

**From:** Mike Whiting, Cabinet Member for Planning, Highways, Transport and Waste

Barbara Cooper, Corporate Director of Growth, Environment and Transport

**To:** Environment & Transport Cabinet Committee – 20 September 2018

**Subject:** Kent & Medway Energy & Low Emissions Strategy – Emerging evidence and priorities

**Classification:** Unrestricted

**Electoral Division:** All

**Summary:**

This report provides an update on the development of an Energy and Low Emissions Strategy for Kent and Medway and the emerging priorities for action.

**Recommendation(s):**

**The Environment and Transport Cabinet Committee** is asked to comment on and note:

1. the evidence gathered to date and emerging analysis; and
2. the proposed themes and potential actions outlined in Section 5, to help shape the final draft Strategy

**1. Introduction**

- 1.1 In November 2017, Kent & Medway Chief Executives and Leaders endorsed the need for a Kent and Medway Energy & Low Emissions Strategy (ELES), as a daughter strategy to the Kent Environment Strategy, with KCC taking the lead in co-ordinating its development collectively with Medway Council, Kent Districts and other key partners.
- 1.2 This paper is a further update to the paper presented to this Cabinet Committee in January 2018 regarding Kent Environment Strategy progress, Energy and Air Quality. The work to date that informs this paper has been and will continue to be shaped by the Kent Environment Strategy Cross Party Members Group that meets every six weeks.

## 2. Background and National Context

- 2.1 In terms of green house gases, over the last five years or so there has been some significant action to reduce emissions both nationally and locally, most significantly carbon dioxide from energy and fuel use. However, although there has been good progress made in some sectors of the economy over this time, there is still some way to go in others, especially in the transport sector and in relation to carbon emissions from heating. As a result, the risks from climate change continue to be a global and local concern.
- 2.2 Regarding air pollution, similarly there have been some reductions made since the 1970s; however, due to the the high levels of growth experienced and being predicted in population, new housing development and car ownership in particular, evidence now shows that air pollution, particularly from transport, is estimated to be the largest environmental risk to the public's health. Poor air quality affects everyone and has long term impacts on all, with a disproportionate impact on the old, sick and poor, and the impact on the growth and development of children being a particularly significant risk.
- 2.3 In addition, with the ambitious levels of growth planned for Kent and Medway and the increasing uptake of new technologies e.g. electric vehicles, the demand for energy – which is one of the key drivers impacting carbon emissions and air quality - is increasing. When considered alongside the constraints of the existing national grid energy infrastructure, there becomes a pressing need to identify and deliver a more sustainable approach to energy generation, use and storage to support growing communities.
- 2.4 As a result, over the last year, several new Government Strategies and Plans have highlighted the need that future growth must be supported by a shift to clean and affordable energy and infrastructure, with commitments for example, to phase out fossil fuels, in particular petrol and diesel for new vehicles by 2040. These strategies and Plans include:
- **The Clean Growth Strategy:** *This Strategy aims to achieve nearly zero emissions from buildings and transport by 2050. This requires strong leadership at local level, to embed measures in strategic plans across areas such as health and social care, transport, housing and own estates, to deliver clean energy.*
  - **The Industrial Strategy:** *This strategy aims to boost productivity, create good jobs and position the UK as a leader in low cost, low carbon innovation, with investment in skills, industries and infrastructure.*
  - **The 25 Year Environment Plan:** *A sister document to the Clean Growth Strategy, this aims to deliver cleaner air and water; plants and animals which thrive; connect more people with the environment to promote greater well-being and secure our environment for future generations.*
  - **The Road to Zero:** *To ensure, almost every car and van is zero emission by 2050, this strategy supports delivery of both the Industrial and Clean Growth Strategies. It outlines the steps towards cleaner road transport, putting the UK at the forefront of the design and manufacturing of zero emission vehicles.*

- **The Clean Air Strategy** (draft under consultation): *This strategy continues to focus on reducing industrial and transport emissions, and also aims to reduce particulate matter emissions by 30% by 2020, and by 46% by 2030 (largely due to burning of solid fossil fuels in homes). In addition, it aims to tackle rising agricultural emissions and the sources of poor indoor air quality.*

2.5 However, these national strategies can only go so far in providing a framework in which local action will be critical to tackling the fundamental challenges of air quality and sustainable energy provision. It is within this context that the Kent and Medway Energy and Low Emissions Strategy is being developed.

### **3. Kent and Medway Energy and Low Emissions Strategy – Purpose and Aims**

3.1 The Strategy will develop a multi-agency approach to improving air quality, reducing carbon emissions and creating a more sustainable energy infrastructure across Kent and Medway.

3.2 The Strategy will utilise available data and evidence of good practice to identify the most effective partnership actions to achieve a step change in delivery, targeting existing resources more effectively, securing new funding and increasing collaboration across partners.

### **4. Building the business case for action – Evidence and Intelligence**

4.1 In order to inform the development of the strategy and build the business case for action, evidence and data has been drawn from a wide range of sources and mapped against the strategic environmental, economic and public health outcomes that are important to Kent & Medway.

4.2 Whilst the analysis and detailed evidence is still being finalised and will form a supporting document to the Strategy, this section summarises the high-level findings. This is based on the best available data and any data limitations will be clearly outlined in the final Strategy. The evidence focuses firstly on energy and greenhouse gas emissions, then air quality and finally health impacts.

#### **4.3 Energy demand and green house gas (GHG) emissions trends**

4.3.1 The energy system in the UK and Kent is changing. Two thirds of UK's existing coal, gas and nuclear power stations are set to close by 2030 and any future power stations must be largely decarbonised if the UK is to achieve its legally binding targets of cutting carbon emissions by 80% by 2050.

4.3.2 To meet short term demand, new and more diverse sources of electricity generation will likely need to be developed. There will be a need for an increased number of smaller, dispersed, low carbon generation power sources, often located near to homes and businesses. Due to the variable nature of this generation, there will also be an increased need for technologies such as battery storage to manage seasonal and diurnal variations.

#### 4.3.3 Total fuel consumption for Kent and Medway in 2015 is shown in **Appendix 1**.

Gas and electricity combined account for approximately 54% of total fuel consumption. Petroleum products account for 41% of total consumption, the large majority of which is associated with road and rail transportation. Domestic energy use is the second highest sector use, only marginally less than road transport. Bioenergy and waste, manufactured fuels, and coal combined account for just over 4% of total fuel consumption. Since 2012, gas and electricity consumption has decreased by approximately 10% and 20% respectively across Kent and Medway.

#### 4.3.4 The 2018 Growth and Infrastructure Framework predicts that by 2031, gas demand in Kent and Medway is expected to increase by approximately 23% (from 8,556 GWh per year to 10,550 GWh per year) and electricity demand is expected to increase by approximately 19% (from 3,101 GWh per year to 3,699 GWh per year).

#### 4.3.5 By 2031, in the domestic sector, which was noted earlier as the second largest draw on energy for Kent and Medway, nearly 1 in 5 homes would have been built after 2015. Therefore, the rate at which Kent and Medway minimises energy demands in the domestic building sector is likely to be highly sensitive to the energy efficiency of those new buildings.

#### 4.3.6 In response to the growing pressures on energy capacity, renewable energy generation in Kent and Medway has increased significantly since 2012, with the currently installed capacity of solar, wind, waste, and CHP being over 1,800 MW, compared to approximately 230 MW in 2012. The majority of the capacity has been delivered through solar and wind installations with wind contributing over 1,000MW and solar over 450MW. Solar generation is made up of a significant amount of small scale renewables, although the majority is made up of larger installations. Wind energy capacity is nearly all from large scale installations, although there is a small amount of small scale wind energy delivering 5.5MW of installed capacity in Kent.

### 4.4 Air quality trends

#### 4.4.1 With regards to air quality, the district councils across Kent and Medway are required to assess air quality in their area. The results of these assessment are updated annually, with the submission to Defra of an Annual Status Report. Where there is or is likely to be a breach of the national air quality objectives, the council must declare an Air Quality Management Area and develop an Air Quality Action Plan. Currently, only two councils in Kent and Medway – Ashford and Herne – have not declared AQMAs, although they have adopted actions aimed at improving air quality. Altogether, the district councils and Medway have adopted over 250 separate air quality actions.

#### 4.4.2 Current evidence demonstrates pockets of poor air quality along major road networks, and in addition linked to maritime travel to and from the Port of Dover. (Appendix 2a). Nitrogen Dioxide levels from roadside sources are proportionately higher in Kent and Medway than the UK average. However, the

data is limited, and a key action of the Strategy will be to get a better picture across Kent and Medway in order to make more informed decisions.

## 4.5 Health impacts

4.5.1 Whilst it is difficult to attribute air quality as a direct cause of death, it is a significant contributor. The Public Health indicator relating to deaths that can be attributed to poor air quality demonstrates that Kent and Medway have a greater proportion of deaths attributable to particulate air pollution than the South East and the national average. Since 2012 there has been no improvement in the Kent, Medway or South East figures and only a slight improvement nationally.

4.5.2 There are also links to public health from the challenges identified above in the provision of energy. Already, Kent & Medway have a greater proportion of households who experience fuel poverty compared to the South East and the national average. This trend has worsened since 2012, albeit at a similar rate to the South East (Appendix 2b).

4.5.3 Kent and Medway also have a higher rate of deaths in winter (generally linked to cold conditions) compared to the South East and national averages. The year-on-year data fluctuates significantly, although the most recent data for winter 2015 shows a lower level.

**Table 1:** Comparison of relevant Public Health Outcome indicators

- a) Fraction of all-cause adult mortality attributable to anthropogenic particulate air pollution (measured as fine particulate matter, PM<sub>2.5</sub>)<sup>1</sup>,
- b) The percentage of households that experience fuel poverty based on the "Low income, high cost" methodology<sup>2</sup>
- c) Excess winter deaths index (single year, all ages)<sup>3</sup>

Indicator	England	South East	Kent / Medway
a) Fine Particulate Matter (PM <sub>2.5</sub> )	5.3	5.5	5.6 / 6.3
b) Fuel Poverty	11.1	9.0	9.6 / 10.1
c) Excess winter deaths	15.1	15.1	15.3 / 18.7

<sup>1</sup> From Public Health Outcomes Framework, PHOF 3.01. Source: [Public Health England](#)

<sup>2</sup> From Public Health Outcomes Framework, PHOF 1.17. Source: [Public Health England](#) See map in Appendix 2

<sup>3</sup> From Public Health Outcomes Framework, PHOF 4.15i. Source: [Public Health England](#)

## **5. Local policy response: A Kent and Medway Energy and Low Emissions Strategy - Potential Themes and Actions**

5.1 Following extensive stakeholder engagement with the data gathered to date, the following themes and potential options for actions have emerged. These options are shared with the Cabinet Committee to gather members' views and comments. There are five themes that have been identified, and with these, a range of options presented for discussion in the sub-sections that follow:

- Leadership and Governance
- Evidence and Intelligence
- Policy, Planning and Guidance
- Financing and Investment
- Communications and Engagement

### **Leadership and Governance**

5.2 If real progress is to be made locally in setting a framework for change on emissions and energy infrastructure, strong leadership will be critical. Given the role of development and transport in these agendas, it is therefore logical that local authorities – at county, unitary and district/borough levels – provide this leadership. Potential actions include :

- More visible joint lobbying of Central Government and business with key partners.
- Kent/KCC being a stronger advocate for energy and low emissions on the Local Enterprise Partnership (LEP) and Transport for the Southeast Subnational Transport Boards – taking the lead in promoting LEP-wide initiatives to reduce emissions and promote sustainable energy solutions where appropriate.
- In respect of commissioning and procurement, encouraging or requiring the use clean growth solutions within contracts for services; capital projects commissioned; corporate and Kent strategies and initiatives; and new build design standards for KCC buildings
- Development of a Kent and Medway-wide public sector estate improvement programme. Organisations like KCC, Medway Council and districts playing a leading role in the development of future energy systems through estate energy use and generation, requiring smart, efficient and innovative energy solutions in public sector-owned and managed buildings.
- Taking more of a leading role in facilitating future Kent energy infrastructure, e.g. decentralised energy, EV/alternative fuel vehicle roll out, smart networks.

- Exploring how we reduce emissions from staff travel - to incentivise, promote and provide the infrastructure for low emission transport and active travel options, for commuting and business travel.

### **Evidence and Intelligence**

- 5.3 The current levels and trends in energy and fuel consumption and resultant emissions are clearly set out at national and regional level; however, there is less data and evidence available at district level, where more targeted interventions might be necessary. This includes a lack of consistent monitoring, and a lack of robust case studies, which development planning can reference and use to develop policy, meaning local authorities are less able to press developers to implement more innovative technologies and solutions to achieve higher levels of sustainability.
- 5.4 It is proposed that the strategy considers building more robust evidence and intelligence to support the delivery of the strategy and the development of effective planning policies. The potential actions to be considered are:
- A more comprehensive evidence base across Kent and Medway to inform future action
  - Integration of energy, carbon and air quality data/evidence into future iterations of the Kent and Medway GIF.
  - Provision of more accessible and relevant travel and public health information for the public to make more sustainable and healthier choices.
  - Greater engagement with local universities and the research community to pilot and evaluate innovative approaches and gather intelligence to:
    - Deliver robust case studies to demonstrate 'what works' and to underpin planning.
    - Provide the evidence needed to effectively lobby Government for stronger national policies and to successfully bid for grant funding.

### **Policy, Planning and Guidance**

- 5.5 Planning policy is a critical enabler in delivering a step change to support clean growth. A consistent message from stakeholders confirms there is a disparity between the clean growth ambitions of the Government and the ability of local authorities, particularly local planning authorities, to deliver those ambitions. It should be noted that previous changes in national policy and planning have removed helpful standards such as the Code for Sustainable Homes and as yet there are no common standards for critical national infrastructure such as for electric vehicles. The potential actions to be considered are:
- Development where appropriate of common planning policies for new developments which could cover

- A requirement for Energy Statements for housing over a certain threshold to encourage decentralised energy and renewables
  - A requirement for performance above Building Regulations in some contexts or circumstances
  - The provision of EV charging points (and provision for alternative vehicle fuels) on new developments
  - The provision of sustainable and active travel options on new developments
- Development of guidance or standards for certain licencing, which could include taxis, private rented accommodation (Landlords), commercial premise letting.
  - Development of anti-idling policies – for instance, for bus services, taxis, school drop off points, health facilities and similar circumstances or services where such idling is a particular issue.
  - The exploration of the use of Clean Air Zones to deter use of old diesel buses, lorries and taxis

### **Financing and Investment**

5.6 Ultimately critical to delivering action is funding, particularly for more sustainable transport and energy infrastructure, significant building improvements and new research. Some areas have achieved partnership success in accessing funding, for example for home energy efficiency improvements to reduce fuel poverty. This success needs to be replicated at scale to tackle air pollution and deliver wider energy action. The potential actions to be considered are:

- Increasing KCC and partners investment or support for community scale energy and smart grid projects including renewables, battery storage and EV infrastructure outside the KCC estate where a return exists.
- Explore the development of a potential Kent and Medway-wide Energy and Low Emissions investment fund to support implementation at scale, linking to existing mechanisms such as the Local Growth Fund and the Regional Growth Fund for businesses

### **Communications and Engagement**

5.7 To support the investment in hard measures, a shift in public attitudes and across key sectors is necessary to achieve lasting gains. Local authorities have a key role to inform, promote and encourage behavioural change and the adoption of new technologies. There are already a number of existing initiatives; the intention would be to build on these to accelerate the pace of change. The potential actions to be considered include:



- More targeted information campaigns to reduce negative impacts – e.g. vehicle idling around schools, care and hospital facilities and in town centres.
- More interactive information to be provided in order to:
  - Enable residents to take action to protect their health e.g. alternative walking/cycling/running routes to avoid high pollution areas at particular times
  - Encourage more active travel.

### **Other agendas**

5.8 Aspects which are outside the scope of the Strategy but may require more evaluation to determine the potential for action in the future:

- Impacts from marine transport and local ports and the potential to move more freight by river transport to reduce road freight.
- Impacts from aviation and airport expansion.
- Ammonia emissions from the agricultural sector, which has the greatest detrimental impact on the natural environment (Defra and EA lead on this area of emissions).

## **6. Financial Implications**

- 6.1 At this early stage specific costed measures are not yet defined. As the priorities and action plan develops, the supporting evidence and any cost implications of specific actions will become clearer.
- 6.2 When the strategy moves to identifying potential actions, the most significant costs will arise from mitigation measures required to improve air quality, mainly related to new development, transport and active travel.
- 6.3 However, it is clear that there are significant opportunities to take a more strategic approach across the public sector, to pool resources and existing budgets to deliver common actions and unlock potential investment opportunities
- 6.4 As outlined in para 5.6, accessing new funding will be critical. Government is releasing additional funding, in particular for transport and power (see **Appendix 3**) to deliver Clean Growth. Building funding capacity locally will be an important enabler to deliver the Strategy and action plan. KCC and partners will need to build on previous success to take advantage of these opportunities.

## 7. Policy Framework

- 7.1 This paper and the activity within it is directly linked to KCC Strategic Outcomes and to the Kent Environment Strategy and its Implementation Plan. It is also relevant to the emerging Health and Wellbeing Strategy and Kent's Public Health Outcomes.
- 7.2 The Strategy will specifically have the following implications for KCC's Strategic Outcomes:
- **Children and young people in Kent get the best start in life** – Poorly heated homes and/or air pollution directly impact on child health, attendance at school and their educational attainment.
  - **Kent communities feel the benefits of economic growth, by being in-work, healthy and enjoying a good quality of life** – Delivering smart energy infrastructure and adopting cleaner energy and fuels will deliver more efficient organisations/businesses, which will benefit residents through providing better value for money for taxpayer funded facilities. Good quality alternative transport solutions coupled with accessible green spaces can reduce both air pollution and congestion and improve health outcomes for all.
  - **Older and vulnerable residents are safe and supported with choices to live independently** – Poorly heated homes and/or air pollution exacerbate existing health conditions and is a significant contributor to early deaths, including excess winter deaths.

## 8. Equalities Impact Assessment

- 8.1 An Equalities Impact Assessment is included (**Appendix 4**). At this stage there are no significant negative impacts. As this Strategy is aimed at improving health outcomes, there is more likely to be more positive equality impacts than negative, particularly for Age, Maternity and Disability. As more evidence becomes available and priorities become more defined, impacts will be re-assessed to determine if this assessment requires revision.

## 9. Next Steps and Timescales

- 9.1 It is the aim to bring back a final draft for consultation to Cabinet Committee in either November or the New Year. The final draft will go out for public consultation in late spring 2019 for 12 weeks with the final version completed by Autumn 2019.

## 10. Conclusions

- 10.1 The evidence gathered to date shows a clear need for more action in Kent and Medway to deliver sustainable growth and improve health outcomes; at the same time these actions will also address the risks of climate change.

- 10.2 Delivering effective partnership working to a clear set of priorities for multiple benefits, is considered the most resource-efficient way to achieve better outcomes in the current financial climate.
- 10.3 By engaging the public and private sectors across Kent & Medway to deliver an area-wide strategy and action plan, KCC and partners will demonstrate clear leadership and send a strong message to the public and our delivery partners of the need to take a co-ordinated approach to action.

## 11. Recommendation(s)

### **Recommendation(s):**

**The Environment and Transport Cabinet Committee** is asked to comment on and note:

1. the evidence gathered to date and emerging analysis; and
2. the proposed themes and potential actions outlined in Section 5, to help shape the final draft Strategy

## 12. Background Documents

Kent Environment Strategy – [www.kent.gov.uk/environmentstrategy](http://www.kent.gov.uk/environmentstrategy)

Paper presented to Environment & Transport Cabinet Committee Jan 2018  
<https://democracy.kent.gov.uk/documents/s82600/Item%206%20-%20Report%20-%20Kent%20Environment%20Strategy%20Progress%20Energy%20and%20Air%20Quality.pdf>

## 12. Contact details

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### **Relevant Director:**

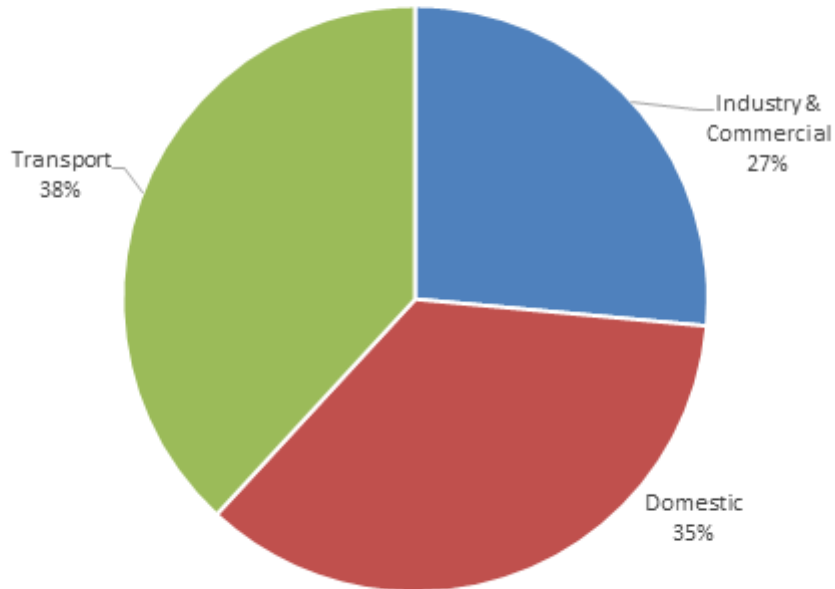
Katie Stewart, - Director of Environment, Planning and Enforcement

03000 418827

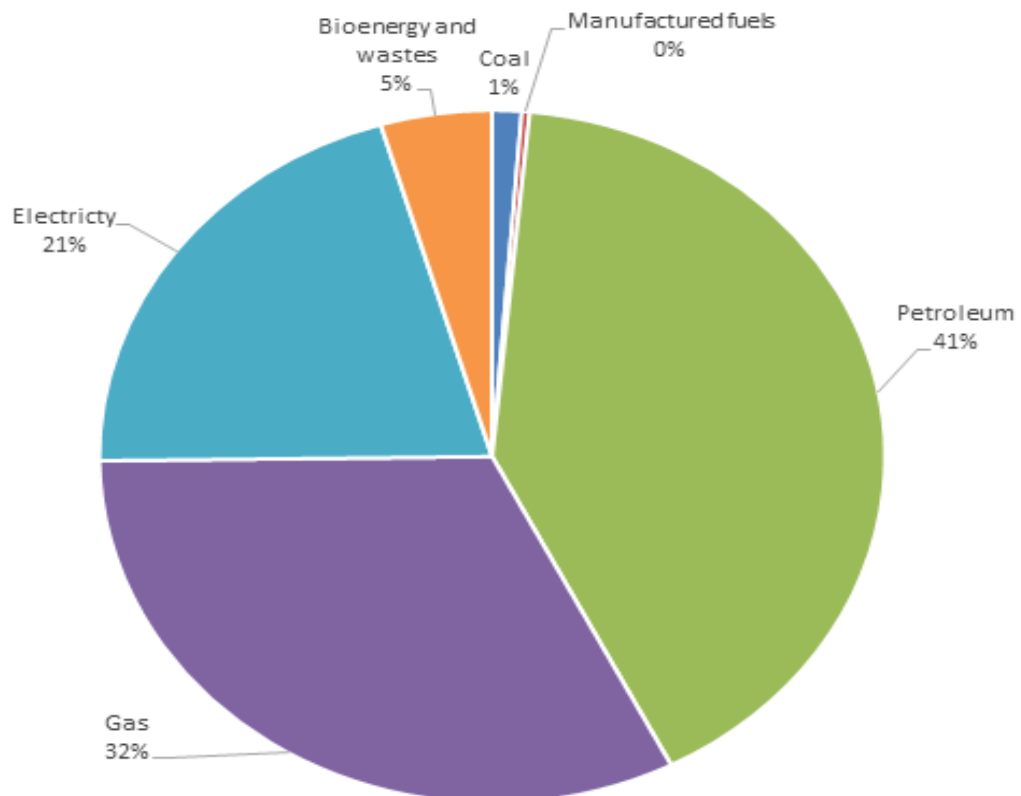
[katie.stewart@kent.gov.uk](mailto:katie.stewart@kent.gov.uk)

## Appendix 1 – Fuel Consumption (AECOM Report 2017)

Total Kent and Medway fuel consumption by sector 2015

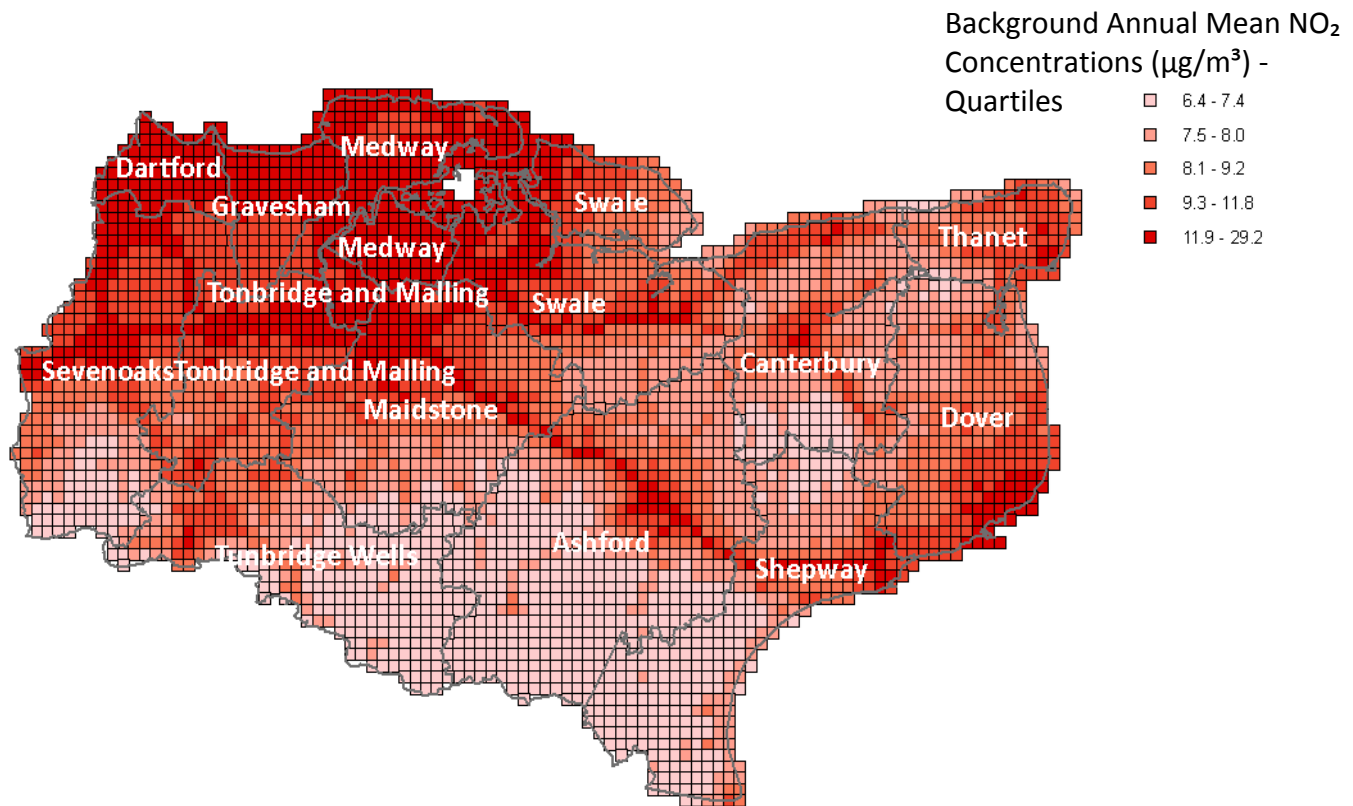


Total Kent and Medway fuel consumption 2015

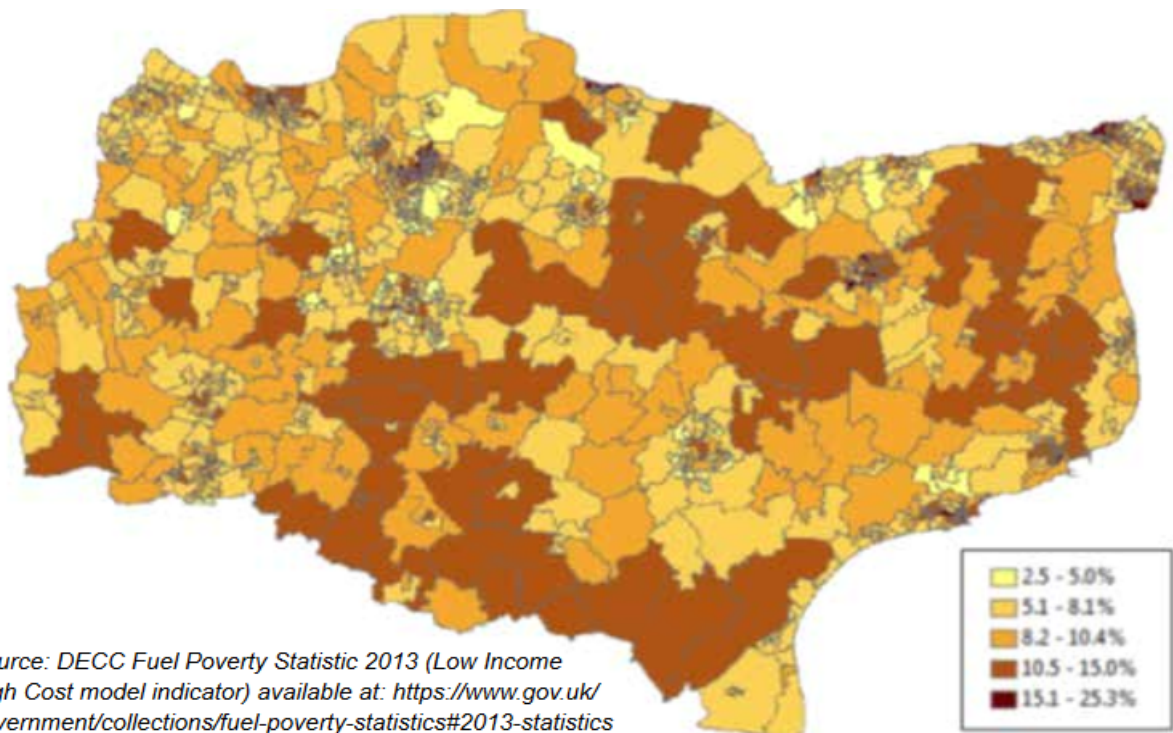


## Appendix 2 – Nitrogen Dioxide concentrations and Fuel Poverty

### a) Nitrogen Dioxide (Air pollutant) concentrations – primarily from transport

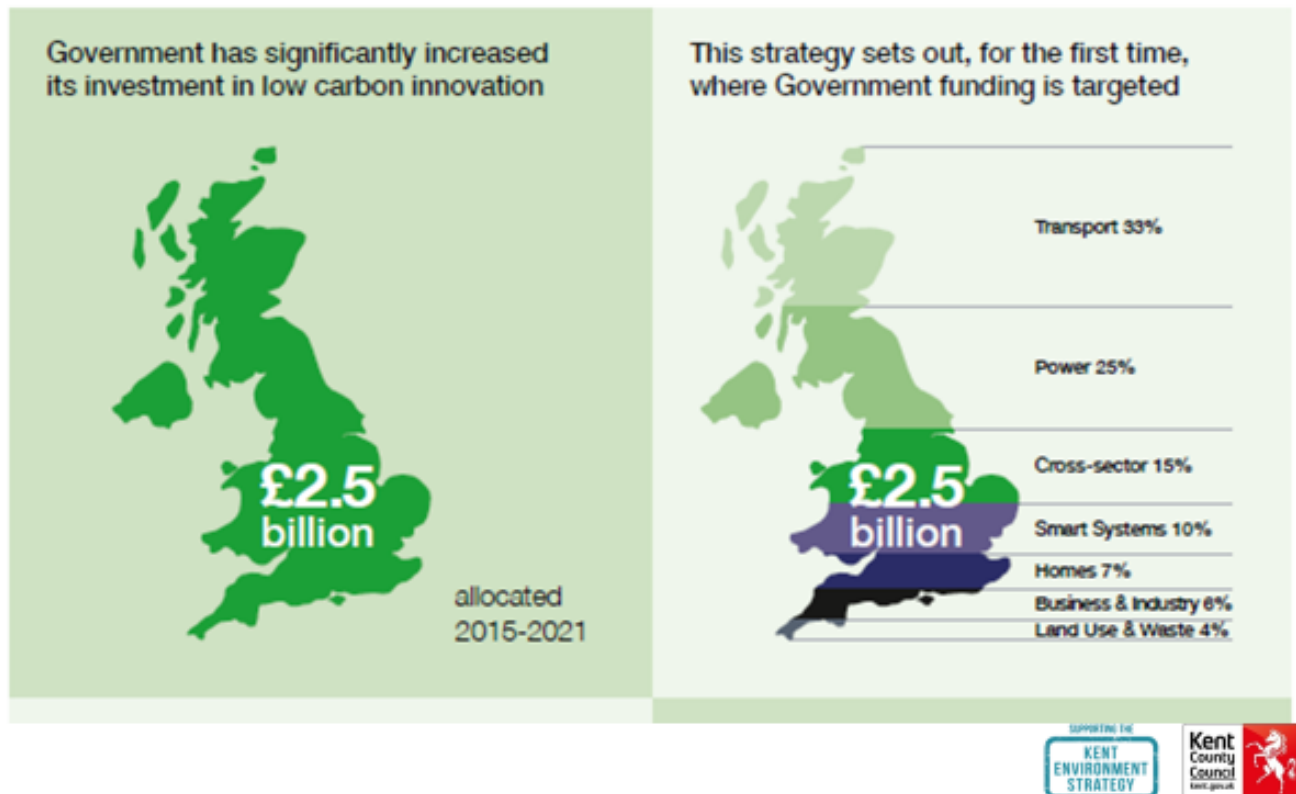


### b) Households in Fuel Poverty



Source: DECC Fuel Poverty Statistic 2013 (Low Income High Cost model indicator) available at: <https://www.gov.uk/government/collections/fuel-poverty-statistics#2013-statistics>

## Clean Growth Funding



## **Appendix 4 Equality Impact Assessment**

**KCC - Growth, Environment and Transport Directorate (GET).**

### **Equality Analysis / Impact Assessment (EqIA) template**

#### **Name of decision, policy, procedure, project or service:**

Kent & Medway Energy and Low Emissions Strategy

#### **Brief description of policy, procedure, project or service**

The project is the coordination of the development of an Energy and Low Emissions Strategy for Kent & Medway. The strategy will aim to identify and prioritise action to reduce harmful emissions that contribute to climate change and poor air quality leading to impacts on people's health. The Strategy will also incorporate the strategic approach to energy across the County as there is significant overlap in activity and the resources that are delivering actions.

This Strategy will strengthen and support the UK government's Clean Air Strategy (under consultation), Kent Environment Strategy implementation plan and District Council's air quality action plans.

It will also take into account the Government's Industrial Strategy, Clean Growth Strategy, the 25 Year Environment Plan and Road to Zero.

#### **Aims and Objectives**

##### **Objectives of group**

- Oversee the development of a Strategy and Action Plan for Kent & Medway that provides a comprehensive and cohesive framework, to set out the ambition and challenge for a step change in action.
- Seek out relevant data and information to ensure a robust evidence-based approach.
- Identify individuals, groups and organisations that have a key role to play in this agenda and ensure effective engagement and consultation to obtain their contributions and support.

- Identify the areas requiring a partnership approach to be most effective, opportunities for quick wins, synergies between KCC, Medway Council and District Councils.
- Promote increased partnership action and information sharing.
- Take individual responsibility to promote opportunities, align action and foster a wider awareness of the development of the strategy and the challenges faced from this agenda through our own roles and interactions.

### **Outcomes**

- Support the delivery of Kent & Medway air quality objectives, as defined by EU Directives and the UK's Air Quality Strategy to reduce the level of air pollutants
- Focus local authority action where it can positively influence more secure, sustainable and affordable energy to benefit Kent and Medway residents and businesses
- Deliver a joined-up approach to tackling the challenges of climate change and air quality
- Demonstrate tangible improvements in tackling air pollution through more partnership activity
- Ensure actions and resources are focused where they are needed most and to benefit the most vulnerable residents

### **Outputs**

- Strategy and Action plan
- Comprehensive evidence base and identified gaps, where more research is required
- Identification of policies required to influence local planning/local plans
- Development of simple messages for the public, for partners to use in communications
- Development of Kent & Medway case studies
- Development of a knowledge hub of current/planned actions
- Joint funding opportunities

### **JUDGEMENT**

- **Adjust and continue - adjust to remove barriers or better promote equality**



This initial screening has shown there are unlikely to be any significant negative impacts. Some low negative impacts are most likely to be outweighed by the wider positive benefits from the strategy and action plan. However, this needs to be assessed further during the development of the strategy and action plan over the course of 2018 and into early 2019.

One Medium negative impact linked to electric vehicle use by the disabled also requires further investigation to understand the direction of development of electric vehicles suitable for disabled people.

For both positive and negative impacts identified, the need to obtain factual evidence to support assumptions across several protected characteristics is required; this evidence will be obtained during the first phase of the work to develop the strategy.

The evidence obtained will be used to determine communications and engagement messages and channels to be used, as well as informing the resulting action plan.

This will aim to ensure that any negative impacts for specific protected characteristics are minimised or addressed as far as reasonably practicable.

**I have found the Adverse Equality Impact Rating to be Low**

#### **GET Document Control Revision History**

<b>Version</b>	<b>Date</b>	<b>Authors</b>	<b>Comment</b>
V0.1	13/11/2017	D Kapaj	Initial screening grid completed by Sustainable Business & Communities team (team meeting)
V0.2	23/11/2017	D Kapaj	Review and development of first draft by first meeting of K&M energy and low emissions working group
V0.3	31/01/2018	D Kapaj	Further feedback from K&M energy and low emissions working group and EPE

			E&D group
V0.4	19/02/2018	D Kapaj	Refined further based on additional feedback and evidence obtained
V0.5	28/03/2018	D Kapaj	Refined further based on additional feedback and evidence obtained
V0.6	05/04/2018	D Kapaj	Formatted into GET template and feedback from A Agyepong
V1	29/08/2018	D Kapaj	Finalised content to support Environment & Transport Cabinet Committee paper

**Document Sign-Off (this must be both the relevant Head of Service and the relevant Director)**

**Attestation**

I have read and paid due regard to the Equality Analysis/Impact Assessment. I agree with the actions to mitigate any adverse impact(s) that has /have been identified.

Name	Signature	Title	Date of Issue
Carolyn McKenzie		Head of Sustainable Business & Communities	
Katie Stewart		Director of Environment Planning & Enforcement	

## **Part 1 - Screening**

Regarding the decision, policy, procedure, project or service under consideration,

Could this policy, procedure, project or service, or any proposed changes to it, affect any Protected Group (listed below) less favourably (negatively) than others in Kent?

Could this policy, procedure, project or service promote equal opportunities for this group?

**Please note that** there is no justification for direct discrimination; and indirect discrimination will need to be justified according to the legal requirements

Protected Group	You MUST provide a brief commentary as to your findings, or this EqlA will be returned to you unsigned			
	High Negative Impact	Medium Negative Impact	Low Negative Impact	High/Medium/Low Favourable Impact
Age			Encouraging public transport over car potentially gives rise to personal safety concerns ie vulnerable to abuse/followed home (although road safety stats show public transport is safer than cars ie fewer accidents)	High – children/young people due to evidence of air quality impact on lung development (up to age 9) and long-term effect on health into adulthood  Medium – improving air quality and home energy efficiency will

				<p>reduce risks of illness and/or early death particularly linked to conditions mainly affecting young children or older people or due to living in colder homes. (ie heart disease, stroke, COPD)</p> <p>Medium - Young people (aged 18-29) – 25% less likely to own a car, so reliant on public transport/ lift-share and active travel and this age group will benefit from improvements to this infrastructure and availability of pay-as-you-go car clubs.</p>
<b>Disability</b>		Physical ability to use Electric Vehicle chargers/charging points could inhibit take up by this group. *Need to investigate information on availability of modified EV for disabilities and those included with the	<p>Encouraging public transport over car potentially gives rise to personal safety/access concerns (perception that public safety is achieved by disabled using own car)</p> <p>Avoid excluding from active travel opportunities as far as reasonably practicable.</p>	<p>Low - Improving air quality may reduce symptoms of some disabling health conditions</p> <p>Low – Some energy efficiency improvements such as boilers are linked to</p>

		government's Mobility scheme.		disabled adaptations which can benefit those with a disability (e.g. disabled facilities grant)
<b>Gender</b>			Encouraging public transport over car potentially gives rise to a personal safety concern (perception by women that personally safer using own car – evidence to be confirmed) (although road safety stats show public transport is safer than cars ie fewer accidents)	
<b>Gender identity/ Transgender</b>			Ensure inclusive promotions/communications Encouraging public transport over car potentially gives rise to a personal safety concern (although road safety stats show public transport is safer than cars ie fewer accidents)	
<b>Race</b>			Encouraging public transport over car potentially gives rise to a personal safety concern (although road safety stats show public transport is safer than cars ie fewer accidents)  Using more reflective images of population in campaigns and promotions.  Ensuring clear language is used and	

			language barriers are reduced where possible in the promotion of schemes and projects under this strategy (inclusive promotions and schemes)	
<b>Religion and Belief</b>			Ensure inclusive promotions	
<b>Sexual Orientation</b>			Ensure inclusive promotions	
<b>Pregnancy and Maternity</b>			Encouraging public transport over car potentially a personal safety concern (although road safety stats show public transport is safer than cars ie fewer accidents)	Poor air quality impacts lung development of growing foetus ( <a href="#">Evidence 1</a> <a href="#">Evidence 2</a> ) and young children. Improving air quality benefits this group
<b>Marriage and Civil Partnerships</b>			N/A	
<b>Carer's Responsibilities</b>			Carers may be more likely to need a car due to transporting children or cared for individuals, some with specific needs requiring larger (and potentially more polluting) vehicles Need for careful communications in encouraging less polluting transport modes	

**Conclusion:** Overall no significant negative impacts identified, there is potentially one Medium impact for disabled people, which requires more investigation, although solutions to mitigate this impact largely rests with the motor industry and central Government. This may have implications on the selection of siting of EV charge points in relation to disabled parking spaces.

More positive benefits will be delivered for the young, old and disabled and maternity (unborn foetus). As more evidence is collected for the Strategy, this assessment will be revisited at Strategy final draft stage.

## **Part 2 - Full Equality Analysis /Impact Assessment**

**From the screening grid, identify the Protected Groups impacted**

**Disabled**

**Information and Data used to carry out your assessment**

Further data/evidence will be required to support the assumption that disabled could be negatively impacted by the use of electric vehicle chargers.

**Who have you involved consulted and engaged with?**

Sustainable Business and Communities team  
Kent & Medway Energy & Low Emissions Working group  
GET E&D group  
A Agyepong, corporate E&D lead

**Analysis**

Benefits have been identified for Age (both young and old), disabled, gender, race and pregnancy (unborn foetus)

**Adverse Impact,**

It is assumed that disabled (specifically physical) may be at a disadvantage when using an Electric Vehicle

**Positive Impact:**

The provision of cleaner vehicles and access to improved walking, cycling and public transport has positive advantages for the characteristics age, disability and pregnancy (unborn foetus).

**Part 3 - Action Plan**

Protected Characteristic	Issues identified	Action to be taken	Expected outcomes	Owner	Timescale	Resource implications
Disability	Potential barrier to take up of electric vehicles	Identify evidence to support or dispel assumptions	If this is a barrier this will need to be taken account of by KCC and District partners when securing funding and establishing actions to expand EV infrastructure across Kent Include in Strategy and action plan	D Kapaj	December 2018	None

**Have the actions been included in your business/ service plan?**

No the action will be taken account of when developing the Strategy and resulting action plan