



# City Profile

# Gateshead

## Introduction

### General information

Gateshead is located in northeast England, in the Tyne and Wear sub-region. It is the main settlement in the Metropolitan Borough of Gateshead and lies opposite Newcastle on the south bank of the River Tyne. Seven bridges join the two city centres across the river Tyne. In 2009 Gateshead had a population of 190,800.

### Organization of energy and climate policies

The main responsibility for local energy policies in the city is located in the Department Environment & Regeneration, within the Development & Enterprise Directorate of Gateshead Council. Other departments working on energy and climate related aspects are the Gateshead Housing Company and the Local Environmental Services. The collaboration has been described as “getting better”. The core team coordinating climate and energy policies has 6 employees and further 24 people are involved from other departments.

The Climate Change Team is a core consultee on new planning applications submitted for urban development to the Development Control section. In new applications, for example, the Climate Change Team assesses the energy and sustainability standards of new developments and the potentials to use renewable energies.

### Relevant stakeholders

The following actors have been involved into the process:

- Friends of the Earth as a consultee on the Climate Change Strategy
- Gateshead Warmzone, the Council’s partner for energy efficiency measures (a community interest company, or CIC).
- Community groups were also involved as were
- the Gateshead Youth Assembly.



To involve stakeholders, Gateshead has utilised special forums to host stakeholder events on the direction of climate change policies from both key partner organisations and members of the public. Furthermore, consultation events and conferences are held to encourage interaction and discussion of topics, including events specifically targeting young people. Gateshead issued pledge cards so that personal or organisational commitments can be made to address climate change. Besides that, a viewpoint resident survey is sent out to 500 randomly selected households and community interest groups. Furthermore, Gateshead Council’s elected Cabinet and Senior Management Team also considers environmental sustainability at Council management meetings and committees.

Gateshead signed the Covenant of Mayors in 2009 and submitted a SEAP in

2010. The city's targets are 40 % reduction of CO<sub>2</sub> by 2025 compared to 2005 citywide, 20 % reduction of domestic energy use by 2030 compared to 2005 and 30 % locally generated renewable or low carbon energy by 2030 compared to 2005.

Targets and programmes

Besides the SEAP, Gateshead developed a Climate Change Strategy and a Carbon Management Plan. Additionally, there has been passed the Local Development Framework and the Local Transport Plan<sup>1</sup>. Both however, have only indirect effects on the city's CO<sub>2</sub> level. For example, funding was secured to help creating active forms of sustainable, low carbon travel across Tyne and Wear particularly regarding school traffic. Cycle paths have been improved, replaced, constructed to encourage more sustainable modes of transport to school with parents encouraged to make journeys with their children.

## Context

Local authorities have a legal obligation and responsibility to enforce UK Building Regulations 2010 in new build and retrospective works. The relevant section (part L<sup>1</sup>) defines a standard to be met with regard energy efficiency in refurbishment or new buildings. In addition, the Code for Sustainable Homes sets standards for broader sustainability measures, and currently meets Level 3. The higher Code Level 4 will become mandatory from 2013 when building regulations increase.

European, national and regional framework

It is also mandatory that Local Councils develop a local transport plan (LTP). Gateshead is part of a sub regional LTP in the Tyne & Wear area. One of the key challenges is set out to reduce carbon emissions produced by local transport movements and to strengthen networks to the effects of climate change and extreme weather events.

The role of local authorities with regard to emission reduction and energy saving is mainly as an enabler, facilitator or leader. The role of fore runner is its primary function to drive forward emissions reduction policy and energy saving projects showing exemplar practice. They are supported by bodies like the Energy Saving Trust and the Carbon Trust. An example is the Carbon Trust Standard that certifies organizations for real carbon reduction and commitment to ongoing reductions. Gateshead has achieved this in 2008.

A legal requirement with regards to emissions, the CRC "Carbon Reduction Commitment", is a mandatory Government scheme aimed at improving energy efficiency and cutting emissions in large public and private sector organisations. These organisations are responsible for around 10 % of the UK's emissions. The scheme features a range of reputational, behavioral and financial drivers, which aim to encourage organisations to develop energy management strategies that promote a better understanding of energy usage. The Environment Agency is responsible for enforcing this scheme and not the local authority.



#### Supports and obstacles

Supportive aspects for the implementation of climate policies are the national financial incentives (CERT, CESP, Salix “Invest to Save” funding, Feed In Tariffs etc). It is also good to have supportive elected Councillors and Cabinet Members. Hindering aspects are a lack of knowledge of renewable technologies and benefits. And when it comes to conflicts with growth or development climate protection is secondary priority.

## Energy Efficient Buildings and Districts

#### Main measures

In the past five years, Gateshead installed 35,000 measures of conventional energy efficiency improvements delivered by “Gateshead Warmzone” (lofts and cavities). This projects runs until December 2012, with an estimated total investment of £8.4m. The Council has supported the Warmzone partnership by providing £1.4m capital funding. Another supportive factor is that the Energy Company’s obligation schemes like CERT and CESP, which lever in private finance to subsidise domestic energy efficiency measure installation and make them free or cheaper for residents.

Hindering aspects are seen in data protection issues with regards to accessing welfare benefit data make targeting the financially vulnerable more lengthy and costly. The people’s attitude and the spreading of incorrect facts towards insulation and the expiring funding are also regarded as hindering aspects for the Gateshead Warmzone project.

Furthermore, the borough has seen evidence of householders reducing energy consumption. About half of the 8% energy reduction seen between 2005-2008 was due to changing behaviours. However, the people’s attitude is still challenging as well as their doubts about the climate change. It is difficult to monitor and measure real change to factor it into targets achieved or the impact on reduced emissions. Supportive factors to encourage behavioural change are national media campaigns and consumer advice agencies.

The city also is installing solid wall insulation in 220 homes ,in the ward “High Fell”. The stock to benefit from this current project exists in large numbers in Gateshead. The emerging Government policy with regard to “Green Deal” and “ECO” (Energy Company Obligation starting in 2013) will help subsidise future works of this type. The new Green Deal financial mechanism eliminates the need to pay upfront for energy efficiency measures and instead provides reassurances that the cost of the measures

should be covered by savings on the electricity bill. The ECO will integrate with the Green Deal, allowing supplier subsidy and Green Deal Finance to come together into one seamless offer to the consumer. Nevertheless, there are a couple of hindering aspects such as emerging technologies, capital costs, planning permission for external render, disruption and intrusion of works and potential decanting, market size and lack of installers to tackle a large market and the supply chain and local skills shortage.

Self assessment

Gateshead describes its expertise as “working on a high level”. Still, the city would like to learn more from others. The retrofit project that Birmingham is pursuing is of particular interest to the local authority here, as are energy efficiency measures in existing school buildings.

## Renewable Energy Sources and Distributed Generation

Main measures

The City of Gateshead is conducting a feasibility study for a gas-fired CHP scheme for the city centre. The existing reduction potential is estimated to be 5.000 tonnes CO<sub>2</sub> per year. The initial capital cost and a lack of finance available along with the disruption of work are challenges to be overcome still. But supportive aspects are the mixed use of buildings, residential developments and the existing heat loads in the town centre. Furthermore, this would be a long-term income for the Council, the CO<sub>2</sub> reduction would be large and the reputational gain would be high.

The Council of Gateshead issued an OJEU tender for a private sector provider / ESCO to design, build, operate, maintain and finance a biomass district heating scheme to provide heat and hot water to two tower blocks for a period of 20 years via a new “wet system”. The existing mixture of electric convector heaters and night storage heaters would have been replaced. The scheme aimed to reduce tenants’ fuel bills, CO<sub>2</sub> emissions, fuel poverty and tackle excess cold and resultant winter deaths. The support of tenants as well as the support of Councillors and Cabinet Members had a positive impact on the scheme. Further supportive aspects were the existing private sector providers and local fuel supply chain. The Council would also have avoided capital costs and any ongoing maintenance. A hindering factor for the project was the financing of the scheme which was reliant on external grant funding from CESP and the Renewable Heat Incentive from central Government plus investments from the Private Sector. The technology was misunderstood by a range of stakeholders and housing officers and some residents had attitudes against change. There was also a competing priority for window replacement.

Another measure in the field “Renewable Energy Sources and Distributed Generation” is the installation of Solar PV. The Council looked to procure a private sector partner to install PV (< 50kw) on existing Council buildings via the “rent a roof basis” where the installer would take the majority of the “Feed in Tariff” with the Council taking a smaller share but benefiting

fully from the free electricity generated and any exported to the grid. The Council has a large supply of buildings for large arrays up to or >50kw which is could support the implementation. Private Sector Providers were interested in installing on basis of the “rent a roof” model. There was a framework agreement in place to speed up the procurement process and free electricity generation would have greatly reduce requirements for grid electricity. Another supportive factor was that residential installation on social housing would have reduced fuel poverty and increased tenants disposal income for those financially vulnerable. A hindering aspect was the comprehensive review of the FIT’s and their planned reduction of FITs from April 2012. The Council has little capital to invest as a result of a low settlement from central government and the financial crisis it is reliant on private sector solution (FIT surrendered).

Gateshead describes its expertise in this filed as “still learning” and is interested in learning from other cities’ experiences. The major theme, which the Council wants to learn about, is district heating.

Main measures

## Energy in Urban Transport

Gateshead installs charging points for electric vehicles throughout the borough. The national Plugged in Places programme, which provides funding to install electric vehicle charging points in North East England, is funded by the Office for Low Emission Vehicles (OLEV), the Regional Development Agency “One North East” and regional partners. North East England was chosen as one of three pilot areas to trial the creation of a comprehensive connected charging infrastructure through this project. Gateshead Council currently has seventeen standard electric vehicle charging posts located in the Borough and one “Rapid” charger. The OLEV gives a clear support for the project. Being a regional pilot and grant scheme incentivises installation of the infrastructure early. The location of Nissan in the neighbouring borough and the battery production for the new Nissan Leaf are also seen as a supportive factor as is the focus of the Gateshead College on automotive skills. Hindering factors are the people’s attitude and their perception that the project brings discomfort and costs rather than benefits. The existing traffic regulation orders made the installation a lengthy process.

There is a Sustainable Transport Fund, which is at present available for £4.9 million across Tyne and Wear, of which Gateshead is a member local authority, for measures aimed at improving sustainable travel to school. This is subdivided between a number of individual projects covering a number of areas, such as increased “Bike It” coverage, child pedestrian training, development of the ‘Travel Matters’ web based learning initiative and capital investment in walking and cycling routes to schools. The bid has only recently received approval and is now in the process of getting underway. There is also a larger Tyne and Wear funding bid for which a formal business case is prepared and submitted to Government by the end of 2011. This would build upon the above bid, with a wider focus on



providing sustainable access to employment, relieving congestion on key corridors and promoting active travel. The exact scale of the bid is yet to be determined, and any bid will not be decided until June 2012. A cross local authority bid means joint working, collaboration and best practice sharing, which is a supportive aspect for the measure. And it means transport projects are holistic and the fund assists efforts aimed towards modal shift. But time is tight to formulate the bid.

Another measure is the introduction of bio fuels (bio diesel) used by the Council's fleet. The share is at about 5% of the fleet currently with a target of 10% by 2014. Lower CO<sub>2</sub> emissions and tax relief incentives for using bio fuel are supportive aspects. Hindering, however, is the long duration of the programme.

Gateshead describes its expertise as "still learning" and would like to learn more from other cities especially about shifting towards electric and low carbon buses.

Self assessment

## Financing

The financial resources dedicated to local energy policies were increasing from 3.785.959 € in 2010/2011 to 4.406.817 € in 2011/2012.

The biggest share has the Capital Sustainable Budget - Street Lighting with 2.166.000 € in 2011/2012 (1.320.000 € in 2010/2011) followed by the Scottish Power Utility Company leverage with 1.240.000 € in 2011/2012 (1.450.000 € in 2010/2011).

The Capital Sustainability Budget - Salix has been increased from 312.000 € 2010/2011 to 405.000 € in 2011/2012.

The Staff Costs / Revenue Budget decreased from 310.659 € to 264.077 € and the Capital Funding for Home Insulation schemes from 393.300 € to 331.740 €.

Finances come from:

- Own Finances - Prudential borrowing, Public Works Loan Board, Council Reserves.
- External Funding - CERT (Carbon Emission Reduction Target) and CESP (Community Energy Support Programme) funding from the "big six" energy suppliers in the UK. Salix "Invest to Save".
- Warmzone - Funding levered in from Scottish Power as a funder of the Warmzone.
- Private Sector - Private Sector financing initiatives with profit sharing.
- Government Grant - Warmfront Scheme. Emerging "Green Deal" mechanism and "ECO" (Energy Company's Obligation).



- Householder contributions.
- EU / Green Investment Bank.

## Emission Inventories and Monitoring

Between 2005 and 2008 Gateshead generated a CO<sub>2</sub> inventory every year. The data came from DEFRA NI186 statistics, and 2008 data was estimated from DECC energy statistics and DfT traffic statistics. The CO<sub>2</sub> emissions decreased a little between 2005 and 2008. In 2008 the CO<sub>2</sub> tonnes per capita were 8.04 in 2005 8.46. In total this were 1,526,926 t/CO<sub>2</sub> in 2008 and 1,607,570 t/CO<sub>2</sub> in 2005.

### CO<sub>2</sub> emissions in 2008

Homes - Gas	296,090 (20 %)
Homes - Electricity	171,840 (11 %)
Employers - Gas	254,110 (17 %)
Employers - Electricity	344,810 (21 %)
Transport	460,076 (31 %)

### CO<sub>2</sub> emissions in 2005

Homes - Gas	323,000
Homes - Electricity	173,850
Employers - Gas	276,570
Employers - Electricity	341,250
Transport	492,900

Gateshead developed a monitoring tool for the state of implementation of their measures. The current SEAP has a SMART (Specific, Measurable, Achievable, Realistic, Timely) action plan against which states key actions and milestones, which are monitored.

## Future Visions and Expectations

The Council of Gateshead plans further briefing sessions for Councillors with regards to planned energy projects and also the renewable technologies available to try and help reduce CO<sub>2</sub> emissions and meet ambitious targets. This will improve the knowledge of technologies, how they can be used appropriately and their limitations.

Regarding financial sources some funding streams are coming to an end so marketing campaigns are being considered to raise the awareness of energy efficiency measure that are currently free, which may be only available on pay as you save or a loan basis in the future. Gateshead also has a feasibility study underway for the Town Centre district heating scheme to look at private finance to move the project forward. This is being undertaken by PWC to look at leveraging in finance to fund the project in the absence of or alongside Council Capital Investment.

Concerning the theme “Energy Efficient Buildings and Districts”, Gateshead’s focus for the near future are retrofits and refurbishment of the existing building stock. The new ‘Green Deal’ is expected to a high impact here.

The gas fired CHP plant (see chapter Renewables) that is supposed to supply numerous buildings is the main project in the near future in the field of “Renewable Energies and Distributed Generation”, as the focus in the field of “Energy in Urban Transport” lies on electric vehicles.



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**CASCADE**

Cities exchanging on  
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