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:

Mhat effects our activities have on the climate (mainly through our emissions of greenhouse gasses) and what we are doing to reduce these effects Mhat 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. Guidance notes and video tutorials for Climate Change Impact Assessment tool

This climate change impact assessment tool has been developed by Chesterfield Borough Council (CBC) for internal use. While CBC are happy to share this tool free of charge, we make no assertions about its usefulness, reliability, or fitness for \odot \odot

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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

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Report Name Report date Report author Project Notes Export filename	Visitor Economy Strategy CCIA 10/01/2022 Matthew Southgate The purpose of the Visitor Economy Strategy is to attract more day and staying visitors to Chesterfield, generating additional visitor spend that will support existing jobs and Visitor Economy Strategy CCIA CCIA	.png a	Theorem and a second se	Copy alt-text		
Category	Impact	Notes / justification for score / existing work	tion)	Score (-5 to +5)		
Buildings	Building construction	(see guidance sheet or attached notes for more informat the strategy includes a strategic priority around Quality P future visitor economy infrastructure development, but do	bes not include specific proposals for assessment a			
Buildings	Building use	The strategy makes reference to a future review of the Visitor Information Centre, but does not include specific proposals at this stage				
	-	Schemes referenced in the strategy will potentially have a positive impact on the built environment, for				
Buildings	Green / blue infrastructure	example through the introduction of street trees as part of the Town Centre Transformation and Staveley - Town Centre masterplan schemes.				
Buildings		Activities in the strategy do not specifically support the development of green businesses, however the strategy				
Business	Developing green businesses	aims to support an increase in the number of independent businesses operating in Chesterfield The strategy seeks to promote the growth of independent businesses and this could potentially include				
Business	Marketable skills & training	The strategy sees to promote the growth of independent businesses and this could potentially include raining to businesses on improving their climate change performance. The strategy seeks to support the growth of independent businesses and this cold include support to				
Business	Sustainability in business	businesses to improve their environmental performance	businesses and this cold include support to			
Business Energy	Local renewable generation capacity	The strategy does not seek specifically address issues around local renewable generation capacity -				
Energy	Reducing energy demand	n general terms the attraction of a significantly increased number of visitors to Chesterfield as likely to ncrease the overall demand for energy through new investment in visitor economy infrastructure and the local -3 ansumption of services by visitors				
Energy	Switching away from fossil fuels	Future investment in visitor economy infrastructure (by the timescale of this strategy) potentially involve investment in	n new fossil fuel systems, for example, the strategy			
Energy		seeking to increase the amount of visitor accommodation i			Cheat Sheet	
		It is only realistic to assume (without evidence to the contri- promote a significant increase in the number of visitors to	the borough, will have (and be seen to have) a		1. We are looking at the effects of this decision (not our past performance, or actions	Click here to go to tutorial
Influence	Communication & engagement	potentially negative impact on climate change. This is parti opportunity is attricating more day visitors from within the Chesterfield by car. Mitigation could include consideration displaced from visiting other locations rather than represe	region, the majority of whom are likely to visit of whether a proportion of these visitors have be	-1 en	that represent future decisions) 2. We are looking at the whole impact of the decision (regardless of geogra	on adding alt text
Influence	Wider influence	Promoting a sustainable approach to the development of t	the visitor economy could be an opportunity to		3. We are only looking at the climate impact - other environmental impacts, and	
		demonstrate leadership on this issue, however the current positioning of the strategy in relation to sustainable - growth is not presently considered sufficient to make this claim			social, economic, wellbeing measures are recorded elsewhere.	
Influence	Working with communities	The strategy does not include measures to raise awareness of climate change in the community - The strategy specifically involves working with partners to achieve its aims and objectives. For example this			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	
Influence	Working with partners	includes supporting the Chesterfield Canals Trust on the re Canal and supporting the PEAK Resort development which attractions in the Peak District and surrounding area.	e-opening / further development of Chesterfield a seeks to increase sustainable transport access to	+1	guide 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,	
Influence	Material / infrastructure requirement	In seeking to significantly increase the number of visitors of	o chesterneio, it seems reasonable (in principle) o	-1	 While there are no other specific rules for writing the summary, some of the things 	
Internal Resources	Staff time requirement	Given that the strategy provides a focus on enhanced / new activities, it seems reasonable to assume that delivery of activities will require an increased staff time requirement. Presently, activities are being delivered within the existing staff resource, although this potentially means staff are being displaced from other -1			you may want to discuss include: • What are the biggest costs and benefits of this activity in terms of the climate?	
Internal	Staff travel requirement	activities. Additional requests will be made to Cabinet to increase the resourcing of activities in future. It is not envisaged that there will be an increased staff travel requirement resulting from the delivery of			Are there things that we will have to include in future iterations of this action - do	
Internal Internal	External funding	It is realistic to assume that some external funding support will potentially to available to deliver activities *1			you have a recommendation? • Are there measures already included in your plan to minimise the costs and	
Land use Land use	Carbon storage Improving biodiversity adaptation	It is not considered that the strategy will have a notable (negative or positive) impact on carbon storage. It is not considered that the strategy will have a notable (negative or positive) impact on improving biodiversity		 Are there measures already included in your plan to minimise the costs and maximise benefits with respect to climate change? 		
Land use	Natural flood management	adaptation. It is considered that the strategy will have a notable (negative or positive) impact on natural flood management			 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 	
Land use Goods & Services	5 Food & Drink	The strategy does not specifically cover the purchase of for	od and drink by the council		which outweighs the climate cost? Is this a valuable climate action which has a cost elsewhere?	
Goods & Service	5 Products	The strategy does not specifically cover the purchase of princeased focus on the visitor economy could lead to an in-			What are your ambitions for this activity – what is technically feasible and what do	
	Single-use plastic	The strategy does not specifically involve the purchase of se The strategy does not specifically cover the purchase of se	single use plastic by the council	-	you think we should be aiming for?	
Goods & Services		increased focus on the visitor economy could lead to an in		-	 If we were to carry out the activity in the best possible way for the climate, what would that look like? 	
Transport	Decarbonising vehicles	The strategy includes an aspiration of increasing the total assigne visions by 6000 by the end of 2005 (compared to Visions Survey (2019) identifies that more than how-thirds with 16% by some from of public transport or a cade trip, destination by bike or by foot (not really an obvious option of car journeys to hour wisks to Chestenfield, this equates Allowing for an average of 3 occupants a vehicle (and a ret additional viehic) pumys just and the display of the represent additional journeys, but rather displayed visits fa samue a significant negative impact from increased cat trip.	a baseline recovery scenario). The Visit Britain 'Da of day visits in the East Midlands were taken by ca The balance included people who arrived at the for visitors to Chesterfield). Applying the proport to approximately 515.000 visitors arriving by car. um journey), this equates to approximately 34500 to assume that a proportion of these trips do not rom other destinations, it is also reasonable to	y , on -5	What method(s) if any are available to monitor our climate performance on this actively? This might include internal data (electricity bills, imlage clams etc.) or an external verification process, is the tabable? 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 friendy local climate change officer	
Transport	Improving infrastructure	A focus on predextrian friedly spaces (under the quality place making priority) and the further development of the cycling and focupatin herowich accors the borough is countered by potential investment in new carparking facilities as part of the station masterplan and Chesterfield Waterside developments, as well as new road access to Chesterfield station.				
Transport	Supporting people to use active travel	The strategy supports the development of pedestrian frien cycling network.	iury spaces and the development of the walking a	nd +1		
Transport Waste	End of life disposal / recycling	It is not considered that the strategy will have a specific im	npact on the proportion of waste recycled			
Waste	Waste volume	It is reasonable to assume that attracting a significant incre produced, although a proportion of this will potentially rep other locations		-2		
Waste Adaptation	Drought vulnerability	This activity is not considered to have a particular vulnerab	bility to drought			
Adaptation Adaptation	Flooding vulnerability Heatwave vulnerability	This activity is not considered to have a particular vulnerability to flooding This activity is not considered to have a particular vulnerability to heatwaves and may even benefit if this				
Adaptation	- converse vomer admity	increases the number of good weather days.				
Other Other	Other 1 Other 2					
Other	Other 3					

Category	Impact	Notes & examples
		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
Buildings	Building construction	concrete, additional timber) to high standard (BREEAM [Building Research Establishment Environmental Assessment Method], Passivhaus etc.) the inclusion of high grade insulation, low
Bullaings	Building construction	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
		and survey ou don't report an item in both categories.
		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
Buildings	Building use	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. 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
Buildings	Green / blue infrastructure	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.
	B	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
Business	Developing green businesses	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 businesses
		the development of a new business instaining solar parets, providing energy adults, or manufacturing or unarging for the solar solar solar solar solar business instaining to individuals and businesses in improving their climate change performance, or in developing marketable green skills? For example, this might include
Business	Marketable skills & training	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
		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
Business	Sustainability 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.
_	Local renewable generation	process, succession applications to government occarbonisation sciences etc. 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.
Energy	capacity	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
211018)		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 existing transport is a particle screek in the context of a static screek in the context of an existing gas boiler with a heat pump of an existing transport is a particle screek in the context of a static screek in the context of an existing gas boiler with a heat pump of an existing transport is context of an existing or the context of a static screek in the context of an existing gas boiler with a heat pump of an existence of a static screek in the context of a static screek in the context of an existing gas boiler with a static screek in the context of a static screek in the context of a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek in the context of an existing gas boiler with a static screek
		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) 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
Influence	Communication &	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?
	engagement	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	Meduine with eastern	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
Innuence	Working with partners	partners more generally?
	Material / infrastructure	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
Internal resources	requirement	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?
		Consciences and strain coupling is non-room to the second staff have to work on an activity - does this activity require more staff time or less? What are the indirect effects?
Internal resources	Staff time requirement	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? 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
Internal resources	External funding	Are we are to reverage additional support to the activity from a starting indicates how the carrier and never more than we could orginally; would support for this project preclude support for spronger by the set of the starting of the starting of the starting to help us reach our climate goals?
		support or some the second many control of the s
Land use	Carbon storage	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	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
	adaptation	connectivity? Are there measures we could be taking to minimise the damage of our activities? 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
Land use	Natural flood management	Is an adviny recently on increasing the rise of moving due to changes in that date indegrit regeneration, and manage and the rise of the recent regeneration of the recent recent regeneration of the rise of the recent re
		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
Goods & services	Food & Drink	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?
contra contr	weather an alternation	are supplier have an environmental policy's is to backer than their competitions? 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?
Goods & services	Single-use plastic	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? 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,
Transport	Improving infrastructure	Does in a string increase or easies in equipmentines within the borogen new carbon none carbon in the many increase or easies provision or paus, such storage and repart activity. Ighting 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 an ent loss of training and
		facilities.
Transport	Supporting people to use	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
	active travel	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	easer allo indire encients 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?
		note that are careful to tage, manufaction in the excerne temperatures, but warner and coder than present now varienable is the activity to heatwaves?