

Climate Change Impact Assessment Tool (CCIA Tool Master v1.1 Derby v1.0)

Developed by Chesterfield Borough Council 2021

Derby City Council is taking the problem of climate change very seriously, and declared a climate emergency on 22 May 2019, with the stated goal of becoming a carbon neutral organisation by 2035. As part of our response to climate change, the council has committed to introduce Climate Impact Assessments for all reports where Key Decisions are made. 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. This will be done by conducting a Climate Impact Assessment (CIA) using this document. It 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.

The CIA should be carried out as soon as possible during the development/change of any policy, project, service, function, or strategy. This will help identify strengths and weaknesses at the outset, to allow weaknesses to be addressed and the CIA revisited to track improvements as the initiative progresses.

<https://www.chesterfield.gov.uk/climate-change-impact-assessment-tool>

This climate change impact assessment tool has been developed by Chesterfield Borough Council (CBC) and adapted by Derby Council. This tool is supplied "as is" with no warranty of <https://creativecommons.org/licenses/by-nc/4.0>

INSTRUCTIONS

1 Open up the Input worksheet.

2 Write notes in the relevant categories (column E).

If the category doesn't apply, leave it blank.

If you identify an impact that isn't otherwise covered, add it in the "Other" category.

For more details on each impact, hover over the impact cell (D).

3 Assign a score for each listed impact (column F).

Scores range from -5 (very strong negative impact) to 0 (no change) to +5 (a very strong positive impact).

Scoring is subjective. If unsure of which score to assign an impact, discuss further with your team.

A number of the categories are unlikely to generate negative results, as a failure of these categories would be a failure of the project.

4 Add the diagram from the report tab into your Key Decision report.

Then use the rest of the information on the Report tab to create a short comment on the impact of the project.

to handle them on our part is likely to simply result in no change.

ary summarising the key costs and benefits of the activity.

Derby City Council

Report Name	Report Name
Report date	Report Date
Report author	Your name
Project Notes	Use this space for a brief overview of the project and any extra notes on things that aren't covered below.
Export filename	

Category	Impact
Adaptation	Drought vulnerability
	Flooding vulnerability
	Heatwave vulnerability
	Other vulnerability (specify)
Buildings	Building construction
	Building use
	Green / blue infrastructure
	Other (specify)
Business	Developing green businesses
	Skills & training
	Sustainability in business
	Other (specify)
Energy	Local renewable generation capacity
	Reducing energy demand
	Switching away from fossil fuels
	Other (specify)
Influence	Communication & engagement
	Wider influence
	Working with communities
	Working with partners
	Other (specify)
Internal Resources	Material / infrastructure requirement
	Staff time requirement
	Staff travel requirement

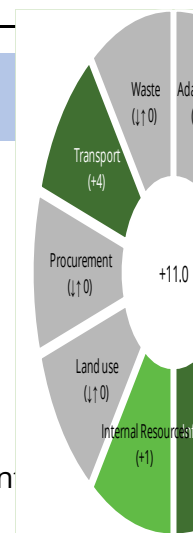
	External funding
	Other (specify)
Land use	Carbon storage
	Improving biodiversity adaptation
	Natural flood management
	Other (specify)
Other	Other 1
	Other 2
	Other 3
	Other 4
Procurement	Food & Drink
	Products
	Single-use plastic
	Services
	Other (specify)
Transport	Decarbonising vehicles
	Improving infrastructure
	Supporting people to use active travel
	Other (specify)
Waste	End of life disposal / recycling
	Waste volume
	Other (specify)

Council Climate Change Impact Assessment (v1.1)

Post 16 Home to School Travel

Dawn Barlow

Instead of the Council arranging taxis and minibuses or paying fuel reimbursemen



with thanks to Chesterfield Borough Council

Notes / justification for score

This proposal has no impact on drought vulnerability
This proposal has no impact on flooding vulnerability
This proposal has no impact on heatwave vulnerability
This proposal has no impact on other vulnerability (specify)

This proposal has no impact s building construction
This proposal has no impact s building use
This proposal has no impact s green / blue infrastructure
This proposal has no impact s other (specify)

This proposal has no impact developing green businesses
This proposal has no impact skills & training
This proposal has no impact sustainability in business
This proposal has no impact other (specify)

This proposal has no impact gy local renewable generation capacity
This proposal has no impact gy reducing energy demand
This proposal has no impact gy switching away from fossil fuels

The Home to school travel service will promote sustainable travel options to all stakeholders through the revised Post 16 Home to school travel assistance policy statement
The Home to school travel service will promote sustainable travel options to all stakeholders through the revised Post 16 Home to school travel assistance policy statement
The Home to school travel service will promote sustainable travel options to all stakeholders through the revised Post 16 Home to school travel assistance policy statement

Minimal impact on time. However information avaiable to the public will need to be maintained.
No staff travel requirement is needed

No external funding is received for Post 16-19 Home to school travel assistance

This proposal has no impact carbon storage

The proposal has no impact on improving biodiversity adaption

The proposal has no impact on natural flood management

The proposal has no impact on products

The proposal has no impact on single use plastic

This proposal has no impact on services

This proposal has no impact on other (specify)

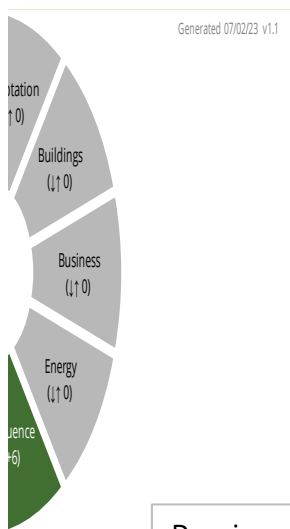
This proposal has no impact on decarbonising vehicles

This proposal has no impact on improving infrastructure

The proposal has the capacity to support young people to develop the skills to travel independently. It will encourage young people and their families to consider the use of public transport, cycling, walking and other forms of travel such as a scooter to support home to school/college travel arrangements.

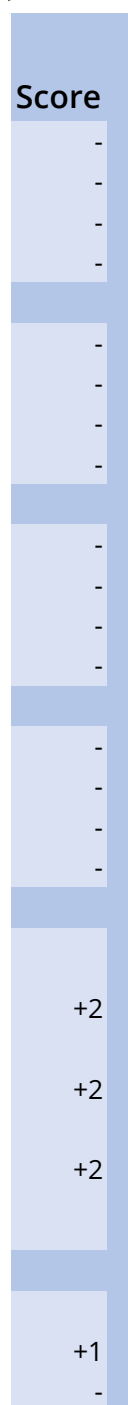
The proposal has no impact on end of life disposal or recycling

The proposal has no impact on waste volume



place them with Personal Travel Budget payments for all eligible sixth form le

Preview



+2

+2

+2

+1

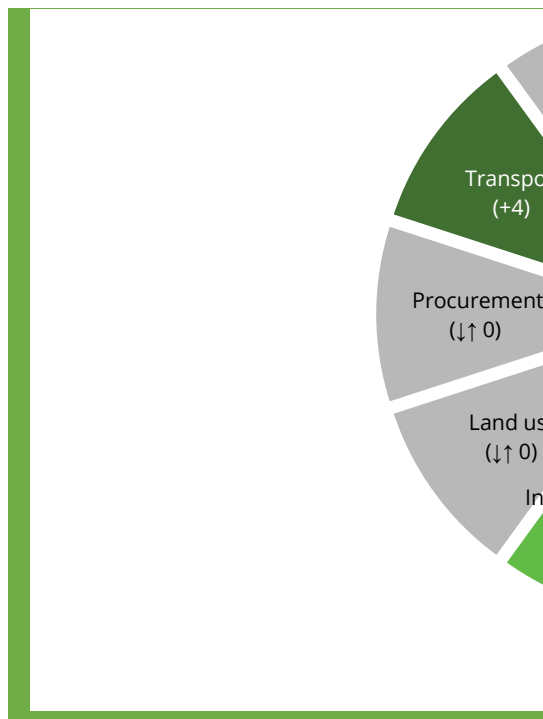


earners. The proposal will be supported by a new and enriched Independent Travel Trai

ning (ITT) service to help and support more young people become independent travelle

rs.

Report Name	Post 16 Home to School Travel
Report date	0
Report author	Dawn Barlow
Project Notes	Instead of the Council arranging taxis a
Export filename	Post 16 Home to School Travel .png



Category	Impact
Adapatation	Drought vulnerability Flooding vulnerability Heatwave vulnerability Other vulnerability (specify)
Buildings	Building construction Building use Green / blue infrastructure Other (specify)
Business	Developing green businesses Skills & training Sustainability in business Other (specify)
Energy	Local renewable generation capacity Reducing energy demand Switching away from fossil fuels

Other (specify)

Influence

Communication & engagement

Wider influence

Working with communities

Working with partners

Working with young people

Internal Resource Material / infrastructure requirement

Staff time requirement

Staff travel requirement

External funding

Land use

Carbon storage

Improving biodiversity adaptation

Natural flood management

Procurement

Food & Drink

Products

Single-use plastic

Services

Transport

Decarbonising vehicles

Improving infrastructure

Supporting people to use active travel

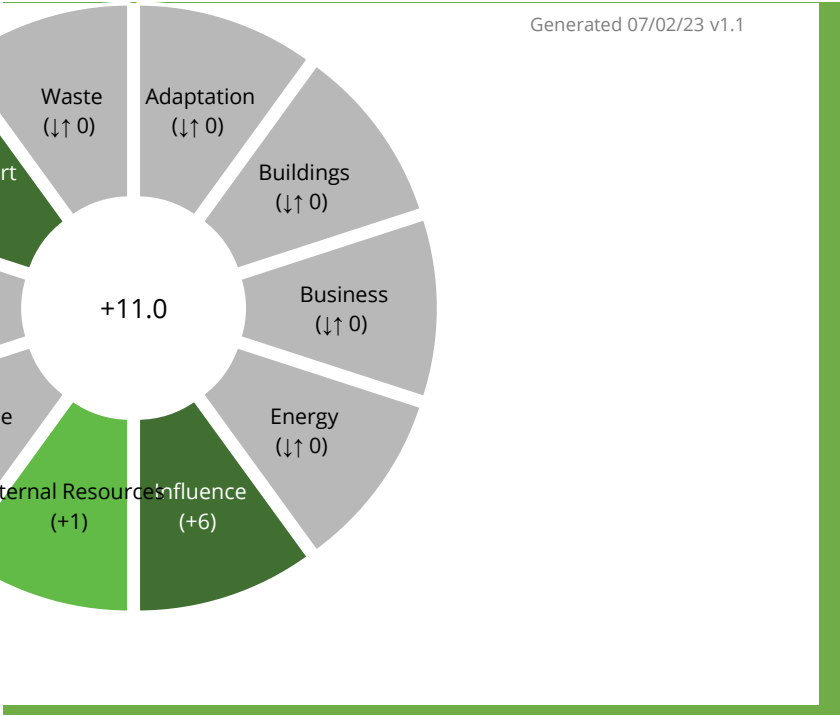
Waste

End of life disposal / recycling

Waste volume

Other (specify)

nd minibuses or paying fuel reimbursements, the Council is proposing to replace them with Pe



<- this green
in the input
displayed €

Notes / justification for score	Score
No impact from proposal	0
No impact from proposal	0
No impact from proposal	0
No impact from proposal	0
	0
No impact from proposal	0
No impact from proposal	0
No impact from proposal	0
This proposal has no impact s other (specify)	0
	0
No impact from proposal	0
No impact from proposal	0
No impact from proposal	0
This proposal has no impact other (specify)	0
	0
No impact from proposal	0
No impact from proposal	0
No impact from proposal	0

No impact from proposal	0
	0
	0
The service will promote sustainable travel options to all stakeholders through the revised Post 16 Home to school travel assistance policy statement	1
The service will promote sustainable travel options to all stakeholders through the revised Post 16 Home to school travel assistance policy statement	2
The service will promote sustainable travel options to all stakeholders through the revised Post 16 Home to school travel assistance policy statement	2
The service will promote and support young people to know about sustainable methods of travel available to them to aid them to travel from home and to school plus wider social implications to enable choice	2
	0
No impact from proposal	0
Minimal impact on time. However information available to the public will need to be maintained.	1
No staff travel requirement is needed	0
No external funding is received for Post 16-19 Home to school travel assistance	0
	0
No impact from proposal	0
No impact from proposal	0
No impact from proposal	0
	0
No impact from proposal	0
No impact from proposal	0
No impact from proposal	0
No impact from proposal	0
	0
No impact from proposal	0
No impact from proposal	0
The proposal has the capacity to support young people to develop the skills to travel independently. It will encourage young people and their families to consider the use of public transport, cycling, walking and other forms of travel such as a scooter to support home to school/college travel arrangements.	4
	0

The proposal has no impact on end of life disposal or recycling	0
The proposal has no impact on waste volume	0
	0

Personal Travel Budget payments for all eligible sixth form learners. The proposal will be su

upported by a new and enriched Independent Travel Training (ITT) service to help and su

pport more young people become independent travellers.

Category	Impact
Adaptation	Drought vulnerability
Adaptation	Flooding vulnerability
Adaptation	Heatwave vulnerability
Buildings	Building construction
Buildings	Building use
Buildings	Green / blue infrastructure
Business	Developing green businesses
Business	Marketable skills & training
Business	Sustainability in business
Energy	Local renewable generation capacity
Energy	Reducing energy demand
Energy	Switching away from fossil fuels
Goods & services	Food & Drink
Goods & services	Products
Goods & services	Single-use plastic
Goods & services	Services

Influence	Communication & engagement
Influence	Wider influence
Influence	Working with communities
Influence	Working with partners
Internal resources	Material / infrastructure requirement
Internal resources	Staff time requirement
Internal resources	Staff travel requirement
Internal resources	External funding
Land use	Carbon storage
Land use	Improving biodiversity adaptation
Land use	Natural flood management
Transport	Decarbonising vehicles
Transport	Improving infrastructure
Transport	Supporting people to use active travel
Waste	End of life disposal / recycling
Waste	Waste volume

Notes & examples

By 2050 we expect drier summers. This could mean 34% less rain, with water courses 65% lower than the current average. How vulnerable is the activity to drought?

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

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

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

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

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

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

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

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

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

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

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

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

Are we increasing overall consumption of products or decreasing them? External businesses providing products have their own carbon emissions. Is the product absolutely necessary?

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

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

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
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
Does this activity help build awareness, willingness, and skills in our communities to address
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
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
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 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
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
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
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
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
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, lighting on public rights of way etc. Conversely, does this activity make active forms of
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
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
Will this activity increase or decrease the total volume of waste?

Carbon emissions calculations

*GHG Factors for 2022 from
A comprehensive set of factors can be f

Energy use:

Insert amount here

Electricity consumption (kWh) inc. supply and dist	0
Gas use (kWh)	0
Gas use (m3)	0
Oil use (kWh)	0
Oil use (litres)	0
LPG use(kWh)	0
LPG use (litres)	0

Resource use

Bricks (tonnes)	0
Concrete (tonnes)	0
Metals (tonnes)	0
Wood (tonnes)	0
Plasterboard (tonnes)	0

Waste generation

Average construction (tonnes)	0
Wood (tonnes)	0
Scrap metal (tonnes)	0
Average plastics (tonnes)	0
Organic food and drink waste (tonnes)	

Transport

Diesel (litres)	0
Petrol (litres)	0

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-fact>

ound on this government spreadsheet. Some common examples are given below.

Carbon emissions (kgCO ₂ e)	Greenhouse gas factor*	Notes
0	0.21107	
0	0.18	
0	2.02	
0	0.25	
0	2.54	
0	0.21	
0	1.56	
0	241.750	Primary soi
0	131.750	Primary soi
0	4018	Average of
0	312.610	Primary soi
0	120.05	Primary soi
0		Waste gene
0		See full list
0		
0		
0	2.56	
0	2.16	

eration GHG factors depend on method of disposal.