

Caredig Sustainability Strategy

2022-2030



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Foreword

Marcia Sinfield, Chief Executive, Caredig

I am delighted to present Caredig’s first Sustainability Strategy, which outlines how the organisation will reduce its carbon footprint and address the challenge of climate change over the next 5-10 years.



Sustainability has moved from being a separate strategic objective to being why we are here. We recognise that as a Registered Social Landlord we sustain people in affordable homes, sustain communities and help them to thrive and are guardians of intergenerational homes ensuring they are resilient to the impacts of climate change. We are about to embark on a refresh of our strategic vision and sustainability will be a common thread as we set out why we are here.

We know that acting now will not only illustrate our commitment but also make sure the organisation can adapt to a climate-changed future, as well as avoid any climate-related risks that could impact the way we operate, the quality of service we provide, or the livelihoods of our tenants. In addition to reducing our carbon footprint we envisage that implementing the actions identified will also

- Help alleviate fuel poverty,
- relieve the strain on health and social care services, particularly in winter,
- Create new industries and potential for skills development and jobs in the areas that we operate.

We support the vision of the Future Generations Commissioner that Wales’ vision for decarbonising residential buildings will “help people live in ways that are good for them now and for future generations”¹.

In March 2019, our Board finalised its 2019-2024 Business Plan. This included a key priority to reduce our carbon footprint and increase environmental sustainability. The takeaway action was to produce a decarbonisation strategy that would guide the organisation towards this goal, setting out agreed targets and carbon reduction measures to reduce its overall carbon footprint. Measures such as driving better energy performance in new and existing homes and fuel used by the leased fleet. Since publishing our business plan, we have started to integrate environmental

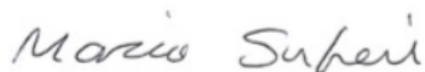
¹ [42949 Second All Wales Low Carbon Delivery Plan \(2021-2025\) \(gov.wales\)](#)

sustainability into our business culture, building capabilities, showcasing possibility, and gaining buy-in from Board and senior members of the team:

- **March 2019** – 2019-2024 Business Plan published with a clear objective to reduce our carbon footprint and increase environmental sustainability
- **January 2020** – Caredig joins the Carbon Literacy Cartrefi Cymru consortium (CLCC), and rolls-out training to a pilot group of staff with an aim to extend the programme in the future.
- **February 2020** – The findings from Chris Joffe’s “Better Homes Better Wales” report was presented to Board members.
- **October 2020** – The Development and Asset Committee agreed a way to drive this agenda forward, agreeing to seeking collaboration with external partners and mandating this as part of the Committee meeting
- **October 2020** - Joined the Sero optimised retrofit consortium
- **December 2020** – The Board adopts the Sustainability Principles that identify priority areas to address as part of the organisation’s sustainability strategy
- **January 2021** - Caredig receives funding as part of the Optimised Retrofit Programme (ORP) to retrofit existing homes and to help grow local supply chains
- **March 2021** – Caredig completes installation of solar panels with battery storage and receives second award for Welsh Government Optimised Retrofit Programme (ORP). Appoints The Carbon Trust to measure our carbon footprint and help create our sustainability strategy.
- **October 2021** - New homes in Treboeth, Swansea, developed to EPC A standard in partnership with Castell Group Ltd².

We see this strategy as a live document and will continue to review and monitor our progress against the actions we have set out to deliver. We hope that with a strategy in place to address the impacts of climate change, we not only deliver organisational benefits, but can also contribute towards achieving Wales’ commitment to providing a better quality of life for current and future generations.

I would like to thank the Board, staff and tenants, all of whom have contributed to the development of this strategy. We recognise that we play a fundamental role sustaining people, communities and the planet. The challenges ahead are significant but we will continue to work with our partners to deliver this strategy through our actions and commitments.



Marcia Sinfield

² Caredig Association turns to solar to tackle carbon footprint and fuel poverty (fha-wales.com)

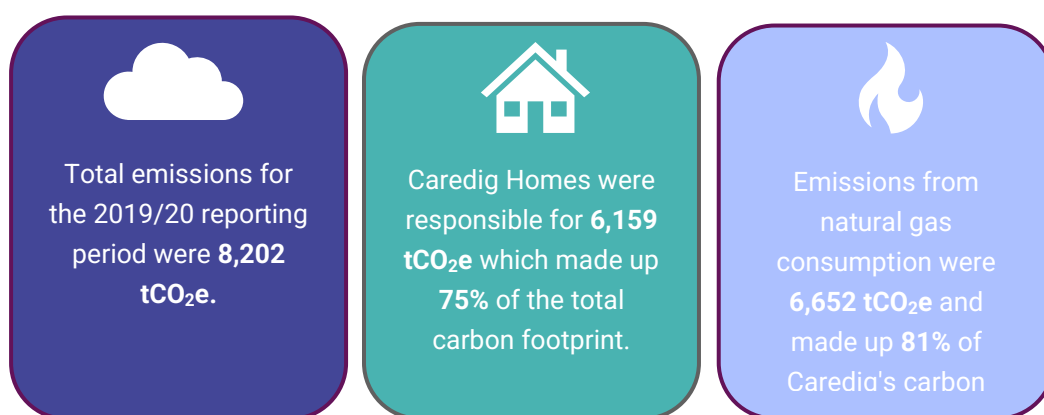
Executive Summary

The Sustainability Challenge

- The Climate Emergency presents a multi-faceted problem for Caredig. Whilst what is needed is a rapid transition to a net-zero economy in Wales, there is a need for fairness and to ensure that are most vulnerable are not left behind. The funding required to decarbonise our homes is considerable. However, amongst our Board, Staff, Partners and Tenants there is a growing will, and momentum to reduce our carbon footprint and work in a sustainable way.

Our Carbon Footprint

- Caredig’s carbon footprint **was 8,202 tCO₂e (2019-20)**. 75% of our emissions are from our existing homes and 81% of emissions are from burning natural gas. A key challenge will be deciding how to move away from natural gas for heating Caredig’s homes. Tenant engagement will be very important for this to be successful.



Business as usual

We have estimated what would happen to our carbon footprint should we continue acting as we are and taken into account our new build programme and the electricity grid decarbonising in line with projections. This would see us decrease our emissions by approximately 14% by 2025, and 27% by 2030.

	2019	2021	2025	2030
Emissions (tCO ₂ e)	8,201	7,649	7,039	6,006
% reduction		7%	14%	27%

Figure 1 Business as usual reductions.

The Target

We have set our target in line with the Paris protocol which is to reduce our emissions from corporate activities and homes by 25% (2,067 tCO₂e) by 2025 and by 46% (3,789 tCO₂e) by 2030 compared to a 2019 baseline. This is roughly equivalent to taking 1,800 cars off the road for 1 year or halving annual energy consumption across 2,600 homes. Business as usual will not achieve these targets.

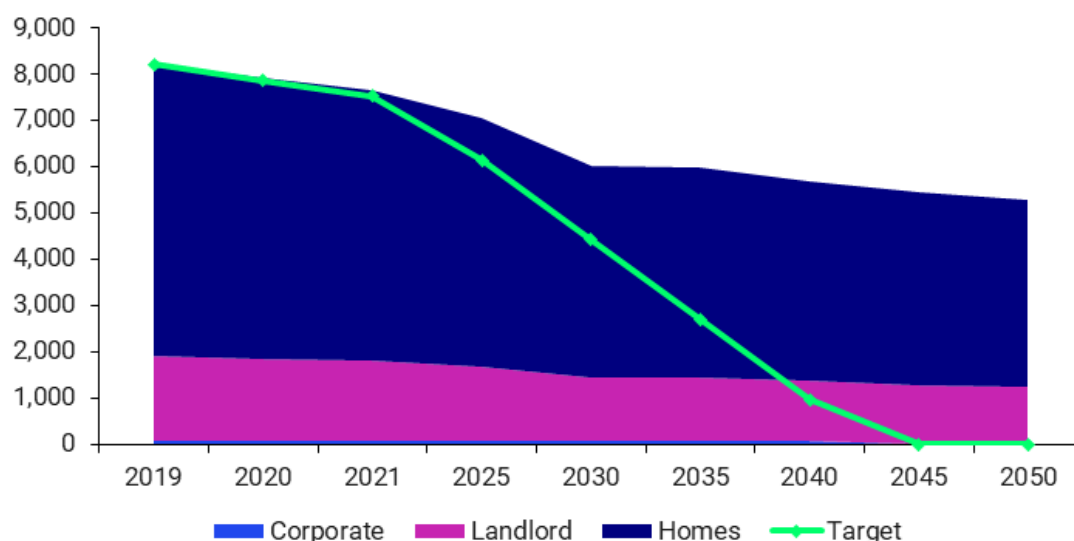


Figure 2. Business as usual emissions vs. 1.5°C target

How we are going to achieve our targets

Figure 2 below shows the principles that we have adopted to reduce our carbon footprint. There is a focus on both action and education. We will utilise these principles when making decisions about our business and the impact of making decisions on the environment. We recognise that we cannot achieve our ambition on our own and it will require collaboration with partners, staff and tenants.

This strategy links with our Development and Procurement Strategies and the Asset Management Strategy that is currently being developed.

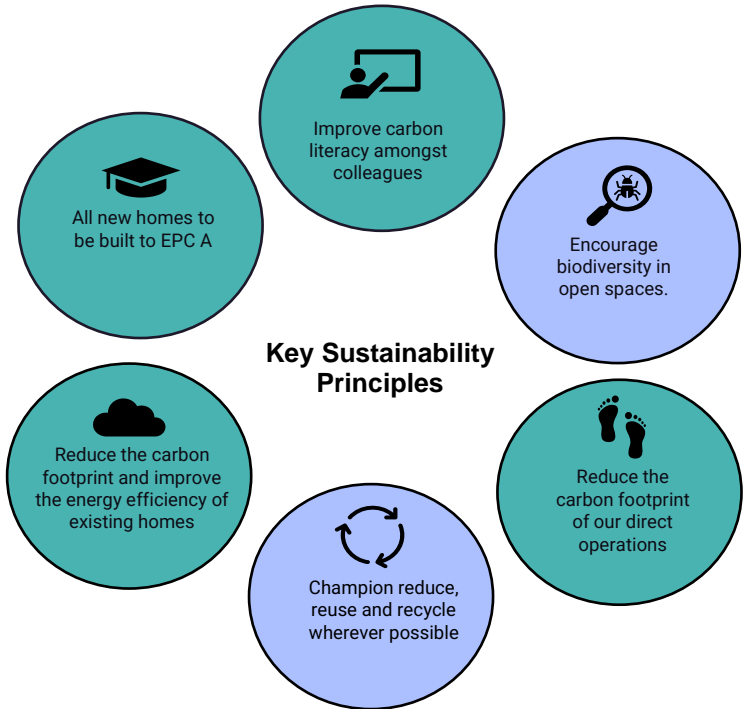


Figure 3 Key sustainability principles

As our homes account for 75% of our carbon emissions we need to take steps to reduce these emissions. All new homes that we build will meet EPC A and will not use fossil fuels. We have begun to retrofit our worst performing homes funded by Welsh Governments’ Optimised Retrofit programme and our own funds. Mindful of fuel poverty we are only carrying out works which will have a beneficial or zero impact on Tenants utility bills. It is our intention that this will be a key pillar of future works. We estimate that it will cost circa £40M to decarbonise our homes so the extent that we can continue with this work is dependent on continued funding. We are developing an Asset Management strategy which will have a retrofit plan for our homes whilst taking a staged approach.

Our strategy is built around our vision and sustainability principals along with considering the following 4 pillars: governance, monitoring and reporting, financial and strategic and engagement and collaboration.

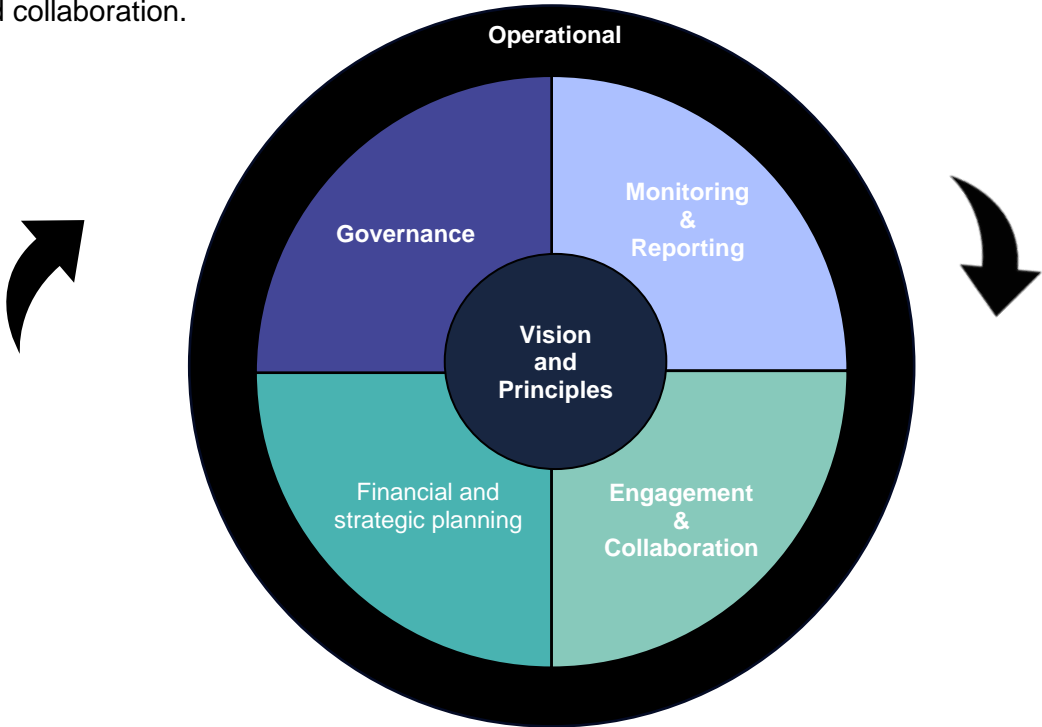


Figure 4 Strategy building blocks

We recognise the need to continue to revise our strategy and have developed an action plan built around these pillars and also an operational plan to ensure that we begin to make immediate change (see Sustainability Strategy at A Glance).

Sustainability Strategy at a glance

<p style="text-align: center;">Vision</p> <p style="text-align: center;"><i>By 2025 we will be a landlord; employer and partner of choice; we will continue to make a positive difference to the lives of our tenants, staff and the communities we work in; we will have achieved an ambitious development programme and supported the circular economy within the areas we work in Wales</i></p>				
Operations	Governance	Financial and Strategic Planning	Engagement & Collaboration	Monitoring & Reporting
<p>Establish Sustainability Working Group and target behaviour change at our offices.</p> <p>Consider the costs and feasibility of shifting to a hybrid van fleet. Pilot use of 2 Hybrid Vans and evaluate outcomes prior to purchasing any further vehicles.</p>	<p>Improve Board visibility and oversight of progress against principles set out in the Sustainability Strategy.</p> <p>Integrate sustainability principles into strategic decision-making.</p> <p>Review the Development Strategy and ensure that the new Asset Management Strategy reflects the</p>	<p>Align capital investment programmes with the retrofit plan once it has been developed, specifically the planned investment programme and asset management strategy.</p> <p>Consider life cycle emissions as an additional metric during project appraisal alongside typical financial metrics such as</p>	<p>Develop a Tenant Engagement Strategy for sustainability and climate change.</p> <p>Consider ways to raise tenant awareness of climate-related issues and their potential impacts</p> <p>Measure emissions from procurement to better understand the impact of procured goods and</p>	<p>Report publicly against key ESG metrics</p> <p>Agree KPIs to increase the Board's accountability for sustainability.</p> <p>Set targets to demonstrate our commitment to decarbonisation.</p> <p>Ensure that the carbon footprint accurately reflects</p>

<p>Offer basic training and/or incentives for more economic ways of driving</p> <p>Analyse data to improve efficiency of and reduce the length of journey time and fuel used</p> <p>Design and release a survey to better understand how agile working has changed</p>	<p>principles in the Sustainability Strategy.</p> <p>Consider the role of tenants and external stakeholders in the Steering Group</p> <p>Develop a Sustainability Vision complementary to the new corporate vision.</p>	<p>investment costs and payback periods.</p> <p>Appreciate the length of financial and strategic planning cycles and consider how the sustainability strategy will be integrated into existing planning cycles.</p> <p>Consider climate-related risks as part of the risk mapping and assessment process.</p>	<p>services and explore ways of engaging suppliers and contractors to reduce emissions from this source.</p> <p>Address the current maintenance and low-carbon technology skills gap by building local partnerships.</p> <p>Gain funders' support for decarbonisation.</p> <p>Collaborate with other RSLs and work towards a standardised, more efficient offering.</p> <p>Encourage cross-collaboration internally on sustainability issues.</p>	<p>all the organisation's emission sources.</p>
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The Sustainability Challenge

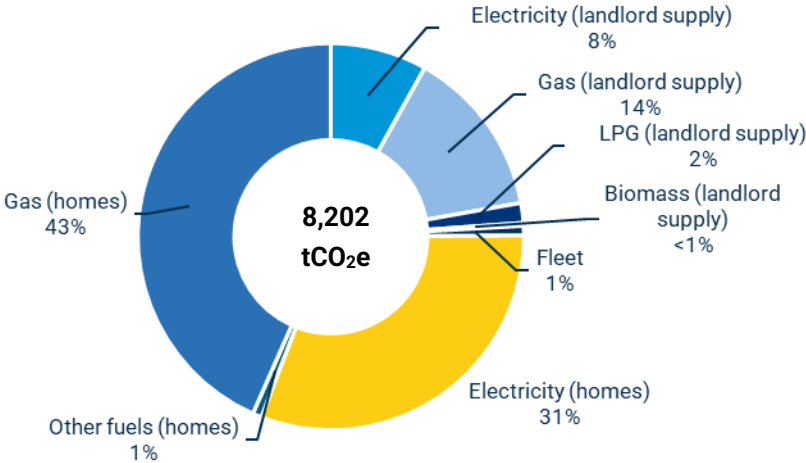
Caredig’s Carbon Footprint 2019/20

We engaged the Carbon Trust to measure our Carbon footprint for the financial year 2019/20. The full report can be found [here](#).

The top emitting activities were:

- Emissions from energy used in Homes (75%)
- Emissions from energy used in corporate facilities and communal areas (22%)
- Emissions from the vehicle fleet (1%)

The summary boxes provide key metrics: Total emissions for the 2019/20 reporting period were 8,202 tCO₂e. Caredig Homes were responsible for 6,159 tCO₂e, which is 75% of the total carbon footprint. Emissions from natural gas consumption were 6,652 tCO₂e, making up 81% of Caredig's carbon footprint.



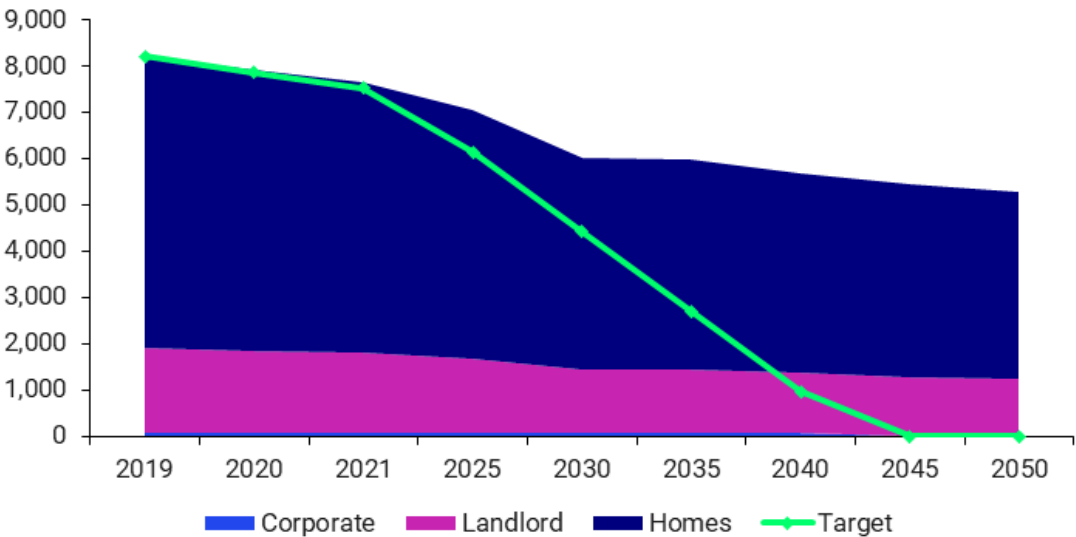
Business as usual emissions

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Our Target

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Business as usual emissions compared to 1.5°C target

A Business-as-usual” approach to decarbonisation is not enough to limit global warming to 1.5°C. To achieve this, Caredig will need to reduce its emissions from its corporate activities and homes by 25% (2,067 tCO₂e) in 2025 and by 46% (3,789 tCO₂e) in 2030 compared to a 2019 baseline. This is roughly equivalent to taking 1,800 cars off the road for 1 year.

Sustainability Strategy

Development of Strategy Framework

After measuring our Carbon Footprint, we were equipped with a better understanding of the challenge at hand and our own carbon emissions, we organised two engagement workshops with stakeholders to develop a sustainability vision for the future and discussed what factors would make a future strategy successful. Discussions at the workshops and the development of our strategy was centred around the 4 key building blocks which were: Governance, Financial and strategic planning, Engagement & Collaboration, Monitoring and reporting. Operational actions were also identified at the workshops, and they have been included in an action plan.



Strategy Building Blocks

Once a blueprint for a strategy had been defined, we discussed specific measures to reduce emissions in the short- and medium-term. This strategy report takes this feedback and outlines a plan that describes how sustainability will be governed, how progress will be reported, how we will effectively engage with our partners to drive action and finally what we can do now as an organisation to reduce impacts from our direct operations and homes.

Carbon impact factors, where available for different actions will append this strategy. This will be an ongoing resource for managers to use when developing business cases for specific projects. The benefit of this approach is that the defined business case details will result in carbon and cost estimates that are sufficiently accurate to be tracked against the carbon target.

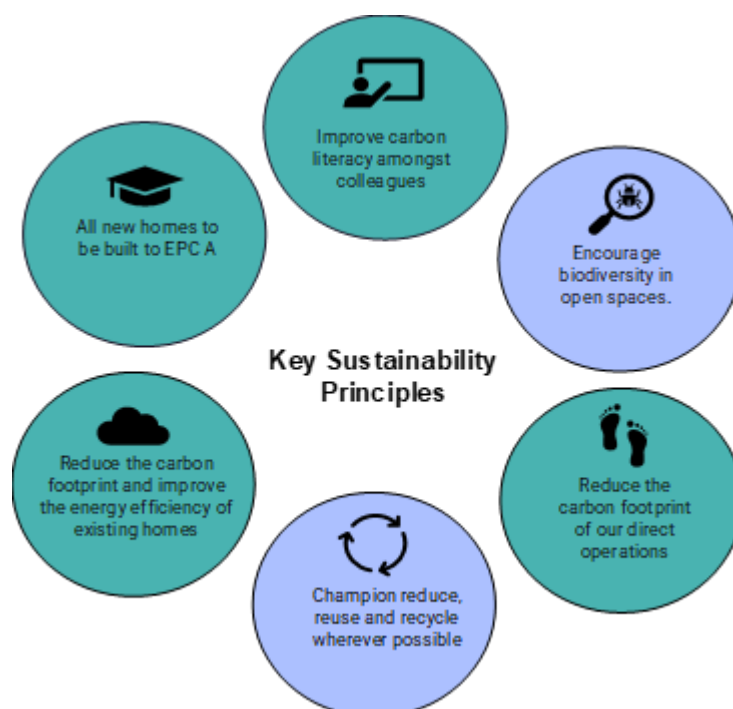
The Action Plan and the shares recommendations for measures that can be taken to establish a strategic framework for sustainability at Caredig.

Our Vision

“By 2025 we will be a landlord; employer and partner of choice; we will continue to make a positive difference to the lives of our tenants, staff and the communities we work in; we will have achieved an ambitious development programme and supported the circular economy within the areas we work in Wales”.

As part of our most recent corporate plan 2019-2024, we committed to a 4-step plan to achieving “zero carbon”³, as well as key principles to help us effectively implement sustainability across the business and work towards our vision.

Our vision for Caredig is dependent on identifying and responding to the potential impacts of climate change. For example, to make a “positive difference to the lives of tenants, staff and communities” means to provide services and developments that are climate-proof, that uphold decent living standards for all, and protect vulnerable communities from economic or financial impacts of climate change. The vision also recognises the importance of creating a circular economy, supporting local supply chains and creating a regenerative economy that self-sustains, whilst minimising extraction from the environment. We identified 6 key principles to support our sustainability objectives. This strategy focuses on decarbonisation, and as such addresses the key principles highlighted below.



³ Caredig's Annual Report 2019/20. [Annual-Report-and-Financial-Statements-19_20.pdf \(caredig.co.uk\)](#)

We asked stakeholders what they felt Caredig's future looked like through the lens of environmental sustainability and the results are shared below. The workshop provided a good start for understanding how stakeholders viewed the organisation's future through the lens of environmental sustainability, and the priorities that would make the organisation successful:

- Collaboration with partners and tenants
- Developing decarbonisation plan and taking a staged approach to decarbonisation
- Having realistic ambition
- Safeguarding the well-being of future generations

We recognise that it is important for our strategy to support the commitments and targets being set at council and regional level and will consider this as we work towards our own vision and complementary targets.

Governance

We recognise that having a clear governance structure for managing sustainability and climate-related issues that spans all levels of the organisation is key to ensuring that climate-related risks and opportunities are considered when strategic and financial decisions are being made.

Board-level responsibility for overseeing the implementation of the Sustainability strategy will be held by the Development and Asset Management Committee. The Committee reports to the Board on a regular basis.

The Head of Assets and Compliance will have management-level responsibility for delivering on the sustainability strategy. They will lead a Steering Group which will be a cross-organisational group of colleagues responsible for implementing the actions identified as part of the strategy, and responsible for day-to-day delivery. Tenant involvement is also crucial to the success of the strategy and will be consulted on how they would like to be involved and how best to integrate them into the proposed governance structure. Our Governance Action Plan is in Appendix 1

Financial and Strategic Planning

We need to ensure that we are taking a forward-looking approach to assessing the strategic implications of climate-risk and sustainability and are able to respond to opportunities. In 2017, the Taskforce on Climate-related Financial Disclosures (TCFD) released guidance to encourage the integration of climate-related risk into strategic and financial decision-making, and to provide a consistent approach for disclosure in Annual Reports⁴. The Action Plan outlines recommendations that are related to forward-looking planning, and how climate-related risks and

⁴Implementing the TCFD recommendations. [2021-TCFD-Implementing_Guidance.pdf \(bbhub.io\)](https://www.bbhuh.io/2021-TCFD-Implementing_Guidance.pdf)

opportunities can be integrated into planning processes to ensure they reflect a preparedness and resilience to succeed in a climate-changed future.

We recognise the need to assess and recognise climate-related risks as part of our risk management process. Failure to do so would leave us open to the negative financial impacts associated with extreme weather-related events, and unprepared for changes to policy and regulation as the UK transitions to a net zero economy. We are moving towards Environmental Social and Governance (ESG) reporting and lenders requiring ESG targets. Funding retrofit of our homes will be extremely challenging.

We need to identify and assess the potential impacts of climate-related/sustainability risk and how to manage them. Our Financial and Strategic Action Plan is in Appendix 2

Monitoring and Reporting

We recognise the need to have a monitoring and reporting process in place to ensure that we track and monitor progress. We will put in place:

- **Methodology** – Ensuring there is a clear methodology agreed for emissions calculation for each source, and that any estimation methods chosen accurately represents the characteristics of the source category.
- **Data** – Identifying data owners and ensure that quality data is available for included emissions sources.
- **Processes** – Identifying a team responsible for the collection and review of data used for the inventory, integrating this into existing organisational processes.
- **Documentation** – Developing a comprehensive blueprint for reporting the inventory each year aligned to best practice, which will ensure credibility and consistency in future reporting years.

Our carbon footprint is a starting point from which emissions can now be monitored or progress against a defined target of KPI can be tracked. To ensure that we can monitor and report on our progress and that the information is as accurate and informative as possible we have developed an action plan which is in Appendix 3.

Engagement and Collaboration

We recognise the need to engage with staff across the organisation to ensure that we drive action forwards and develop internal capability and knowledge of sustainability issues.

We are well-placed as an organisation to collaborate with key stakeholders. We are already working with Welsh Government Community Housing Cymru, 4TheRegion, other Housing Associations, Contractors and members of the Sero consortium. We will develop an engagement strategy for sustainability and climate change. Our Engagement and Collaboration Action Plan is in Appendix 4

Operations

Existing Homes

Our homes account for 75% of our emissions and therefore decarbonising them is key to us achieving our target. Tenants are key. No programme can be effective without the support of tenants, we will ensure that Tenants understand why we are carrying out the works and that they understand how to maximise the benefits. To decarbonise existing homes effectively, we will employ a “whole-building” and “whole-system” approach wherever possible⁵. This starts with building up a robust evidence base for successful, whole house approaches to retrofit. To do this we will undertake whole home surveys. We will then undertake optimised retrofit i.e. undertaking the right measures at the right time. We want to reduce fuel poverty our aim is that Tenants will not have to pay any more for their fuel than before we commenced retrofitting.

So far 28 homes have had solar PV panels with battery storage installed. Appendix 5 outlines our action plan for existing homes and the need to develop a Retrofit Plan alongside an Asset Management Strategy.

New Build Homes

All newly constructed homes will be built to EPC A and will comply with the Welsh Government ambition to build beautiful homes in beautiful places. They will be powered with non-fossil fuels and wherever possible adopt a fabric first approach. We will continue to carry out lessons learnt from new build and implement any findings in future developments. Appendix 6 outlines our plans for new build homes.

Direct Operations and Offices

We will develop a Sustainability Working Group to identify ways of working to reduce energy consumption throughout our premises. Our new offices will be designed to minimise our carbon footprint. Hybrid working allows our staff and partners to work from their homes or offices nearby. We will complete a financial, practical and environmental assessment on shifting our fleet from diesel to hybrid or electric fuel. Our Procurement Framework will evolve to place greater emphasis on circular and foundational economic principles, community benefit and sustainability. Appendix 7 outlines our plans for our Operations and Office sites

⁵ [Heat and buildings strategy \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/90444/heat-and-buildings-strategy.pdf)

Appendices

Appendix 1 Governance Action Plan

Ref	Action	Description	Immediate next step(s)
G1	Improve Board visibility and oversight of progress against principles set out in the sustainability strategy.	Consider how updates related to organisational sustainability can be made more transparent for the Board. For example, mandating regular reporting, or airtime for representatives to present at Board meetings.	Progress against KPI's will be reported to Board through the Development and Asset Management Committee.
G2	Integrate sustainability principles into strategic decision-making.	The importance of integrating sustainability objectives into strategic decision-making has been recognised at Board level following discussions.	When redesigning the cover sheet for Board papers it is suggested that the impact on the environment features. This will ensure that impacts have been considered
G3	Review the Development Strategy and ensure that the new Asset Management Strategy reflects the principles in the sustainability strategy.		The Asset Management Strategy is in the process of being developed and will be adopted in the first 6 months of 2022/23
G4	Consider the role of tenants and external stakeholders in the Steering Group	It is important that tenants and key external stakeholders are consulted during the decision-making process. Involving stakeholders also makes them more likely to be successful and beneficial for all.	Consider how to use the mechanisms in our Tenant Involvement Strategy to engage with Tenants.
	Develop a Sustainability Vision complementary to the new corporate vision.	It is important that Tenants, staff and stakeholders are clear about what we want to achieve	Ensure that this is incorporated into consultation and development of new vision

Appendix 2 Financial and Strategic Planning Action plan

Ref	Action	Description	Immediate next step(s)
FSP1	Align capital investment programmes with the Retrofit Plan once it has been developed, specifically the planned investment programme and asset management strategy.	As retrofit is likely to require a significant investment in the future, the costs of retrofitting homes and other buildings needs to be reviewed in the context of existing planned maintenance and investment programmes. Identifying the shortfall will be a key part of seeking funds (public, private, other revenue streams), or exploring alternative business models.	Agree a process to ensure that a retrofit plan is developed, and that funding is secured through a review of lifespan, the planned investment programme and asset management strategy.
FSP2	Consider life cycle emissions as an additional metric during project appraisal alongside typical financial metrics such as investment costs and payback periods.	For other projects, emissions metrics should be considered during appraisal alongside more traditional metrics such as investment and payback.	Consider how life cycle carbon or environmental metrics can be assessed when developing new homes and as part of future procurement processes.
FSP3	Appreciate the length of financial and strategic planning cycles and consider how the sustainability strategy will be integrated into existing planning cycles.	A significant element of our sustainability strategy will be the development of a Retrofit Plan that outlines how we will decarbonise homes in the next 5-10 years. Financial planning cycles are 30 years but key areas of planning where this plan needs to be considered are in annual budgets and the	Integrate the Retrofit Plan and Sustainability Strategy into annual and 5-year financial plans. Align the timescales for reviewing the sustainability strategy and retrofit plan with other key strategic and financial planning processes.

		<p>medium term, 5-year financial plan.</p> <p>It's also important to consider how the decarbonisation plan will interact and feed into the organisation's corporate plan which is prepared every 5 years.</p>	
<p>FSP4</p>	<p>Consider climate-related risks as part of the risk mapping and assessment process.</p>		<p>Ensure that the Risk Management Framework identifies Climate Risks.</p>

Appendix 3 Monitoring and Reporting Action Plan

Ref	Feedback from stakeholders	Action	Immediate next steps
MR1	Report publicly against key ESG metrics.	Using a consistent recognised reporting framework could unlock future investment opportunities and position the organisation as a leader in the area. It also illustrates the organisation's commitment to sustainability to external partners.	<p>Publish our carbon footprint in our Annual Report and increase visibility of our work.</p> <p>Agree the KPI's that the Association will report against using the Sustainability Reporting for Social Housing framework (ESG Social Housing – Building a sector standard approach to ESG reporting.)</p>
MR2	Agree KPIs to increase the Board's accountability for sustainability.	Integrate an agreed set of sustainability metrics alongside financial metrics into the annual report and accounts. This could be KPIs that monitor emissions, track carbon saving projects, or success of supplier engagement.	<p>The Leadership team and Sustainability Working Group will devise metrics that could be used to report on progress. This will be informed by the ESG Reporting for Social Housing Framework.</p> <p>The progress against agreed KPIs will then be presented to the Development and Asset Management Committee for review.</p>
MR3	Seek Board approval for overarching science-based targets to demonstrate commitment to decarbonisation.	Engage stakeholders in deciding what targets to aim for whilst understanding the resources required to meet the target.	<p>Build on existing engagement completed with Board Members and Staff, introducing the idea of target-setting and the advantages associated with it.</p> <p>Review activity from other housing associations and advice from regional bodies such as Community Housing Cymru.</p>
MR4	Ensure that the carbon footprint	Consider extending the carbon footprint to consider	Understand which emissions have not been captured when measuring our

	accurately reflects all the organisation's emission sources.	other relevant Scope 3 emissions sources such as purchased goods and services, business travel, commuting etc.	carbon footprint and make an informed decision as to whether further work need to be done to capture these.
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Appendix 4 Engagement and Collaboration action plan

Ref	Feedback	Action	Immediate next steps
EC1	Develop a tenant engagement strategy for sustainability and climate change.	<p>Develop a tenant engagement framework that addresses the challenge of meeting the needs of different tenants and considers ways of empowering tenants to play an active role in design of low-carbon solutions and for their homes.</p> <p>The Executive Director is part of the CEIC cohort working on the decarbonisation of social housing and working with other organisations on engaging with Tenants on decarbonisation and retrofit.</p>	<p>Implement the outputs of the CEIC cohort and evaluate.</p> <p>Consider the most effective ways of engaging based on outcome/situation.</p>
EC2	Consider ways to raise tenant awareness of climate-related issues and their potential impacts	Set up communication tools that are meaningful to tenants and that help raise awareness of the organisation's sustainability objectives.	<p>The CLCC consortium is developing training courses for Tenants, and these will be rolled out to interested Tenants Provide carbon literacy training for staff.</p> <p>The CEIC cohort is planning to work together to raise climate related issues e.g. social media, newsletters etc. – need to implement this.</p> <p>Develop a carbon barometer that shows a live view of carbon savings from activities on a regular basis.</p>

EC3	Measure emissions from procurement to better understand the impact of procured goods and services and engage suppliers and contractors to reduce emissions from this source.	Start by estimating emissions from procurement using contractual spend, which will highlight its contribution to the organisation's footprint, and key hotspots to investigate further. With this information, a targeted engagement strategy should be developed, to manage emissions from procurement.	Estimate the emissions that arise from procured goods and services. Investigate the mechanisms that can be used to collaborate with partners to reduce emissions in line with the organisation's objectives (e.g. Consider if carbon literacy programme would be useful to roll-out to contractors, reviewing contract criteria etc.)
EC4	Address the current maintenance and low-carbon technology skills gap by building local partnerships.	Identify the skills gaps both internally and with partners and work together to provide access to training needs. This could be providing financial support for training required to install new technologies or helping to identify the appropriate courses.	Identify where there are apprenticeships available for low-carbon skills development amongst existing or new staff. Take advantage of funding opportunities for establishing new apprenticeships and programmes.
EC5	Gain funders' support for decarbonisation.	Engage directly with funders to maximise the amount of money that we can spend on decarbonisation measures, which could be done in partnership with other RSLs.	Initial discussions have taken place and consent gained for optimised retrofit grant funding to be excluded from covenant calculations.
EC6	Collaborate with other RSLs and work towards a standardised, more efficient offering.	Working collaboratively ensures that learnings are shared and improves the overall service offered. it could bring cost and time benefits	Use the procurement framework that has been developed as part of the Sero consortium for optimised retrofit works for new work and ensure that experiences are shared.
EC7	Encourage cross-collaboration internally on sustainability issues.	Create a Sustainability Working Group that are responsible for reporting information from across Caredig	A cross-organisational group of volunteers will be created which will help steer the implementation of this strategy and implement initiatives.

Appendix 5 Operational Action Plan – Existing Homes

Ref	Action	Description	Immediate next steps
H1	Ensure 100% of building condition and energy efficiency data.	Use stock condition surveys to collect more information around the condition of assets (e.g. Floor area, EPC ratings).	Stock condition surveys occur every 5 years, and whole home surveys will be completed as part of the Optimised Retrofit Programme (ORP).
H2	Collect actual energy performance data on all our homes.	Collect actual performance data and use this to identify the performance gap that might exist between EPC or SAP rating and actual performance. Monitoring the real-world performance of homes and the performance of home retrofits will help us understand if assumptions about home emissions are accurate and better inform retrofit strategies. This is also a way of protecting tenants from potential fuel bills rises from the electrification of heat i.e. inefficiently operating systems can be identified early and rectified.	IES systems are being installed in homes which have received Optimised Retrofit funding. These collect information on how the home is performing in real-time.
H3	Take the condition and actual performance data for homes, and the learnings from the Optimised Retrofit Programme, to identify key opportunities for decarbonising archetypes in the stock, which will form the basis of a retrofit plan.	<p>We received a second award of funding through Welsh Government's Optimised Retrofit Programme (ORP). Part of the programme is to develop pathfinder homes, that will help design specific pathways to reduce emissions to as close to zero as possible for different property types and establish these routes for a future retrofit plan that reduces energy demand and decarbonises homes across the entire stock.</p> <p>The Retrofit Plan needs to include a strategy for electrifying heat in homes, as well as specify a</p>	<p>Identify properties where major planned investment is due to take place and where energy performance is particularly low and consider consolidating investment into a whole house retrofit.</p> <p>Review major planned maintenance works such as boiler replacements, roofing, repairs to walls, glazing replacements etc. from a carbon perspective and investigate the feasibility of replacing with low-carbon alternatives.</p> <p>We will use the findings from this programme, as well as data from the stock condition surveys to develop a retrofit plan across different archetypes in our stock.</p>

		<p>minimum thermal performance target for each archetype. It will also be important to consider the role of storage heating in flats. Storage heat (in the form of modern storage heaters or centralised storage boilers) is likely to be a key technology for decarbonising heat in flats. When paired well with time of use tariffs, tenants can benefit from lower fuel bills⁶.</p>	<p>which will be reviewed alongside the Asset Management Strategy and investment programme.</p>
H4	<p>Ensure that the retrofit plan provides the link between the asset management strategy and building passports from the Optimised Retrofit Programme (ORP).</p>	<p>Combine findings from stock condition surveys and whole home surveys with the passport to zero carbon from ORP to establish a retrofit plan.</p>	<p>Software should be available soon to consolidate this analysis, which can then be used to integrate the retrofit plan and passports into the asset management strategy.</p>
H5	<p>Empower Tenants to monitor and reduce energy consumption where possible.</p>	<p>Where there is no direct metering and where tenants pay a service charge for energy consumed in homes and for communal areas, this means that Tenants do not know how much energy they are consuming. Installing sub-meters to accurately measure consumption would give better visibility of what's being used and provide an incentive to reduce consumption where possible.</p>	<p>Identify a programme to install sub-meters where service charges are being used to bill tenants by usage rather than apportionment.</p> <p>Use Optimised Retrofit Demonstrator Projects to raise awareness of low carbon heating systems and how they work.</p>

⁶ <https://connectedresponse.co.uk/our-services/>

Appendix 6 Operational Action Plan - New Developments

Ref	Action	Description	Immediate next steps
ND1	Use recently completed Treboeth project (constructed to EPC A) as a learning opportunity to apply to future new developments.	Caredig currently has a target to build 700 new homes in the next 10 years, which will need to comply with the Welsh Housing Design Standards To achieve this, all new builds will need to be future-proofed, with electric heating systems and EV charging capacity, as wells a high building fabric efficiency.	Carry out lessons learned exercise on Treboeth and use to inform future developments.
ND2	Adopt a fabric first approach to new build	Adopting a fabric first approach means that the homes are less dependent on how a Tenant lives and manages any technology.	Ensure that future designs for new build homes adopt a fabric first approach

Appendix 7 Operational Action Plan - Direct Operations and Offices

Ref	Focus area	Immediate next steps	Description
DO1	Office	Establish sustainability working group and target behaviour change at our offices.	We will convene a Sustainability Working Group whose focus will be to identify ways to reduce energy consumption throughout the office.
DO2	Leased fleet - vans	Consider the costs and feasibility of shifting to a hybrid van fleet. Pilot use of 2 Hybrid Vans and evaluate outcomes prior to purchasing any further vehicles.	We will complete a financial assessment for shifting to an all-hybrid and all- electric fleet to understand the cost differences (unlike hybrid electric vehicles, there is grant funding available to support the costs of BEVs which could bring leasing costs down). A fully electrified fleet may be challenging because staff take vehicles home after work, so we should consider the costs and feasibility of having a hybrid fleet so charging is more flexible, and vehicles driven have much lower emissions rates.
DO3	Leased fleet - vans	Offer basic training and/or incentives for more economic ways of driving.	<p>Consider developing internal or external training programmes for fleet drivers that provide more information on simple ways to save on fuel by changing driving habits.</p> <p>Miles per gallon could be reduced by up to 15%. Approximately 40 kgCO_{2e} every 100 miles driven could be saved based on a diesel van.</p>
DO4	Leased fleet - vans	Analyse data to improve efficiency of and reduce the length of journey time and fuel used.	We will investigate ways that fleet travel can be made more efficient to reduce fuel consumption by reviewing use data that is collected.
DO5	Ways of working	Design and release a survey to better understand how agile working has	We have introduced an Agile Working Policy so we will complete an assessment of its success on reducing emissions from commuting.

		changed employee travel emissions.	
DO6	Ways of working	<p>Relaunch the cycle to work schemes and consider introducing a scheme providing access to electric cars. Request staff to complete a survey to gauge interest</p> <p>Explore the options for salary sacrifice schemes.</p>	We currently have a cycle to work scheme, but it could be more visible. We will review our ‘total benefit package’ and consider introducing additional benefits such as Electric Cars to support this strategy.
DO7	Procurement	Revise procurement framework so that specific environmental criteria and local supply chain criteria are more robust and enforceable.	The existing Procurement Framework includes several key principles eg foundational economic principles, community benefits and sustainability outputs. This could be reinforced and built on to ensure that the benefits are maximised.
DO8	Procurement	Consider using contractual agreements to encourage suppliers to commit to upskilling their workforce and providing training to support the green economy.	The Association will develop a community benefit policy and procedure that incorporates sustainability and aims to upskill the workforce.