# BUILDINGS



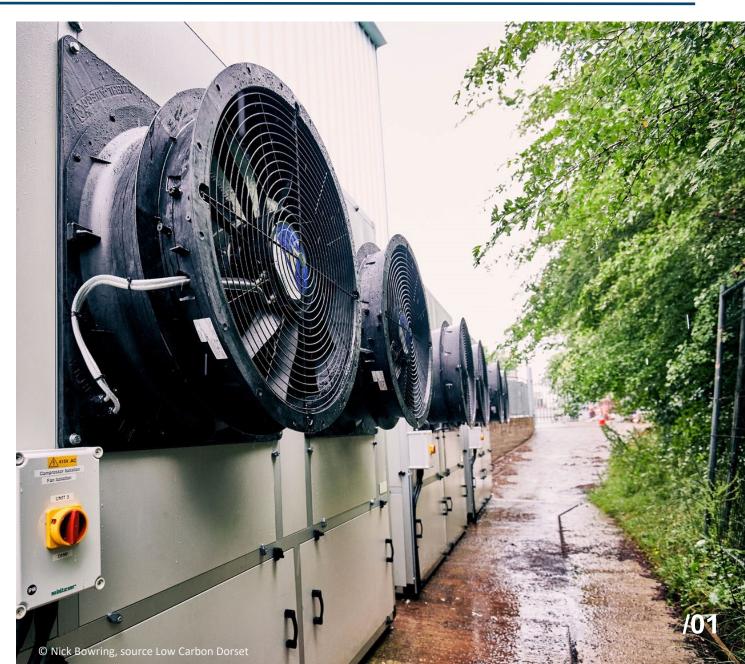
In order to reach national carbon-reduction targets emissions from Dorset buildings will need to be eliminated and all energy used to maintain a comfortable indoor environment will need to be generated from renewable sources.

Dorset Council is extremely limited in the powers it has to achieve this. However, we do have control of our own current buildings and any future buildings that are constructed on our land. We are also able to influence and stimulate action with partners to facilitate change.

After detailed evidence and information gathering exercises, led by the EAP and carried out by officer working groups, it has been recommended that the Council **implement the following 37 actions.** 

Milestones have been identified for each action. This plan shows the immediate targets we will need to achieve by 2023 to keep us on track.

Find definitions for each of the symbols used in this plan in the...



Partnership /

influence

action

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Improves

ecology

Direct

action

D

Indirect

action

CO<sub>2</sub> SAVING POTENTIAL **OBJECTIVE ACTION TYPE CO-BENEFITS** COST 8 8 8 **Ensure Council estate becomes zero-**D carbon by 2040 **ACTIONS** 2021-23 TARGET Include climate & ecological considerations **Asset Management** as part of the Asset Review, and align future D **Plan** adopted asset management plan with achieving DC by 2021 carbon budgets to 2040 Initial Develop detailed decarbonisation prodecarbonisation plan 8 8 8 gramme of energy efficiency and renewable D completed energy retrofit projects to achieve a carbon by March 2022 neutral estate by 2040 Additional capacity in Increase capacity of Energy Team to imple-8 8 8 place by Dec 2021 D ment decarbonisation programme for Dorset Council property Implement decarbonisation programme to Phase 1 retro fit 8 8 8 retro fit the Council's estate (to include programme D LEDs. thermal upgrades, ambient cooling, implemented by Mar 2022 low carbon heating and renewable energy (£19m, 30 buildings) generation) **Procurement specifi-**Ensure procurement specification favours **cation** specifies energy D energy efficient equipment efficient equipment by Mar 2022

Builds

resilience

Encourages economic

sustainability

Enhances

health &

wellbeing

Estimated carbon

saving potential

Estimated cost

to implement

action

Dorset Council



OBJECTIVE	ACTION TYPE	CO₂ SAVING POTENTIAL	CO-BENEFITS	COST	
Ensure Council estate becomes zero- carbon by 2040	DIP	<b>P P P</b>		8 8 8	
ACTIONS			coorgy commit commity coord		2021-23 TARGET
Investigate costs involved in making key buildings carbon neutral as part of decar- bonisation programme	DIP	<b>;</b> ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		8 0 0	Initial decarbonisation plan completed by March 2022
Re-instate a school's energy programme to support and work with schools to reduce energy and maximise use of renewable en- ergy technologies	DIP	<b>;</b> ; ; ; ;		BBB	Schools liaison officer employed, Plan devel- oped & initiated, Im- provement targets set by March 2023
Expand centralised utility management ser- vice across Dorset Council to incorporate an oversight of energy use, monitor con- sumption and target energy reduction at site level.		<b>~ ~ ~</b>		e e e	Energy officer em- ployed, Plan developed & initiated, Improve- ment targets set by 2022
Expand centralised Building Energy Man- agement System (BEMS)		<b>~</b> ~ ~ ~		BBB	Phase 1 upgrades undertaken by April 2022
Review operational controls on energy using equipment across council estate to ensure optimum efficiency	DIP	<b>;</b> ;;;		C B B	<b>50%</b> of building controls checked <b>by 2023</b> (25% each year)
Keep cost/payback of streetlights, bollards and signals under review to identify when they meet a payback that satisfies loan re- quirements or finance policy requirements	DIP	<b>" " "</b>		8 8 8	Review cost benefit annually & implement viable projects
D Direct I Indirect P Partn action P Partn influe action		Builds resilience	😑 economič 🛛 💛 hea	ances Ith & being	



OBJECTIVE	ACTION TYPE	CO₂ SAVING POTENTIAL	CO-BENEFITS	COST	
Ensure all new Council developments are zero-carbon	DIP	<b>;</b> ; ; ;	cology (relief) (converse of the converse of t	BBB	
ACTIONS					2021-23 TARGET
Establish a policy to ensure all new buildings that Dorset Council has direct influence over (as landowners, clients, or designers) are zero-carbon (this being true zero- carbon, and so a negative BER to cover the unregulated emissions)	DIP	<b>~ ~ ~</b>		8 8 8	Policy developed by Mar 2023
Trial tools to measure the embodied carbon in construction, such as the open source "EC3" tool	DIP	<b>;</b> ; ; ; ;		000	Future action <b>beyond</b> 2023
Investigate available tools to incorporate whole-life costing into property processes	DIP	<b>;</b> ;;;;		8 8 8	Future action <b>beyond</b> 2023
Promote more sustainable materials for new constructions based on the BREEAM tool	DIP	<b>~</b> ~~~~		8 0 0	Future action <b>beyond</b> 2023
Develop and promote case studies and ex- amples of best practice on our own estate to encourage replication by others	DIP	<b>;</b> ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		8 8 0	Future action <b>beyond</b> 2023



Indirect action

Ρ

Partnership / influence

action



Builds resilience









OBJECTIVE	ACTION TYPE	CO <sub>2</sub> SAVING POTENTIAL	CO-BENEFITS	COST	
Decarbonise heating in housing and community, public and commercial buildings	DIP	<b>~ ~ ~</b>	cology viller econy halt	8 8 8	
ACTIONS					2021-23 TARGET
Lobby government for clarity on national strategy for heat and national policy frame-work	DIP	<i>~~~</i>		8 8 8	Lobby paper present- ed to Government in 2021
Investigate large scale installation of low carbon sources of heating (air/ground/water source heat pumps), using social housing as a test bed in partnership with Registered Social Landlords (RSLs)	DIP	<b>~ ~ ~</b>		8	Liaised with RSLs to assess their plans, and Identify potential for large scale installa- tions by 2022
Undertake heat mapping exercises to identi- fy opportunities for low carbon heat in Dor- set such as any clusters of buildings suita- ble for district heating, or large heat de- mands off the gas grid	DIP	<b>~ ~ ~</b>		8	Heat mapping completed by Dec 2022
Investigate support for Dorset Council em- ployees working from home in winter (funding / thermal ungrades / advice)	DIP			BBB	Advice provided to employees, and Fund- ing opportunities



Partnership /

influence

action

Direct D action

Indirect action

Ρ

Improves ecology

Builds

resilience







Estimated carbon saving potential



ing opportunities

investigated & identified by Dec 2021

Dorset Council

OBJECTIVE	ACTION TYPE	CO₂ SAVING POTENTIAL	CO-BENEFITS	COST	
Decarbonise heating in housing and community, public and commercial buildings	DPP	<b>~ ~ ~</b>	coogy Filler Conny Lath	8 8 8	
ACTIONS					2021-23 TARGET
Targeted campaign to encourage all build- ings off the gas grid to switch to heat pumps or biomass for heating	DIP	<b>~ ~ ~</b>		8 8 8	Communications plan developed, , + Campaign initiated by Dec 2022
Use Council buildings in trial projects to test the use of hydrogen heating	DIP	<b>~~~</b>		8 0 0	Future action <b>beyond</b> 2023
Investigate potential in Dorset for large- scale 'blue' hydrogen generation with car- bon capture and storage		<b>~~~</b>		8 8 8	Future action <b>beyond</b> 2023
Access new funding to assist residents to decarbonise heating (delivered through Healthy Homes Dorset Scheme)		<b>~~</b> ~		e e e	Implement Green Homes Grant Local Authority Delivery phase 1a in partnership with BCP by Mar 2022



Indirect action





Builds resilience













Dorset Council



Dorset



OBJECTIVE	ACTION TYPE	CO₂ SAVING POTENTIAL	CO-BENEFITS	COST	
Improve energy efficiency of current housing stock	DIP	<b>~ ~ ~</b>	cology Fieldert Conny Lath	8 8 8	
ACTIONS					2021-23 TARGET
Enforce minimum energy efficiency stand- ards in the private rental sector (focus on EPC certificates E & F without exemptions)	DIP	<b>~ ~ ~</b>		BBB	Enforcement plan developed by 2022
Work in partnership (e.g. with Registered Social Landlords (RSLs), other councils and partners) to deliver programmes to improve energy efficiency of housing stock & hard to treat properties		<b>~ ~ ~</b>		8 8 8	Strategy developed in 2022 and Projects initiated in 2023
Educate residential and non-residential sec- tors on low-carbon technologies, energy efficiency, and sources of funding to en- courage behaviour change & greater up- take of low-carbon technology		<b>~ ~ ~</b>		BBB	Communication plan developed and implemented by 2022
Promote innovative and sensitive energy efficiency/renewable energy measures in conservation areas and on listed buildings which preserve and enhance such assets for the needs of existing and future occu-	DIP	<b>;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;</b>		6 8 8	Future action <b>beyond 2023</b>



Direct action Indirect action

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Partnership / influence

action









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**ACTION TYPE** 

Dorset Council COST **CO-BENEFITS** 

Increase buildings resilience to climate change	DIP	<b>~ ~ ~</b>	cology (relief) (convy) (convy		
ACTIONS					2021-23 TARGET
Develop local plan policies to ensure cli- mate risks are identified and avoided in new developments, including flood risk and over- heating		<b>;;;;;</b> ;		8 8 8	Local Plan policy in place by Dec 2021 adopted by 2023
Work with partners to increase climate change resilience of communities & build-ings by understanding the future climate risks within Dorset		<b>;;;;;</b> ;		e 2 2	Risk Assessment carried out by Sept 2022
Ensure Emergency Plans are adapted to reflect changing climate risks and are tested and proven fit for purpose	DIP	<b>;;;;;;;;</b> ;;;;;;;;;;;;;;;;;;;;;;;;;;;;		8 8	Top 10 'highest risk' plans reviewed by March 2022
Lobby government for more funding for climate risk management	DIP	<b>~ ~ ~</b>		8 8 8	Lobby paper present- ed to government in 2021

CO<sub>2</sub> SAVING POTENTIAL



OBJECTIVE











Builds

resilience









