-2030, in line with the Council’s Net Zero planning.

Every October the Action Plan (appendix 1) will be reviewed and updated against previously set targets and a revised action plan produced for the next year. The revised action plans will be authorised by Arun District Council’s Individual Cabinet Member Decision (ICM) by the Cabinet Member for Technical Services by December of each year.

The entire strategy will be reviewed in detail in 2025 with a view to creating a new strategy, to start from 2026.

5.1 Risks and Challenges

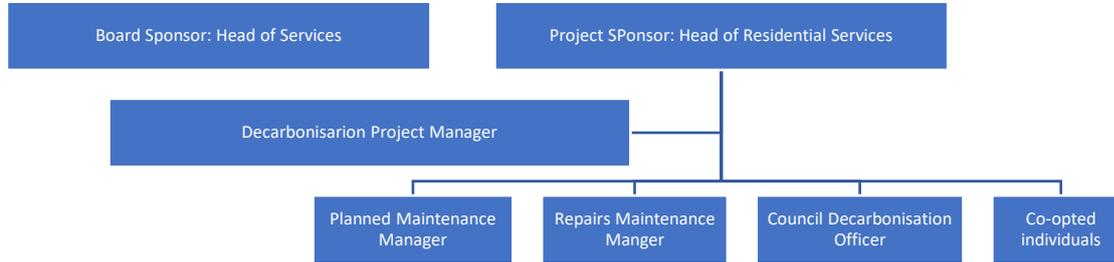
The main challenges/ risks we see associated with wide scale decarbonisation are as follows:

Risk	Mitigation
<p>Financial</p> <p>The current estimates are based on desk top research and not on detailed property plans.</p>	<p>Undertake additional property plans, particularly as the initial work of any grant funding received, to improve confidence in cost projections.</p> <p>Set a threshold for stock redevelopment or disposal where retrofitting is deemed too expensive.</p>
<p>Resourcing</p> <p>There is a risk that we will be under resourced to manage and complete the necessary works.</p>	<p>Include retrofitting work in the Programmed Works Manager Role.</p> <p>Build expertise through well understood fabric programmes while we research and review low carbon heating systems.</p>
<p>Technical</p> <p>There is a risk we act prematurely and install new inefficient or expensive technologies that could cause harm to the property and would eventually require replacing to achieve the objective.</p>	<p>We shouldn’t undertake heating system works until</p> <ul style="list-style-type: none"> a) The strategic review of supported provision is completed b) Fabric works are completed on other properties.
<p>Limited Technical Expertise</p> <p>There is a risk that external and internal expertise to install and service these new technologies either currently do not exist or will be in high demand.</p>	<p>Procurement tests capacities and competencies of potential suppliers.</p> <p>We defer new technologies until fabric works in completed.</p>
<p>Reputation / Customer Acceptance</p> <p>There is a risk of customer refusal due to the invasive nature of decarbonisation work.</p>	<p>Work with Tenants’ panels, and profile the benefits through frequent tenant communication.</p> <p>Work on a ‘property’ approach rather than a ‘measure’ approach to minimise disturbance.</p> <p>Use void periods to undertake disruptive work where possible.</p>

5.2 Governance

Strategy Governance

The decarbonisation strategy will be managed by a Decarbonisation Project Board reporting to the Climate Change Committee.



The Project Board has a number of key functions specifically related to carbon management:

- To provide regular oversight and monitoring of progress towards the targets set
- To raise 'blockages' to the board sponsor where they can be removed e.g. resource issues
- To manage the expectations of tenants and recognise achievements on carbon management.

The Project Board is also responsible for implementing the projects contained within this Strategy. The Project Board will oversee the activity within the programme which will be led by the Decarbonisation Project Manager.

Corporate Strategy & Policy Alignment

The Project Board is accountable to the Climate Change Committee. This Committee will ensure Council direction is applied.

Key Performance Indicators

1. Percentage of our properties with a PAS2035 Medium Term Plan for Carbon Management (Lodged on our Housing Management system)
2. Reduction in carbon emissions year by year (reported via Parity Database)
3. Percentage of our properties by SAP bands (A-G)
4. Percentage of our properties with a kWh/m² value of below 90
5. Individual Projects achievements.
 - a. Carbon Reduction
 - b. Variance against budget
 - c. Variance against timescale
6. Percentage of Tenants agreeing to retrofit programmes for their property.

Data Management

Effective data collection has been a critical element of developing this strategy. It underpins the strategy and target, and it will continue to be a critical element.

ADC will use continue to use a tool such as Parity Projects as a database and analysis tool in order to access national databases for SAP and Retrofit data in a tractable, reliable and credible form.

Appendix 1: Programme of Work

Short term (this financial year)

Ref.	Action	Lead	Timeframe
1	To establish the Decarbonisation project board.	Head of Service	July 2022
2	To refresh stock condition data to include building a better profile of retrofit risks and opportunities in our housing stock	Decarbonisation Project Manager	August 2022
3	To complete an application for the Wave 2 Funding round for the SHDG	Decarbonisation Project Manager	September 2022
4	To commence a programme of retrofit surveys for all of our properties so we have a road map to a low carbon, sustainable future.	Decarbonisation Project Manager	March 2023
5	To review the HRA Capital Programme and determine how to best apply programmed works (doors, windows, roofs, etc) to achieve decarbonisation objectives, and to identify any additional requirements.	Decarbonisation Project Manager	October 2022
6	To embed decarbonisation in day to day building maintenance, so that even day to day repairs considers the materials used and works specified to support our long term goals	Repairs Manager	January 2023
7	To embed decarbonisation in planned building maintenance, so that even day to day repairs considers the materials used and works specified to support our long term goals	Programme Works Manager	January 2023
8	To publish a housing decarbonisation strategy for the housing stock that delivers low carbon housing to the best of our ability	Decarbonisation Project Manager	October 2022
9	Work with Planning to develop standards for new builds that address local issues such as water scarcity and national issues such as decarbonisation, to reduce future costs of Schedule 106 properties.	Decarbonisation Project Manager	March 2023
10	To include decarbonisation assessments in all new build for our own housing stock	Development Manager	September 2022
11	Adopt the standards for retrofit works promoted by the BSI (PAS2030 and PAS2035) and contract with accredited suppliers	Head of Service	January 2023
12	Communicate our strategic intent with tenants and leaseholders	Head of Service	November 2023

Medium term (22/23-24/25)

Ref.	Action	Lead	Timeframe
1	To apply the SHDG grant to undertake qualifying works (improving SAP ratings through better insulation) and to establish the team (staff and providers) and the skills needed for more extensive retrofitting work	Programmed Works Manager	From March 2023
2	To continue to undertake retrofit assessments to the required standard, to cover c. 40% of properties by end 2024/25.	Decarbonisation Project Manager	March 2025
3	To include retrofit requirements in procurement across housing maintenance and works programmes	Repairs and Programmed Works Managers	From March 2023
4	To work with Lewes & Eastbourne, Brighton University, and the Greater Brighton Economic Board on better understanding how to deploy low carbon heating systems effectively	Decarbonisation Project Manager	Ongoing
5	Incorporate long term retrofit assessments into the Supported Housing Schemes review, and work with the Council's Climate Change Team to implement measures that support the 2030 Net Zero target (for instance, PV installations)	Decarbonisation Project Manager	December 2023
6	Engage with leaseholders and tenants, particularly our vulnerable tenants, in building an awareness of decarbonisation goals and strategies, so that we can start to deliver improvements on a whole block level, not just for individual flats	Decarbonisation Project Manager	From January 2023
7	Report on and maintain the Housing Decarbonisation Strategy	Decarbonisation Project Manager	Quarterly from October 2022

Longer term (25/26-31/32)

Ref.	Action	Lead	Timeframe
1	Implement a retrofit-centred capital works programme to manage the delivery of works to properties in line with their specific plans, working within the HRA capital spend	Programmed Works Manager	From March 2025
2	Apply for any future grant funding that supports our plans	Decarbonisation Project Manager	From March 2025
3	To continue the programme of retrofit assessments to all of our housing stock to achieve SAP C or above	Programmed Works Manager	June 2030
4	Determine properties that can never achieve a low carbon status, or are very expensive to improve, and recommend disposal or redevelopment options	Decarbonisation Project Manager	From March 2025
5	Determine other redevelopment options in tandem with the Neighbourhood team or where we have low density housing that would be better redeveloped	Decarbonisation Project Manager	From March 2025
6	Determine options for heating systems including district heating, heat pumps, hydrogen, solar with battery back-up, and other options ahead of the 2035 embargo on gas boiler installations in our properties	Decarbonisation Project Manager	June 2025
7	Report on and maintain the housing decarbonisation strategy Complete a 'root and branch' review in 2027/28.	Decarbonisation Project Manager	Ongoing July 2027

Beyond 2031/32 and through to 2049/50 (Outline only)

- 1) Collaborate on regional initiatives to improve cost effectiveness of programmed works in particular on network heating initiatives.
- 2) Redevelop sites and properties in accordance with approved plans.
- 3) Introduce low carbon heating systems into properties that have had all practical insulation completed.
- 4) Achieve the lowest possible carbon output from our housing stock and develop offsetting approaches to compensate.
- 5) Maintain the strategic intent of decarbonisation for the housing stock, keeping the strategy under regular review]
- 6) Develop an off setting approach in liaison with the Council Climate Change committee.