

### Members Seminar - Sustainability

12<sup>th</sup> May 2021





### About me



#### Length of service:

13 years at Broadland, 9 years as a Director

#### Responsible for:

Repairs and Planned Works
Asset Management
Facilities and Services
Health and Safety
Estate Services
Cleaning Services
Neighbourhood Teams

#### Why sustainability?

I am committed to supporting change within Broadland and with our customers, to safeguard the future. We all have a responsibility to recognise ways that we can live and work more sustainably.

#### Recognition:

Louise received an award for Sustainable Leadership



### Agenda

- 1. What is sustainability
- 2. What is zero carbon
- 3. What are our existing targets
- 4. What are the targets put in place by the government
- 5. What have we done so far
- 6. Fuel poverty / zero carbon
- 7. Future technologies
- 8. Building a plan to zero carbon
- 9. Next steps





# Jargon Buster





### What is Sustainability

Sustainability: using our natural resources responsibly, so we can meet our needs today, but also safeguard those resources for future generations.





### What is ESG







### What is Carbon

Carbon is bad for the environment because carbon emissions actually **hold heat in the atmosphere**. So, the more fossil fuels and such are burned, the quicker the temperature should rise.

Carbon is mandatory to survive as well, so don't only see the bad affects of carbon. All plants and animals need it to survive.





#### BROADLAND Zero Carbon and Carbon Neutral / Net Zero Carbon

# Zero Carbon: no carbon emissions are being produced from a product or service

(e.g. zero-carbon electricity could be provided by 100% renewable energy supplier)

# Carbon Neutral / Net Zero Carbon: while some emissions are being generated, these emissions are being offset, making overall emissions zero

(such as buying only renewable energy or investing in emissions reduction projects)



### What is Fuel Poverty

# Fuel Poverty: having to choose between eating and heating

Important to balance the need to reach zero carbon, with the possible implications on our tenants, particularly the fuel poor.

We need to ensure that the changes we are bringing in will benefit all our tenants by adopting a careful, targeted approach and having accurate data.



### Targets – Government



10-point plan for a Green Industrial Revolution (UK Gov. November 2020)



UK to aim for net zero on all green house gases by 2050 (Committee of Climate Change 2019)



Keep global warming under 2 degrees

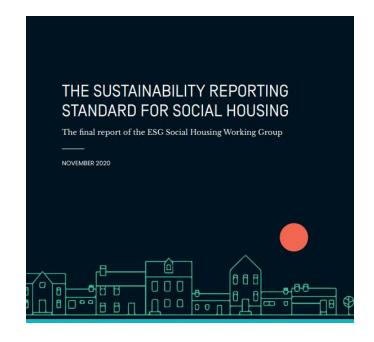
(Paris Agreement 2016)



### Targets – Government



Clean Growth Strategy
All fuel poor homes to
have an EPC C by 2030.
(UK Gov. October 2017)



A voluntary reporting framework.

Housing is responsible for 14% of UK emissions.

(The ESG Social Housing Working Group November 2020)



### Targets – Social Housing (Existing Homes)

Interim Targets = To reduce as many fuel poor households as reasonably practicable.



<sup>\*</sup> Where practical, cost effective and affordable



### **Targets - New Build Homes**

Building Regulation
Changes
75% to 85% reduction
in carbon by 2025

Future Homes
Standard 2025
Focusing on insulation and capacity for heat pumps

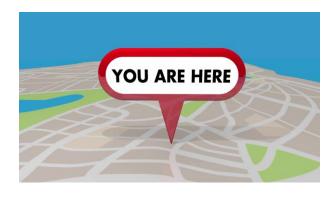
No Gas Heating
In new build homes
from 2025

Further changes to **Building Regulations**planned following a 2<sup>nd</sup>

consultation



### What have we done so far....





### **Environmental Champions**

- Group of staff from all aspects of the organisation
- Ambassadors for sustainability
- Each champion is set a sustainable objective as part of their annual appraisal
- Focus on small changes in everyday behaviour
- Run events for staff and tenants to promote awareness
- We are working to recruit Tenant Environmental Champions





### Website, Social Media, Newsletter

#### Broadland's Wildlife Watch - win prizes to encourage more wildlife into your garden!

The Environmental Champions at Broadland recently completed a survey to find out how many wildlifefriendly 'homes' we have on our schemes. We are lucky that our Estates Services Team are pretty brilliant at building wildlife stations from old trees or recycled bits of wood that would otherwise have been thrown away. They have made some amazing bird feeders, bird houses and trugs for our tenants.

That got us thinking - perhaps you have put your own hedgehog box, bird feeder, bug house etc in your garden to attract wildlife or pond life? Maybe you made it yourself? Send in your photos - you could win a prize! We have 3 bird boxes and 3 bird feeding stations up for grabs - all made out of recycled wood,



@louisearcher3 / \* / \*

residents #gardening club. 🖚

Broadland Housing @BroadlandHsg · 12 Aug 2019

Gareth Trench @GarethTrench · 12 Aug 2019

Very excited to see this project get off the ground #environmentalchampions

#bhgestates using #recycled scaffold boards to build planters for our

Send your pictures to tenantengagement@ proadlandgroup.org or go to our website and post your entry onto our Pinboard at https://www.broadlandgroup.org/ enants/engage-with-us/pinboard/. The winners will be the first 6 entries to be drawn at random on 31 July 20

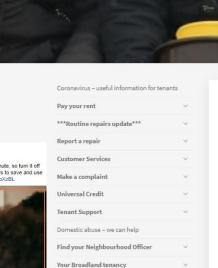
But do keep sending us your pictures after hat date. We'll put all your photos on our











Controlling condensation and mould

Recycle your way green

Our landfill sites are getting full and our oceans are clogging up with plastic. So it's more important than ever for all of us to recycle!

Here are a few links and ideas to help you on your way...

- Norfolk County Council Find your local recycle centre
- · Suffolk County Council recycling webpages can be found here
- . Never really sure what you can recycle? What to do with.... can help you find the safest, green option closest to you.

everyday items in your recycle bins?

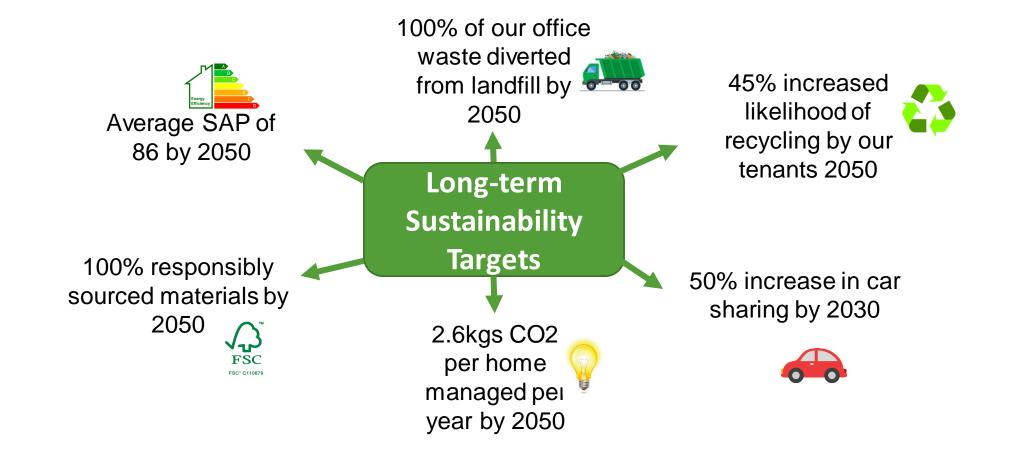
- · air freshener aluminium cans
- toilet roll tubes
- · liquid soap bottles once rinsed

. Recycle Norfolk is another excellent resource if you don't know what you can and can't recycle. It also has a handy postcode tool. There are many items around the home that can be recycled. Did you know that you can put these

· empty deodorant and hairspray cans



### Targets - Broadland





### Strategic Performance Measures

#### 10. Environmental responsibility

We will reduce our carbon footprint and our impact on the environment. We will consider sustainability in all our activities.

#### Addressing fuel poverty

Subject to Coronavirus restrictions, we will continue energy efficiency improvements in our tenants' homes to reduce the risk of fuel poverty.

#### Decarbonisation

We will continue planning to make our homes net zero carbon by 2050 with a clear strategy and realistic milestones.

#### Better scheduling

We will seek to improve productivity and reduce mileage through better scheduling of our repair operatives.

#### Reducing waste

- We will prioritise sustainability in our development and maintenance programmes.
- We will prioritise digital technology that reduce the need for printing and postage.

#### **Environmental Champions**

We will support and encourage the work of Broadland's Environmental Champions.

#### Offices

With more staff working at home as a result of the pandemic, we will review our office accommodation needs and develop a plan to make our offices fit for the new post Covid-19 normal.

#### 3. Asset management

We will invest in our homes to improve quality and energy efficiency.

#### Improving energy efficiency and tackling fuel poverty

- We will use surpluses from property disposals, and some profits from sales of open market homes by BSB, to improve the energy efficiency of properties we own.
- We will support people to move from homes (if they wish to) that are not economical to bring up to acceptable energy efficiency standards.
- We will actively support the Home Group's Campaign to get energy providers to help tackle fuel poverty.

#### 6. Development

We will build as many new affordable homes as possible each year, while ensuring we maintain our existing homes, the safety of our tenants and our long-term viability.

#### Sustainability

- We will build environmentally sustainable homes, normally minimum EPC level B.
- We will accept homes coming through S.106 programmes at a minimum EPC level of C and we will budget to bring these properties up to a minimum EPC level B.



### **Sustainability Assessment**

## SHIFT Assessment = Sustainable Homes Index For Tomorrow (the sustainability standard for housing)

- Annual assessment undertaken to measure how sustainably Broadland operates
- Covers key factors including:







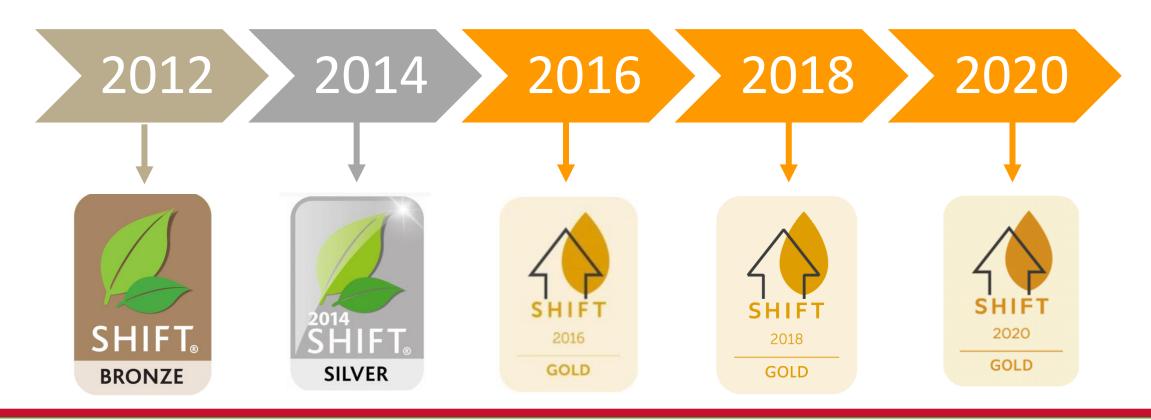






### **Sustainability Assessment**

### **Our SHIFT Journey**





### Sustainability Assessment 2020

Environmental issue	Absolute <sup>1</sup>	Intensity <sup>2</sup>	Intensity target for SHIFT platinum 2020 <sup>3</sup>	Long term intensity target (by 2050 unless otherwise stated)
CO₂ - homes	14,038 tonnes CO <sub>2</sub>	SAP 73.3	SAP 72.89 ✓	SAP 86
CO <sub>2</sub> – communal heating systems  8.3 million kWh  CO <sub>2</sub> – communal areas  1,978 tonnes CO <sub>2</sub>		8,990 kWh yr / home managed	5500 kWh yr / home managed ×	3500 kWh yr / home managed
		721 kgCO <sub>2</sub> / home managed	n/a	n/a
CO <sub>2</sub> – resident engagement			n/a	n/a
CO <sub>2</sub> – offices	50.5 tonnes CO <sub>2</sub>	29.52 kg/m <sup>2</sup>	81.19kg/m² ✓	25kg/m <sup>2</sup>
CO₂ – business mileage			n/a	n/a
CO₂ – maintenance activities	117.8 tonnes CO <sub>2</sub>	21.39 kg CO₂/ per home managed	n/a	n/a
Water – homes 0.5 million m³		130 lpd	142 lpd ✓	130 lpd by 2030
Water – offices	550 m <sup>3</sup>	3.99m³/employee/ yr	9.03m³/employee/ yr ✓	3m³/employee/yr by 2030
Waste to landfill – homes 1,627 tonnes		20.3% increase in resident recycling rates above local authority rates	4.64% increase in resident recycling above local authority rates ✓	45% increase in recycling

Waste to landfill – offices	14.7 tonnes	91% of waste diverted from landfill	70.03% waste diverted from landfill ✓	100% diverted from landfill
Responsible materials – maintenance	56.5%	56.5%	43.95% responsibly sourced ✓	100% responsibly sourced
Responsible materials - offices	34.25%	34.25%	56.45% responsibly sourced ×	100% responsibly sourced
Adaptation to climate change – homes protected from flooding	4,826 homes	98% of homes protected from flooding	30.73% protected from flooding ✓	100% protected from flooding
Adaptation to climate change – homes protected from overheating	4,574 homes	92.9% of homes protected from overheating	30.73% protected from flood and overheating 🗸	100% protected from overheating
Biodiversity value	1989 tonnes of biomass	Equivalent of 7% land "protected"	8.1% of land protected ×	19% of land 'protected' by 2043





### **Energy rating of our homes**

<b>A</b> (92-100)	<b>B</b> (81-91)	<b>C</b> (69-80)	<b>D</b> (55-68)	<b>E</b> (39-54)	Awaiting survey
0	862	3,420	679	13	51

National Average SAP Rating = 65 Sector Average SAP Rating = 68.4 BHA Average SAP Rating = 73.4

**SAP** = Standard Assessment Procedure assesses how much energy a home will use

**EPC** = Energy Performance Certificate provides an energy efficiency rating for the home

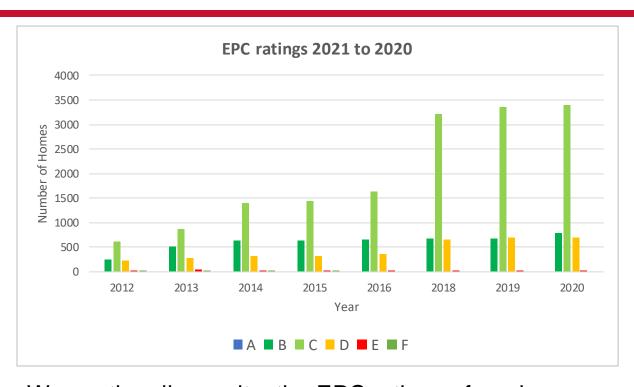


### Works to existing homes



Photovoltaic panels fitted to the roofs of one of our schemes.

There are lots of different works we can undertake to improve the energy efficiency of our homes such as insulation, solar panels or new heating systems.



We continually monitor the EPC ratings of our homes so we can identify where works are most needed. Above shows the progress from 2012 to 2020.



### CROHM (Portfolio)

# CROHM = Carbon Reduction Options for Housing Managers

A system we use to map out what works are needed to reach our Net Zero targets.

#### The Headlines:

To achieve a minimum EPC of C for all Broadland's Homes = £4.5 million

To achieve a minimum EPC of B for all Broadland's Homes = £35 million



### New build homes

Last year Broadland increased it's portfolio by 273 homes.

#### **EPC** ratings were

52 = High C

62 = Low B

159 = High B

We include recycling bins in our kitchen designs

Our new scheme at Canary Quay is getting its own Car Club car

We ensure all our materials are responsibly sourced

We fit low flow showers, taps and toilets to save water

We are already using alternatives to gas, such as District Heating Systems





### Significant Challenge

The estimated cost of taking a home from EPC C to Zero Carbon is £20,000. (higher for homes in listed buildings or those in a conservation area)

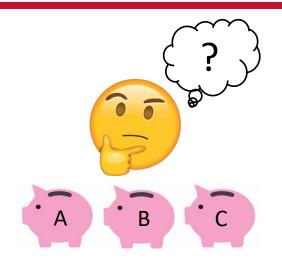
Building new homes to higher environmental standards is part of the solution, but 80% of the homes we will live in in 2050 are already built.





### Funding

Greater clarity around the requirements and long-term funding is needed.





Balancing funding zero carbon and still achieving all our other ambitions.



### **Funding**

#### **Funding Opportunities**

- Energy Company Obligation (ECO3) scheme
- Social Housing Decarbonisation Fund (SHDF)
- Green Homes (closed)





### The Road to Net Zero Carbon

Housing Associations own and manage around £2.7 million homes across England. This means we need to **retrofit around 2.1 million homes** over the next 30 years, to become Carbon Neutral.

The NHF found that social housing outperforms other tenures and are committed to make homes greener and warmer for residents by the need to tackle climate change and fuel poverty, improve resident satisfaction, health and wellbeing and cut fuel bills for residents.





### Building a plan to Zero Carbon

 BHA is already fitting alternative heating systems in our new build homes



 We are starting to map out our decarbonisation journey, consulting with specialists in this area



 Working with our Board to establish what our priorities are and how to achieve them





### **Future Technologies**



**Switchee Devices** 



**Battery Storage** 



Decarbonisation of electricity



### Conclusion

Social Housing is ahead of other housing

**Broadland is ahead of a lot of other Social Housing Providers** 

However, there is a lot of work needed to reach net zero legislation by 2050, which is not that far away.....





### Thank you!

