

# “Local air quality and carbon reduction challenges”

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## Local air quality and carbon reduction challenges

1. Local air quality challenges
2. Linkages to between air quality and carbon targets in transport.
3. Local initiatives:  
Inform, protect, innovate and improve.
4. What needs to change to enable local improvement.

# 1. Local Air Quality Challenges

## Sussex has 11 declared Air Quality Management Areas

- Traffic emissions are the cause of all breaches of AQO's.
- Most are in urban areas but some now in villages!
- Many other locations are near AQ objective levels.
- AQ action plans need policies to drive improvements.

## Pollution Events:

- Ozone highest in the South East.
- Transboundary pollution (O3 and PM) from UK and EU.



Select a monitoring site to view:



## Sussex AQMA's

- Hastings (2004) (1)
- Brighton (2005) (1)
- Lewes (2005) (1)
- Shoreham(2005) (2)
- Chichester (2006) (3)
- Storrington (2010)(1)
- Worthing 2010(1)
- Hassocks (2011) (1)

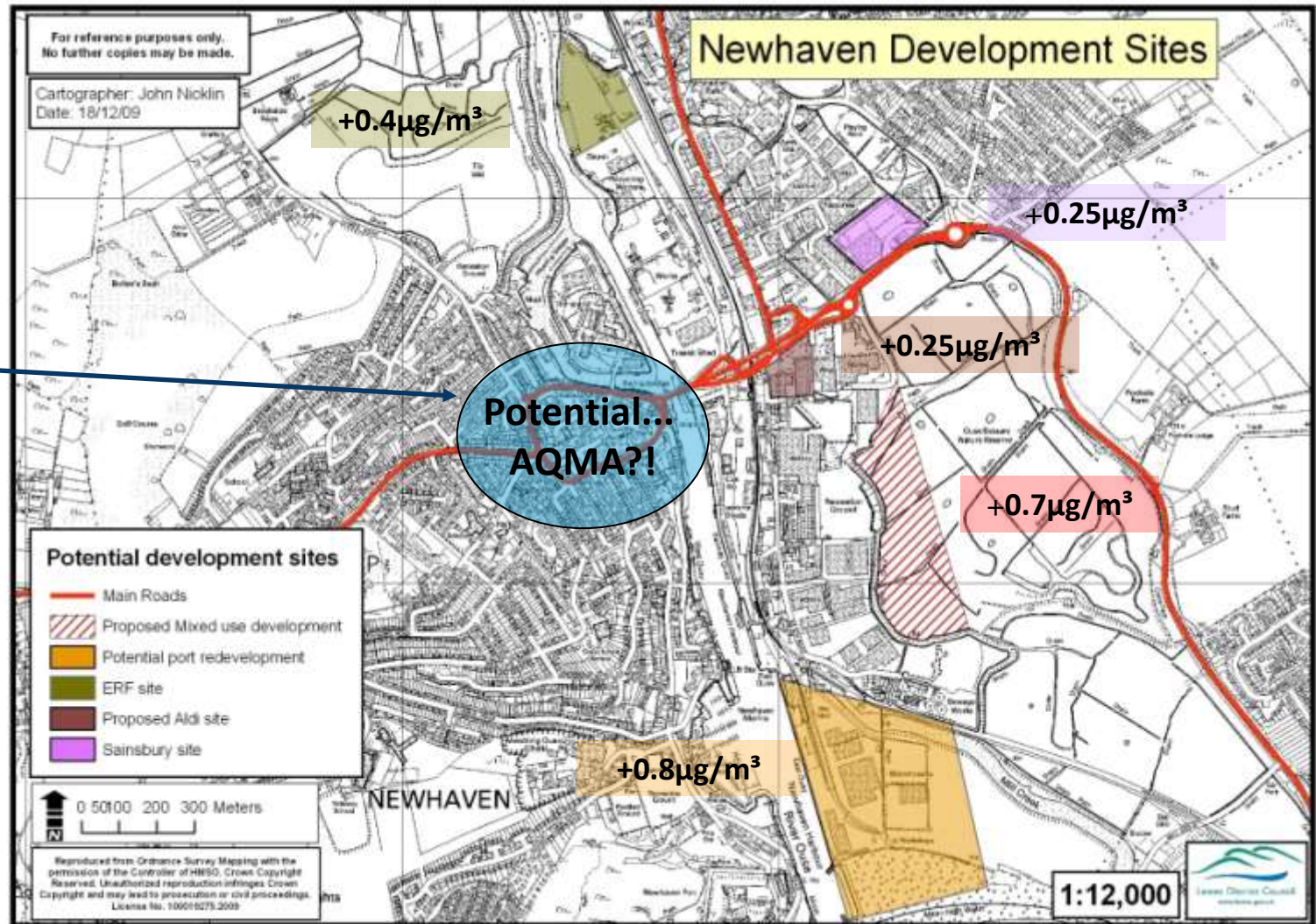
## Next:

- Cowfold & Newhaven?

# Local cumulative impacts from developments

Air Quality  
limit =  
 $40\mu\text{g}/\text{m}^3$

Conc. in area  
=  $38.5\mu\text{g}/\text{m}^3$





## 2. Linkages to between air quality and carbon targets in transport.

Reduction measures of air pollutants and carbon are in the main beneficial (win:win):

- Cleaning up emissions at tail-pipe
- Moving away from liquid fuels  
-> EV or biogas (Anaerobic Digestion)
- Change in driving mode, less congestion
- Scrapage = newer cleaner fleet
- Modal shift = reducing vehicle numbers



There are some scenarios which can dis-benefit carbon or pollutants:

- re-routing traffic away from AQMA's = increasing travel distance and can introduce new vulnerable receptors/people.
- EV 's may have zero local emissions, however not all electricity generation is zero carbon or zero pollutant.
- \*Biomass - increased delivery frequencies (+ local pollution)

### 3. Local initiatives:

#### Reducing peoples exposure to air pollution:

- airAlert was developed in Sussex to alert respiratory vulnerable people
- airAlerts by SMS, email & voice.
- > 1,000 people across regions.
- airAlert in Hertfordshire, Bedfordshire, Southampton and Sevenoaks (2011).



#### Informing people about air pollution:

- Near-real time monitoring and data on [www.sussex-air.net](http://www.sussex-air.net) and iPhone apps (2011)



## Improve local policies through partnership working.

- Sussex have through working with the (DEFRA supported) Low Emission Strategy Partnership developed LES planning guidance (draft) and associated planning briefs for integrating low emission options into new developments.
- Enabled AQ officers to negotiate LE options on planning apps in/near AQMA's and establish s106's to deliver LE or AQAP related initiatives.



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### The Low Emissions Strategy for Sussex (Feb 2011)

- Draft policy statement for consultation

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Sussex-air Low Emission Work Group

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Sussex Air Quality Partnership

working with

Sussex local and county authorities

and

Low Emission Strategies Partnership

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## Innovate with projects to encourage emissions reduction.

- Support local community car club initiatives.
- Cycle challenges (Lewes & Chichester)
- Supported and assisted on expanding a Sussex/Hampshire linked EV Network.
- West Sussex (20 EVP's) + Brighton & Hove (6-8)  
+ East Sussex (3-4)



- Established the South Coast+ partnership to assist with the EV infra structure and worked with West Sussex CC and Elektromotive Ltd to bring Charge-Your-Car (CYC) to Sussex.



## Charge Your Car Charge Points



## 4. What needs to change to enable local improvement.

Air Quality Action Plans set out tables of measures which attempt to “move toward” the attainment of air quality objectives, which can include:

- Emission reduction initiatives: car clubs, EVP Point's, green procurement
- Modal shift: cycling, Bus LEZ initiatives (Cambridge), car share
- Hard measures: changing priorities, differential parking LEZ

However key partners such as the Transport Authorities now have further reduced budgets/resource and have multiple priorities to weigh-up in selecting best value options for the LTP3.

[The Local Sustainable Transport Fund may be the best next opportunity...](#)

## The Local Sustainable Transport Fund (LSTF) [£5mill - £50mill]

The LSTF is an opportunity for LA's to partner up with their local transport authority (TA) to deliver local and strategic initiatives and provide added value by:

- Partnership and community support.
- Built on locally proven initiatives.
- Sustainable, match-funding options (private partnerships i.e. EV manufacturers, train stations)
- Incl. health, CO<sub>2</sub>, noise, air quality, environmental linkages.
- Support key government targets on greener car travel/LEV 's.
- Encourage modal shift.
- Improved congestion options.
- Viable, value for money and deliverable
- Providing local and wider strategic options.(Electric hubs – Train->EV->Train)

\*Plus LA's have the in-built skill sets to offer TA's in project delivery, carbon assessment and networks of existing partnerships.



## 4. What needs to change to enable local improvement.

To deliver improvements in local air quality and carbon reductions from transport and to place the responsibility to “deliver change” on the shoulders of local authorities, several key enabling functions need to be in place:

1. Powers to influence sources of emissions (traffic).
2. National and local planning policy to deliver low emission development (transport and buildings).
3. Funding mechanism to better deliver and sustain improvements (s106/CIL) specifically targeting carbon and air pollutant reduction measures.
4. Political support.