Climate Change Impact Assessment Tool (v1.36)

Developed by Chesterfield Borough Council 2021

Chesterfield Borough Council (CBC) is taking the problem of climate change very seriously, and declared a climate emergency in July 2019, with the stated goal of becoming a carbon neutral organisation by 2030. As part of our response to climate change, the council committed to introduce climate change impact assessments for all reports where decisions are made. (Climate Change Action Plan item 34). This means that if you develop or change a policy, project, service, function, or strategy, you need to identify the impact of the activity regarding the climate. Our preferred method for doing this is by conducting a Climate Change Impact Assessment (CCIA). This is similar to a risk assessment, or an equalities impact assessment: it is a structured report showing:

•What effects our activities have on the climate (mainly through our emissions of greenhouse gasses) and what we are doing to reduce these effects
•What impacts a changing climate may have on our services and functions and what actions we will take to become more resilient and less vulnerable.

For further information on how to use this tool, see the guidance notes and video tutorials at:
https://www.chesterfield.gov.uk/climate-change-impact-assessment-tool

It would be helpful to us if you could send us a copy of any revised or altered version you create and let us know how you are planning to use it. This helps us to gauge the impact of our work and justify similar projects. Please send information via climate@chesterfield.gov.uk

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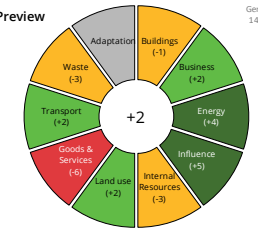
Report Name	Housing Capital Programme 2022/23
Report date	03/12/2021
Report author	Vanessa Watson
Project Notes	Housing Capital Programme including new build, refurbishments, adaptations and programmed works.
Export filename	*Housing Capital Programme 2022/23* .png

Preview

Generated 14/02/22 v1.36



Chesterfield Borough Council has committed to being a carbon neutral organisation by 2030 (7 years and 10 months

Copy to clipboard

Save to desktop

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Category	Impact	Notes / justification for score / existing work (see guidance sheet or attached notes for more information)	Score (-5 to +5)
Buildings	Building construction	Large building programme	-5
Buildings	Building use	Adding ev points, insulation etc.	+2
Buildings	Green / blue infrastructure	Small amount of landscaping / suds / habitat creation, net biodiveristy gain	+2
Buildings			
Business	Developing green businesses	Local contactors - will include new green technologies	+2
Business	Marketable skills & training		
Business	Sustainability in business		
Business			
Energy	Local renewable generation capacity	solar panels where appropriate	+1
Energy	Reducing energy demand	good insulation, low ebnergy light fittings heat reclamation	+2
Energy	Switching away from fossil fuels	no GCH or gas cookers	+1
Energy			
Influence	Communication & engagement	PR and storytelling re energy efficiency etc	+2
Influence	Wider influence		
Influence	Working with communities	consultations and contractors community events	+2
Influence	Working with partners	improve ability to work with partners on issues like fuel poverty	+1
Influence			
Internal Resources	Material / infrastructure requirement	Major internal resource use	-3
Internal Resources	Staff time requirement		
Internal Resources	Staff travel requirement		
Internal Resources	External funding		
Internal Resources			
Land use	Carbon storage	small amount of tree planting	+1
Land use	Improving biodiversity adaptation	small amount of meadow planting	+1
Land use	Natural flood management	SUDS - no net change	
Land use			
Goods & Services	Food & Drink		
Goods & Services	Products	building supplies	-5
Goods & Services	Single-use plastic	packaging	-1
Goods & Services	Services		
Goods & Services			
Transport	Decarbonising vehicles		
Transport	Improving infrastructure	EV points, active travel included in design	+2
Transport	Supporting people to use active travel		
Transport			
Waste	End of life disposal / recycling	Steps to recycle materials where possible	+1
Waste	Waste volume	short term waste from building projects	-4
Waste			
Adaptation	Drought vulnerability		
Adaptation	Flooding vulnerability		
Adaptation	Heatwave vulnerability		
Adaptation			
Other	Other 1		
Other	Other 2		
Other	Other 3		
Other	Other 4		

Cheat Sheet

1. We are looking at the effects of **this** decision (not our past performance, or actions that represent future decisions)

2. We are looking at the **whole impact** of the decision (regardless of geographical location or organisational boundary)

3. We are only looking at the **climate impact** - other environmental impacts, and social, economic, wellbeing measures are recorded elsewhere.

4. We need to stay **accessible**. Click on the "copy alt-text" button above and then paste the result into the alt text box for your infographic in word. Click here for a guide

Click here to go to tutorial on adding alt text

5. Your report must include some explanation as well as the infographic. **If the decision will have consequences past 2030 you must say so in your report.**

6. While there are no other specific rules for writing the summary, some of the things you may want to discuss include:

- What are the biggest costs and benefits of this activity in terms of the climate?
- Are there things that we will have to include in future iterations of this action – do you have a recommendation?
- Are there measures already included in your plan to minimise the costs and maximise benefits with respect to climate change?
- Are there other costs and benefits which are outside the scope of the CCIA? For example, does the project have high value in terms of economic or social benefit which outweighs the climate cost? Is this a valuable climate action which has a cost elsewhere?
- What are your ambitions for this activity – what is technically feasible and what do you think we should be aiming for?
- If we were to carry out the activity in the best possible way for the climate, what would that look like?
- What method(s) if any are available to monitor our climate performance on this activity? This might include internal data (electricity bills, milage claims etc.) or an external verification process. Is this feasible? If not, why not?
- What are the constraints which stop you doing more? Time, money, expertise, political support, partner buy in, something else?

If you get stuck, contact your friendly local climate change officer

Category	Impact	Notes & examples
Buildings	Building construction	How is the building constructed? Positive impacts would include retrofitting existing buildings rather than demolition and replacement, construction using low carbon materials (e.g. low concrete, additional timber) to high standard (BREEAM [Building Research Establishment Environmental Assessment Method], Passivhaus etc.) the inclusion of high grade insulation, low carbon heating, and microgeneration technologies. Negative impacts would generally be business as usual construction techniques. This is distinct from the building use impact in that it is about the fabric of the building rather than how the building is used. If it is not clear whether an impact should be in this category or the building use category below, simply choose one, and make sure you don't report an item in both categories.
Buildings	Building use	How is the building used? Positive impacts would include encouragement of low-carbon living and travel. This could be provision of bicycle storage, water fountains, recycling bins, automatic lighting, or passive cooling etc. Negative impacts would include removal or omission of one or more of these modifications, or alterations that discourage low carbon use (removal of cycle storage for example). If it is not clear whether an impact should be in this category or the construction category above, simply choose one, and make sure you don't report an item in both categories.
Buildings	Green / blue infrastructure	This includes changes to the value of green / blue infrastructure in the built environment (excluding wider land use which is included below) . Impacts may include habitat creation within a building (nesting boxes or a green roof for example) the introduction of street trees or sustainable drainage from a development. These are measures which are implemented with good building design but are not necessarily part of the building itself. Negative impacts would include habitat loss, impermeable drainage surfaces etc.
Business	Developing green businesses	Does the activity explicitly support the development of green businesses? This impact covers businesses which are focussed on delivering green technologies, research, services etc. NOT simply an existing business implementing incremental changes to established processes and supply chains (which would be counted under sustainability in business below). Examples might be development of a new business installing solar panels, providing energy audits, or manufacturing EV charging points. Negative scores would reflect adverse effects on these
Business	Marketable skills & training	Does this activity provide training to individuals and businesses in improving their climate change performance, or in developing marketable green skills? For example, this might include land management, waste reduction, low carbon construction, microgeneration technologies etc. Negative effects are unlikely in this category, but could include closure of a local training provider
Business	Sustainability in business	Does this activity support businesses in applying best practice and sustainable solutions in their existing business model and supply chains? This must be a quantifiable shift in business practice to reduce climate impact (rather than a high score simply because the business is involved in some form of low carbon technology – this would be included under the developing green businesses heading) . Examples of this might be successful application to a new certification scheme (FSC, PEFC, ISO 14001 etc.) a switch to a less carbon intensive manufacturing process, successful applications to government decarbonisation schemes etc.
Energy	Local renewable generation capacity	Does the activity include changes to local capacity for renewable electricity heat generation? This might include solar PV panels, heat pumps, biomass boilers, wind turbines, micro-hydro etc. Negative effects would include decommissioning of local capacity, e.g. building on an existing solar farm.
Energy	Reducing energy demand	Does the activity change overall energy demand? This might include installation of more efficient systems, or management to allow reduced heating or lighting energy demand. A negative score would represent a net increase in heating or lighting energy demand.
Energy	Switching away from fossil fuels	Does this activity involve an increase or decrease in static fossil fuel technologies (transport is covered later). For example, replacement of an existing gas boiler with a heat pump of an equivalent rating would be a positive score. Installation of new fossil fuel systems represents a negative score in this category (even if they are more efficient than existing systems)
Influence	Communication & engagement	Does this activity increase awareness of climate change, and our actions to address climate change issues? Does it challenge climate change disinformation, and can we back up what we say with good quality published science? Conversely, is this activity embarrassing from a climate point of view? Is there a climate cost to a positive action that we are delivering for other reasons? Is this reasonable and justifiable?
Influence	Wider influence	Does this activity result in us gaining authority on a climate change issue, could we be a clear example to other local authorities, are we leading on this? A negative outcome would be us missing opportunities, failing to engage with the wider conversation, or re-inventing existing work.
Influence	Working with communities	Does this activity help build awareness, willingness, and skills in our communities to address climate change? Does it have a cost or benefit in terms of our relationships with community groups?
Influence	Working with partners	Are we taking steps in this activity to ensure that we are working with partners with similar values to ours in relation to climate change? Is this activity expanding or limiting our work with partners more generally?
Internal resources	Material / infrastructure requirement	Does this activity result in us using more or less of our existing infrastructure, supplies and council resources? Will this have an indirect impact on the climate change impact of other services? Are we taking the appropriate steps to ensure that we are using the minimum necessary resource, and that it is at the highest possible environmental standard? Is there a clear constraint stopping us from doing more?
Internal resources	Staff time requirement	Council emissions are directly influenced by the amount of time members of staff have to work on an activity - does this activity require more staff time or less? What are the indirect effects? Does this mean that another project will have more or less resources?
Internal resources	Staff travel requirement	Does this activity mean that staff will need to travel more or less? Can this be reduced? Can we modify the project to change the mode of transport (public transport, cycling, walking, remote working etc.) If not, why not?
Internal resources	External funding	Are we able to leverage additional support for the activity from external funders? Does this mean we can achieve more than we could originally? Would support for this project preclude support for something else? How can we use external funding to help us reach our climate goals?
Land use	Carbon storage	Does this project result in a net increase or decrease in land carbon storage? This is likely to be directly correlated with the amount of timber (or mature trees) on the site, but may also be affected by peat formation, wetlands, or peat use as a horticultural medium. Remember that trees take a long time to grow (!) so simply replacing a mature tree with a newly planted one would still result in a loss of carbon.
Land use	Improving biodiversity adaptation	Does this activity help or hinder the natural world's ability to cope with climate change? Are we creating, destroying, or modifying habitats? Are we joining up species rich areas or cutting that connectivity? Are there measures we could be taking to minimise the damage of our activities?
Land use	Natural flood management	Is this activity reducing or increasing the risk of flooding due to changes in land use? Rough vegetation, woodland, and artificial flood storage areas will decrease the risk, impermeable surfaces, open ground, and drainage directly into watercourses will increase it. Are there modifications we could make to the activity to improve its performance?
Goods & services	Food & Drink	Are we working to ensure that we specify lower carbon options when we buy in food and drink? Typically, we want to use food that is less land and carbon intensive to produce, process, and transport. This means we should ideally be reducing red meat and dairy consumption, and keeping supply chains as short as possible (i.e. buying locally produced food where possible). How is the food packaged? Is it wrapped in foil or plastic? Are we increasing the quantities we buy, or decreasing?
Goods & services	Products	Are we increasing overall consumption of products or decreasing them? External businesses providing products have their own carbon emissions. Is the product absolutely necessary? Does the supplier have an environmental policy? Is it better than their competitors?
Goods & services	Single-use plastic	We are committed to phasing out single use plastic where possible. Does purchase of this product increase or decrease our reliance on single use plastic? Is there an effective alternative? What does the supplier pack the product in?
Goods & services	Services	Are we increasing overall consumption of services or decreasing them? External businesses providing services have their own carbon emissions. Does this activity increase or decrease our indirect emissions created by relying on these services? Is the service absolutely necessary? Does the supplier have an environmental policy? Is it better than their competitors?
Transport	Decarbonising vehicles	Does this activity increase or decrease the use of fossil-fuelled vehicles?
Transport	Improving infrastructure	Does this activity increase or decrease the opportunities within the borough for low carbon forms of travel? This may include increased provision of paths, cycle storage and repair facilities, lighting on public rights of way etc. Conversely, does this activity make active forms of travel more difficult? Does it divert traffic, or block access, does it result in a net loss of training and facilities.
Transport	Supporting people to use active travel	Does the activity provide support for people to use active forms of travel (mainly cycling and walking). This may include training and improvements to general health and fitness. Removal of any of these services would result in a negative score.
Waste	End of life disposal / recycling	Do you expect this activity to increase or decrease the **proportion** of waste which is recycled? Does it increase the amount of mixing of otherwise recyclable material? Does it make recycling easier and more efficient?
Waste	Waste volume	Will this activity increase or decrease the **total volume** of waste?
Adaptation	Drought vulnerability	By 2050 we expect drier summers. This could mean 34% less rain, with watercourses 65% lower than the current average. How vulnerable is the activity to drought?
Adaptation	Flooding vulnerability	By 2050 we expect the biggest rainfall events to be up to 20% more intense than current extremes (peak rainfall intensity). Average winter rainfall may increase by 29% on today's averages. This means that at their highest, the flow in watercourses could be 30% greater than current extremes. How vulnerable is the activity to flooding both from rivers and surface water?
Adaptation	Heatwave vulnerability	By 2050 we expect summer daily maximum temperature may be around 6°C higher compared to average summer temperatures now. Winter daily maximum temperature could be 4°C more than the current average, with the potential for more extreme temperatures, both warmer and colder than present. How vulnerable is the activity to heatwaves?