



# Clean Air Hospital Framework: a health-sector response to tackling air pollution

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# If we're planning for utopia, healthcare organisations play a key role

- The NHS is an anchor organisation
- As an anchor organisation the NHS can make a difference to local people by:



**Purchasing more locally and for social benefit**  
In England alone, the NHS spends £27bn every year on goods and services.


**Using buildings and spaces to support communities**  
The NHS occupies 8,253 sites across England on 6,500 hectares of land.

**Working more closely with local partners**  
The NHS can learn from others, spread good ideas and model civic responsibility.

**Widening access to quality work**  
The NHS is the UK's biggest employer, with 1.5 million staff.

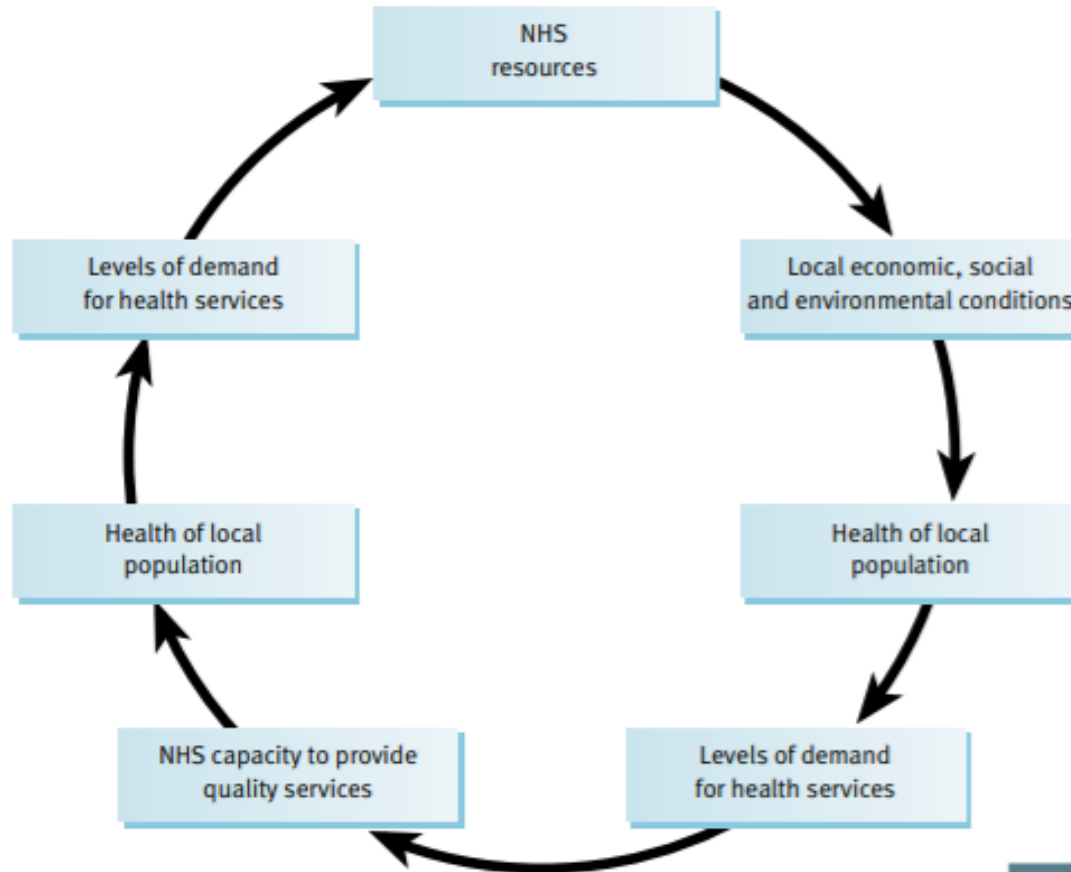
**Reducing its environmental impact**  
The NHS is responsible for 40% of the public sector's carbon footprint.

As an anchor institution, the NHS influences the health and wellbeing of communities simply by being there. But by choosing to invest in and work with others locally and responsibly, the NHS can have an even greater impact on the wider factors that make us healthy.

 The Health Foundation

References available at [www.health.org.uk/anchor-institutions](http://www.health.org.uk/anchor-institutions)  
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## SUSTAINABLE DEVELOPMENT



King's Fund, 2002



# Air pollution is a health issue



Air pollution is linked to

Dementia

Stroke

Asthma

Diabetes

Heart disease

Premature birth

Cancer

COPD

Low birth weight

High blood pressure





**Air pollution causes up to 36,000 deaths each year in the UK**

**Air pollution causes over 20,200 respiratory and cardiovascular hospital admissions a year in the UK**

**Air pollution causes over 6 million sick days a year in the UK**

**Air pollution has an estimated total social cost of £22.6 billion per year in the UK**



# Air pollution requires a health sector response





## Role Model

Show leadership through minimising the air pollution the NHS creates and influences



## Educate

Inform staff, patients and the public about the health risks and how to protect their health



## Champion

Support policy measures and work with others to improve air quality

# What is a clean air hospital?



# A clean air hospital:

**Improves air quality** outside and inside the hospital by minimising sources of air pollution under its control

**Provides advice** to help protect staff, patient and public health from air pollution and

**Champions the case** for clean air locally and nationally



## Role Model

Show leadership through minimising the air pollution the hospital creates and influences

Minimise air pollution from staff, visitor and patient travel

Reduce air pollution from procurement and deliveries

Minimise emissions from building design and construction

Reduce emissions from energy generation

Minimise air pollution levels inside the hospital



## Educate

Inform staff, patients and the public about the health risks and how to protect their health

Inform staff about air pollution risks and how to reduce pollution

Train clinicians to provide air pollution information and advice to patients

Communicate with visitors and the wider public to help them protect their health from air pollution



## Champion

Support policy measures and work with others to improve air quality

Work with local partners to improve area-wide air quality

Support national initiatives and influence others to improve national air quality





Good indoor air quality

On site energy production: Solar

Building designed to minimise pollution

Eco-friendly cleaning products

Electric Boilers

Less pollution

Off site energy production: Wind

Electric delivery vehicles

Air pollution advice to the local community

Electric vehicle charging points

Consolidated deliveries

Local transport links

Cycling and walking encouraged


Green space

Bicycle parks

Last mile delivery

# What is the Clean Air Hospital Framework?

A free resource co-designed by Great Ormond Street Hospital & Global Action Plan to enable a hospital to:

- Understand what it means to be a clean air hospital
  - Self-assess progress against the seven elements of a clean air hospital
  - Develop a clean air action plan to improve air quality
  - Assign ownership within the organisation to implement the action plan
  - Track and report progress towards becoming a clean air hospital
- 

# Example page from the Clean Air Hospital Framework



## Travel

There are currently more vehicles on the road than ever before. Road transport is the biggest source of nitrogen dioxide in the UK, which causes inflammation of the airways, exacerbates existing heart and lung conditions shortening lives, and increases susceptibility to respiratory infections and allergens, leading to rising costs and increased strain on health services. The total health cost to the UK from cars and vans is £6 billion each year.

By reducing the number of vehicles on the road, and reducing the pollutants emitted from those vehicles that are still necessary, we can improve the air quality directly around our hospitals, and in our communities.

The travel section of the framework covers travel by staff, visitors and patients. 306 points are available within this section.



	Basic	Getting There	Excellent
<b>Hospital travel planning (providing information and encouraging lower pollution travel)</b>	You provide staff, patients and visitors information that shows public transport routes in the local area. <input type="checkbox"/>	You provide staff, patients and visitors clear and accessible maps of public transport, walking and cycling routes to/from the hospital in the local area. <input type="checkbox"/>	Taxis booked by the hospital are zero tailpipe emission vehicles. <input type="checkbox"/>
	The hospital site is safe, pleasant and easy to get around for cyclists, pedestrians and people with disabilities. <input type="checkbox"/>	You have campaigns to promote active travel and public transport to visitors and staff. <input type="checkbox"/>	You work in partnership with the local authority to ensure planning and development decisions minimise air pollution. <input type="checkbox"/>
	Taxis are not allowed to leave their engines running (idling) when waiting near the hospital. <input type="checkbox"/>	You encourage and facilitate car sharing for colleagues that live close to one another. <input type="checkbox"/>	

[www.cleanairhospitals.org](http://www.cleanairhospitals.org)



**Nick Martin, Head of  
Sustainability and  
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**Great Ormond Street Hospital  
NHS Foundation Trust**



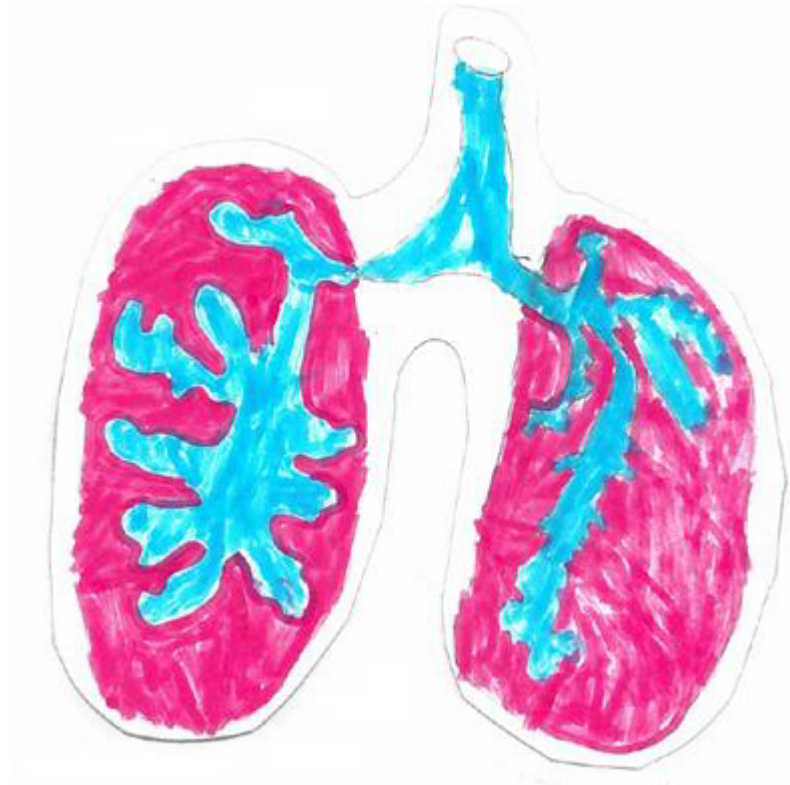


# Clean Air Hospital Framework & GOSH



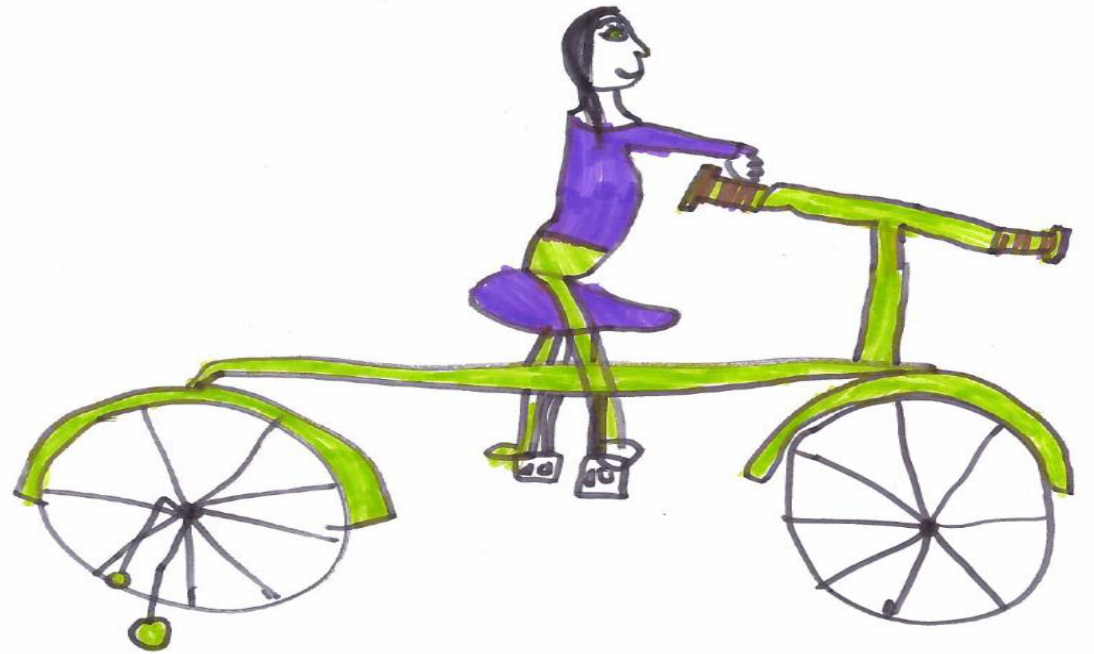
# Journey summary

- Objective
  - Health sector approach!
  - Developing & sharing practice
- Collaborative approach
  - Development of CAHF
  - Implementation
  - Dissemination and evolution
- Activity so far
  - Engagement/education
  - Measuring/ monitoring
  - Innovation & partnerships
- Targets & next steps



# Creating the Framework

- Broad consultation
  - Internally
  - Externally
- Establish realistic criteria
- Benchmark ourselves
- Create an Action Plan
- Begin delivering it





# What are we doing to get there



# Activity!

- **Education/Training**  
Play therapy/general workforce/ clinical staff engagement/ Young Person's Forum/ School/ AGM/Open days
- **Measuring & monitoring**  
Outdoor/indoor/ home
- **Outreach & innovation**  
GOSH Play Street





## My clean air superhero



**Name:**

Niquita the field elm  
tree

**Super powers:**

Sweeps up all the bad/  
dirty air.

**How my super hero protects people:**

because then people  
dont breathe in the  
bad air





**Car**



**Bus**



**Building site**



**Motor bike**



**Lorry**



**Electric car**



**Making asthma symptoms worse**



**More coughing**



**More visits to a & e**



**Damage lungs and impact breathing**



**Impact heart and lead to future heart problems**



**Avoid heavy traffic**



**Take low pollution routes and avoid main roads**



**Be physically active**

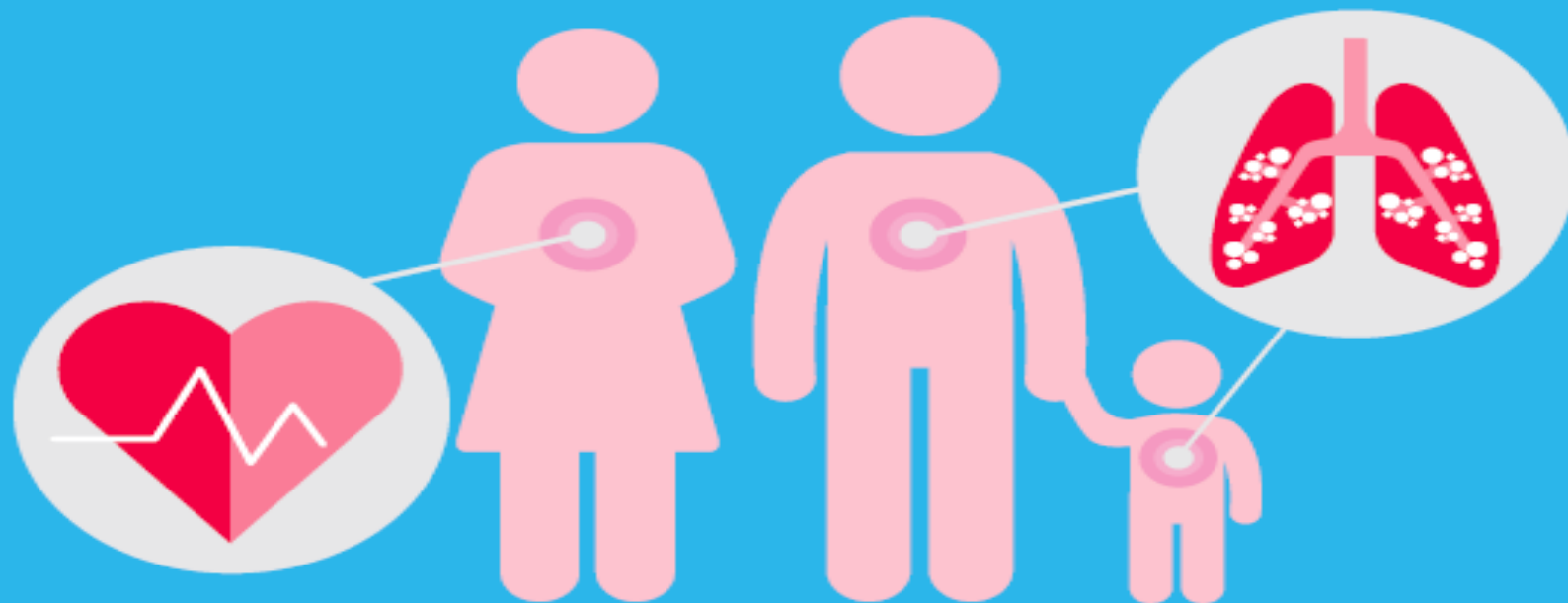


**Walk instead of driving**



**Drive instead of walking**

# Air pollution can affect your heart and lungs



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# Walk, cycle or scoot & reduce your exposure to air pollution



**NHS**

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Hospital for Children  
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# Take quieter routes to breathe cleaner air



**NHS**

Great Ormond Street  
Hospital for Children  
NHS Foundation Trust

# Breathe cleaner air: keep your home well ventilated



**NHS**

Great Ormond Street  
Hospital for Children  
NHS Foundation Trust

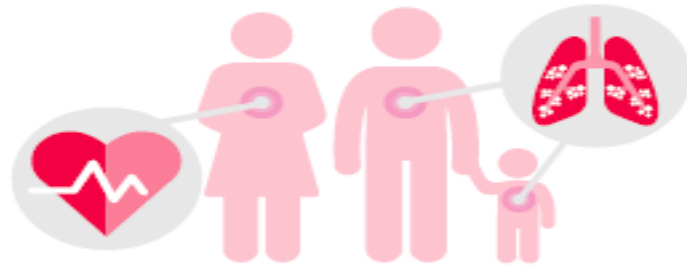
# Clinical engagement

## Clean air why it matters

"Children's developing organs and immune systems - and smaller bodies and airways - make them especially vulnerable to dirty air"

*Dr Margaret Chan,*

*Director-General of the World Health Organisation*



Air pollution is damaging to the health of all of us, but particularly young children and those with heart and lung problems including:

- Exacerbation of asthma
- Increased risk of lung cancer
- Impacted lung function development
- Increased risk of bacterial pneumonia
- Impeded cognitive performance
- Higher risk of diabetes
- Increased risk of skin diseases

## Clean air what we can do

There are straightforward things which every one of us can do immediately to protect ourselves, our families and those around us.



Keep your home well ventilated, especially when cooking and cleaning. Try to choose fragrance-free cleaning products and avoid aerosols.

Walk, cycle, bus, train... whenever possible leave the car at home and take to the streets. This reduces your exposure and the amount of pollution you create.



Discover the side streets. Using quieter streets when you're on a bike or on foot can lower your exposure to air pollution by 20%.

# Fleet driver training

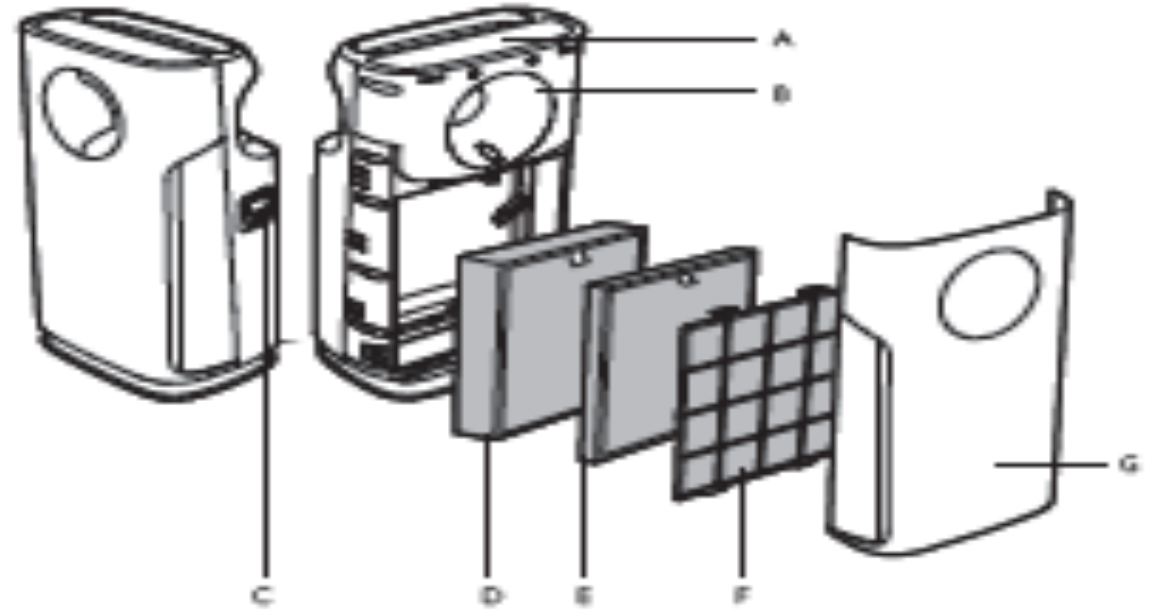




# Idling squads



# Indoor Air Quality





# GOSH Play Street

## What we did

- Sustainability/Play/Security partnership
- Closed GOS to traffic
- Created a play ground
- Invited GOSH & local children
- Local community groups/air quality partners



# What were the challenges

- Not BOU
- Building clinical/ leadership confidence
- Hospital logistics
- Security





# Successes & next steps

- Joy, wonder & smiling
- Reduction in pollution levels
- New relationships
- Vision for a future hospital entrance
- Ceilidh & hopscotch miracles
- New attitudes



# **GOSH Clean Air Play Street**



Great Ormond St, London

# CAHF Progress & targets

- Currently at 26% complete
- 11% increase since launched 6 months ago
- 117 point increase

## Trust goal

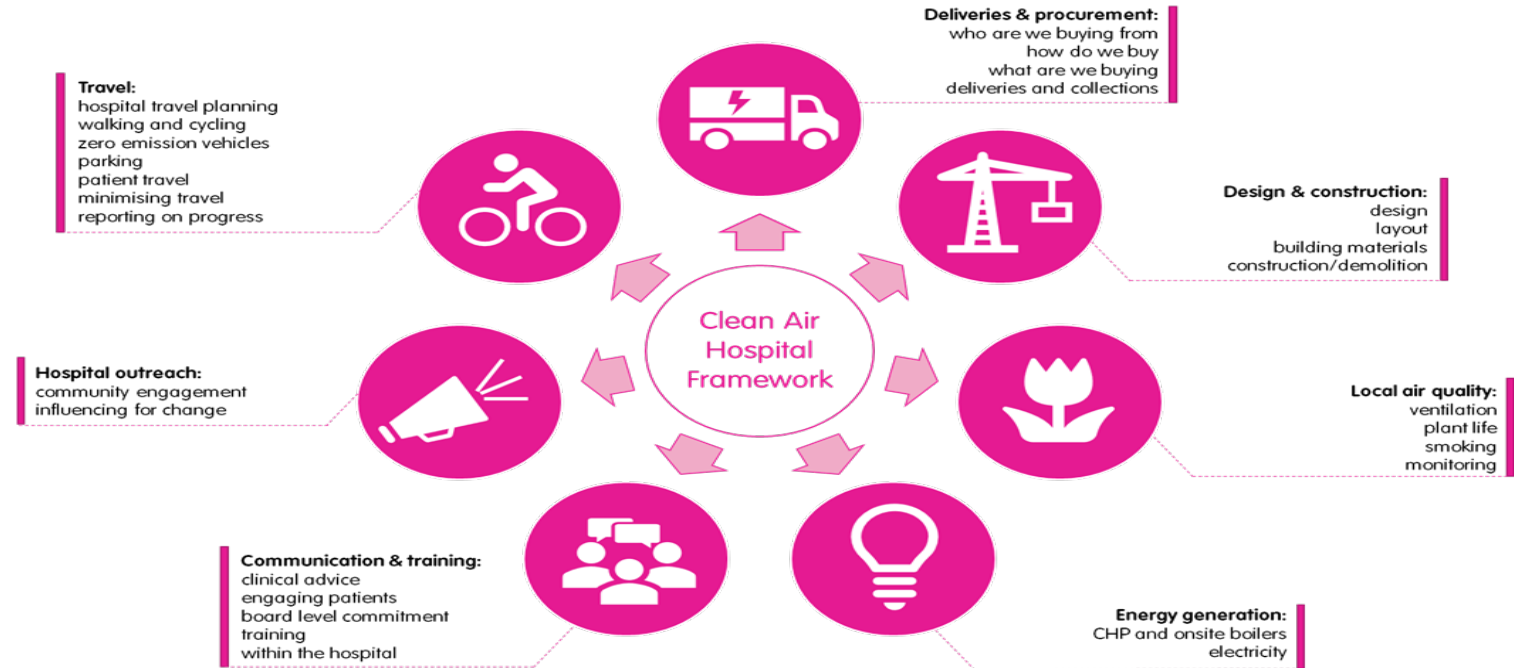
- 'Good' rated by 2021 (50%+)
- 'Excellent' rated by 2023 (70%+)
  - CCC, charging infrastructure, contracts, partnerships
- Fully disseminated across NHS by 2023



# Get involved

A blue print for action!

- Download framework & presentation here [www.cleanairhospitals.org](http://www.cleanairhospitals.org)
- Call us to discuss (07710 182553)
- 400 downloads so far
- Educational resources available





# Clean Air Hospital Framework

To start your hospital on the road to clean air visit

[www.cleanairhospitals.org](http://www.cleanairhospitals.org)

[@cleanairdayUK](https://twitter.com/cleanairdayUK)



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