# **Derby City Council Climate Impact Assessment (CIA)**

#### Original CIA developed by Chesterfield Borough Council 2021

Derby City Council is taking the problem of climate change very senously, 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.

Below you will see the following tabs: Introduction, Instructions, Input, Report, Guidance and GHG amissions. First familiarise volumelf with the tabs as they evaluate the process. When you are ready, fill in the https://www.chesterfield.gov.uk/climate-change-impact-assessment-tool

adapted by Derby Council. This tool is supplied "as is" with no warranty of any kind under a Creative <u>https://creativecommons.org/licenses/by-nc/4.0</u> 

#### 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 on the 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 pos Scoring is subjective. If unsure of which score to assign an impact, discuss further with colle A number of the categories are unlikely to generate negative results, as a failure to handle t

#### 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 commentary summ

:hem on our part is likely to simply result in no change.

|               | Derby Ci  |
|---------------|---|
| Report Name   | Report Name   |
| Report date   | Date CIA is undertaken  |
| Report author | Your name(s)  |
| Project Notes | Use this space for a brief overview of the project and any extra notes on things that aren't covered below. |
| Category      | Impact  |
| Adaptation    | Drought vulnerability   |
|               | Flooding vulnerability  |
|               | Heatwave vulnerability  |
|               | Other (specify)   |
|               |   |
| Buildings     | Building construction   |
|               | Building use  |
|               | Green / blue infrastructure   |
|               |   |
|               |   |
| Business      | Developing green businesses   |
|               | Skills and training   |
|               | Sustainability in business  |
|               | Other (specify)   |
|               |   |
| Energy        | Local renewable generation capacity   |
|               | Reducing energy demand  |
|               | Switching away from fossil fuels  |
|               | Other (specify)   |
|               |   |
| Influence     | Communication and engagement  |
|               | Wider influence   |
|               | Working with communities  |
|               | Working with partners   |

|             | Other (specify)                      |
|-------------|--------------------------------------|
|             |                                      |
| Internal    | Material / infrastructure requiremen |
| Resources   | 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 and drink                       |
|             | Products                             |
|             | Single-use plastic                   |
|             | Services                             |
|             | Other (specify)                      |
|             |                                      |
| Transport   | Decarbonising vehicles               |
|             | Improving infrastructure             |
|             | Supporting people to use active      |
|             | Congestion/Air Quality               |
| Masta       | End of life disposed (requeling      |
| Waste       | End of life disposal / recycling     |
|             | Waste volume                         |
|             | Other (specify)                      |

# y Council Climate Impact Assessment

Derby & Derbyshire Minerals Local Plan – approval of plan for formal consultation and submission for examination

16.01.2023

Andrew Waterhouse

Regulation 19 (Submission) stage of a joint Minerals Local Plan for Derby & Derbyshire

Notes / justification for score

No

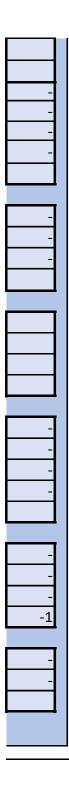
consultation. Addressing sustainable development and climate change has been a major factor

The Plan will help meet certain mineral needs across the UK and beyond and Minerals Planning Authorities are required to work together to identify these cross boundary issues.

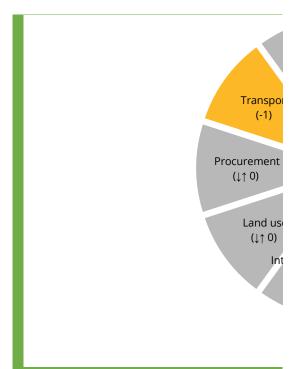
Communities have been consulted as the plan has developed, though they do not have a right to prevent development if that is the most appropriate course of actin following assessment of alternative options. The Plan has been developed in consultation with a wide range of partners.

| Vehicles from mineral workings may travel through the City enroute to their final destination |  |
|---|--|
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |





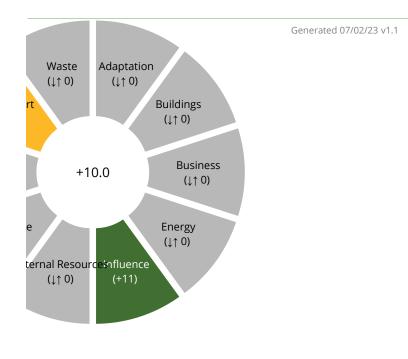
## <u>Report</u>



| Category    | Impact   |  |
|-------------|--|--|
| Adapatation | Drought vulnerability                                  |  |
|             | Flooding vulnerability                                 |  |
|             | Heatwave vulnerability                                 |  |
|             | Other (specify)  |  |
| Duildings   | Duilding construction                                  |  |
| Buildings   | Building construction                                  |  |
|             | Building use   |  |
|             | Green / blue infrastructure                            |  |
|             |  |  |
|             |  |  |
| Business    | Developing green businesses                            |  |
|             | Skills and training                                    |  |
|             |  |  |
|             | Sustainability in business                             |  |
|             | Sustainability in business<br>Other (specify)          |  |
| _           | Other (specify)  |  |
| Energy      | Other (specify)<br>Local renewable generation capacity |  |
| Energy      | Other (specify)  |  |
| Energy      | Other (specify)<br>Local renewable generation capacity |  |

| Influence          | Communication and engagement                                    |
|--------------------|---|
|                    |   |
|                    |   |
|                    | Wider influence   |
|                    |   |
|                    |   |
|                    |   |
|                    | Working with communities  |
|                    | Marling with partners   |
|                    | Working with partners<br>Other (specify)                        |
|                    | Other (specify)   |
| Internal Resources | Material / infrastructure requirement                           |
|                    | Material / infrastructure requirement<br>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 and drink  |
|                    | Products  |
|                    | Single-use plastic  |
|                    | Services  |
|                    | Other (specify)   |
|                    |   |
| Transport          | Decarbonising vehicles  |
|                    | Improving infrastructure  |
|                    | Supporting people to use active travel                          |
|                    |   |
|                    | Congestion/Air Quality  |
| Wasta              | End of life dispessel / regueling                               |
| Waste              | End of life disposal / recycling                                |

| Waste volume    |
|-----------------|
| Other (specify) |



This infographic will change accord scores entered on the Input tab. Plea paste the infographic into the 'C Implications' section of your DCC re the CIA is complete.

| Notes / justification for score | Score |
|---------------------------------|-------|
| 0                               | 0     |
| 0                               | 0     |
| 0                               | 0     |
|                                 | 0     |
|                                 |       |
| 0                               | 0     |
| 0                               | 0     |
| 0                               | 0     |
| 0                               | 0     |
|                                 |       |
| No                              | 0     |
|                                 | 0     |
| 0                               | 0     |
|                                 | 0     |
|                                 |       |
| 0                               | 0     |
| 0                               | 0     |
| 0                               | 0     |
|                                 | 0     |
|                                 |       |

| The Plan has been developed over several years and a great    |    |
|---|----|
| deal of formal and informal public consultation. Addressing   |    |
| sustainable development and climate change has been a major   |    |
| factor throughout.  | 4  |
| The Plan will help meet certain mineral needs across the UK   |    |
| and beyond and Minerals Planning Authorities are required to  |    |
| work together to identify these cross boundary issues.        | 2  |
| Communities have been consulted as the plan has developed,    |    |
| though they do not have a right to prevent development if     |    |
| that is the most appropriate course of actin following        |    |
|   | 2  |
| assessment of alternative options.                            | 2  |
| The Plan has been developed in consultation with a wide range | 2  |
| of partners.  | 3  |
|   | 0  |
|   |    |
| 0   | 0  |
| 0   | 0  |
| 0   | 0  |
| 0   | 0  |
|   | 0  |
|   |    |
|   | 0  |
| 0   |    |
| 0   | 0  |
| 0   | 0  |
|   | 0  |
|   |    |
|   | 0  |
|   | 0  |
|   | 0  |
|   | 0  |
|   |    |
| 0   | 0  |
| 0   | 0  |
| 0   |    |
| 0   | 0  |
| 0   | 0  |
|   | 0  |
|   |    |
| 0   | 0  |
|   | 0  |
| 0   | 0  |
| Vehicles from mineral workings may travel through the City    |    |
| enroute to their final destination                            | -1 |
|   |    |
| 0   | 0  |
| v   | 0  |

| 0 | 0 |
|---|---|
|   | 0 |

ing to the se copy and limate port when

| 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<br>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 2000 we expect their summers. This could mean 3+70 less rain, with water courses 0.570ant average. How vulperable 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 (not mandatory)**

\*GHG Factors for 2022 <u>https://www.gov.uk/gover</u> A comprehensive set of factors can be found on th

| Energy or resource   | Insert amount here | Carbon emissions<br>(kgCO <sub>2</sub> e) |
|--|--------------------|---|
|  |                    |   |
| Electricity consumption (kWh) inc. supply and distribution | 0                  | 0   |
|  | 0                  | 0   |
| Gas use (kWh)  | 0                  | 0   |
| Gas use (m3)   | 0                  | 0   |
| Oil use (kWh)  | 0                  | 0   |
| Oil use (litres)   | 0                  | 0   |
| LPG use(kWh)   | 0                  | 0   |
| LPG use (litres)   | 0                  | 0   |
| Resource use   |                    |   |
| Bricks (tonnes)  | 0                  | 0   |
| Concrete (tonnes)  | 0                  | 0   |
| Metals (tonnes)  | 0                  | 0   |
| Wood (tonnes)  | 0                  | 0   |
| Plasterboard (tonnes)                                      | 0                  | 0   |
| Waste generation   |                    |   |
| Average construction (tonnes)                              | 0                  | 0   |
| Wood (tonnes)  | 0                  | 0   |
| Scrap metal (tonnes)                                       | 0                  | 0   |
| Average plastics (tonnes)                                  | 0                  | 0   |
| Organic food and drink waste (tonnes)                      | 0                  | 0   |
| Transport  |                    |   |
| Diesel (litres)  | 0                  | 0   |
| Petrol (litres)  | 0                  | 0   |

### nment/publications/greenhouse-gas-reporting-conversion-factors-2022

is government spreadsheet. Some common examples are given below.

| Greenhouse gas<br>factor* | Notes  |
|---------------------------|--|
|                           |  |
| 0.21107                   |  |
| 0.18                      |  |
| 2.02                      |  |
| 0.25                      |  |
| 2.54                      |  |
| 0.21                      |  |
| 1.56                      |  |
|                           |  |
| 241.750                   | Primary source (not recycled)                              |
| 131.750                   | Primary source (not recycled)                              |
| 4018                      | Average of all metals and sources                          |
| 312.610                   | Primary source (not recycled)                              |
| 120.05                    | Primary source (not recycled)                              |
|                           |  |
|                           | Waste generation GHG factors depend on method of disposal. |
|                           | See full list of factors using link at top of page.        |
|                           |  |
|                           |  |
|                           |  |
|                           |  |
| 2.56                      |  |
| 2.36                      |  |
| 2.10                      |  |