

Healthy Air Cymru and the journey to a Clean Air Act Legal context

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What are we concerned about?

- Particulate matter (PM_{10} and $PM_{2.5}$)
- Nitrogen dioxide (NO_2)
- Sulphur dioxide (SO_2)
- Ozone (O_3)



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Air in 44 UK cities and towns too dangerous to breathe, UN pollution report finds

Millions of people inhaling fine particles linked to heart disease and premature death

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Asthma patients LIFE-THREATENING attacks could be cut after Hammond's £220m Clean Air Fund

ASTHMA symptoms in patients may be reduced after Chancellor Philip Hammond revealed plans in today's

DIRTY DIESEL Toxic air kills 40,000 people in the UK every year, study reveals

Levels of dangerous airborne particles linked to heart disease

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'Urgent' action needed by Welsh Government to tackle air pollution, say charities

pollution and plastic waste, warn environmentalists

UK government '10 years late' on air quality targets

UK government sued for third time over deadly air pollution

Air pollution & Mortality

The annual mortality burden in the UK due to **outside air pollution** is ~ **40,000 deaths**



Every breath we take:
the lifelong impact of air pollution (February 2016)



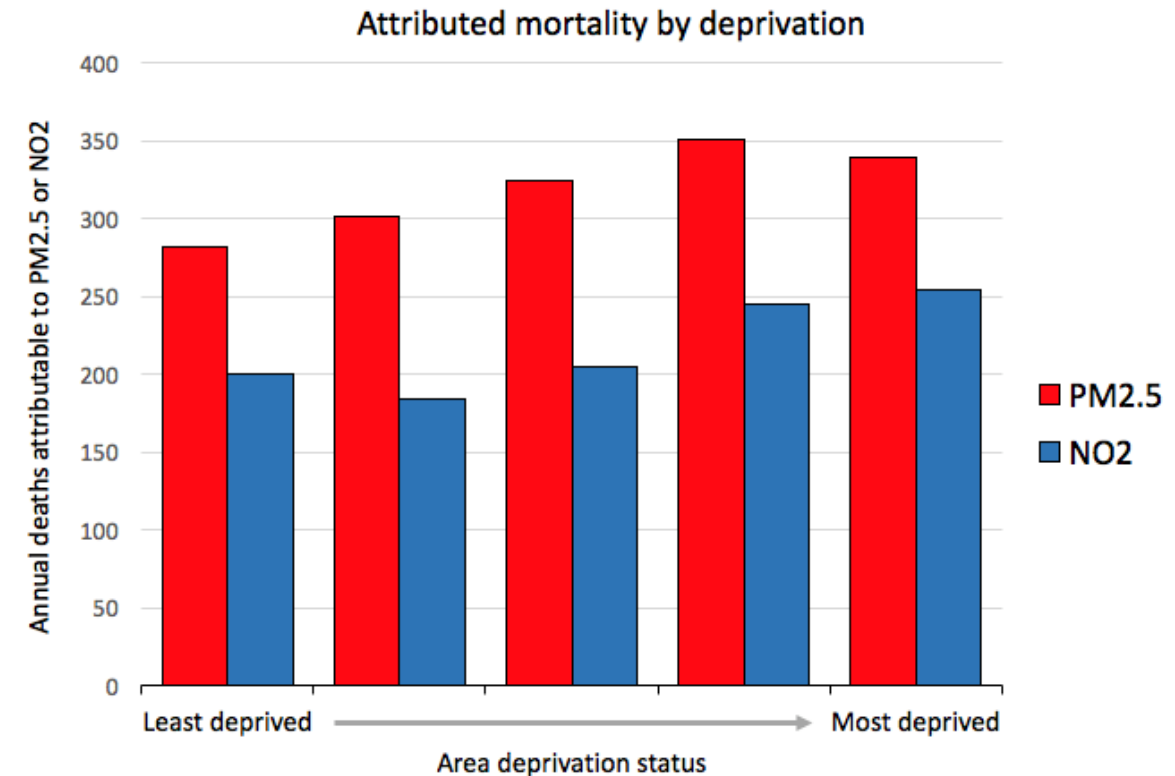
29,000 deaths due to particulate exposure



23,500 deaths from NO₂

Air pollution & mortality in Wales

PM _{2.5}	Attributable deaths	Years of life lost
Urban areas	1,125	13,494
Rural areas	477	5,725
NO ₂		
Urban areas	876	10,516
Rural areas	224	2,693
Total	2,702	32,428



What is the health impact of air pollution?



- General population
- Pre-existing lung conditions
- Age
- Pregnancy
- Children

6.2.3 Global burden of disease

With respect to air pollution, the Global Burden of Disease (GBD) 2010 study¹³ focused on quantification of mortality impacts from exposure to PM_{2.5} and O₃. Overall, results indicate that a total of 7 million deaths in 2010 across the world were attributable to indoor and outdoor air pollution, making air pollution one of the most important risk factors globally. Results for air pollutant impacts for the UK, expressed as both disability-adjusted life-years (DALYs) and deaths (GBD did not include morbidity), are shown in Table 2.

Table 2. GBD results for outdoor air pollution for the UK¹³

	DALYs	Deaths	%
Ambient PM pollution			
Cerebrovascular disease	73,061	5,448	20 %
COPD	27,558	1,681	8 %
Ischaemic heart disease	220,643	13,907	61 %
Lower respiratory infections	815	9	0 %
Trachea, bronchus and lung cancers	38,623	2,328	11 %
Total (all causes)	360,700	23,373	100 %
Ozone			
Total (all COPD)	8,865	772	100 %

Table 4. Estimated impacts in 2010 in the European Union and the UK¹⁵

O ₃ effects	Units	EU	UK
Mortality	Premature deaths	23,507	1,371
Respiratory hospital admissions	Cases	19,117	1,368
Cardiovascular hospital admissions	Cases	86,279	2,678
Minor restricted activity days	Days	108,845,140	6,662,683
PM_{2.5} effects			
Mortality	Life-years lost	4,030,653*	327,769*
Mortality	Premature deaths	379,420*	30,018*
Infant mortality	Premature deaths	777	70
Chronic bronchitis	Cases	316,685	25,582
Bronchitis in children aged 6–12	Cases	1,068,990	102,386
Respiratory hospital admissions	Cases	142,243	11,652
Cardiac hospital admissions	Cases	108,989	4,523
Restricted activity days	Days	436,351,761	40,809,466
Asthma symptom days in children	Days	11,290,673	1,171,559
Lost working days	Days	121,378,612	6,097,215

Air pollution & Health Costs

Cumulative incidence cases attributable to air pollutants in England between 2017 & 2035

PM_{2.5}

Year	CHD	Stroke	Asthma	Lung cancer	COPD	Diabetes	Low birthweight	Total
2017	16,136	4,451	5,564	1,669	11,684	14,467	9,459	63,430
2017-2035	348,878	106,331	133,356	44,290	246,916	273,767	173,886	1,327,424

NO₂

Year	Asthma	Diabetes	Lung cancer	Low birthweight	Dementia	Total
2017	18,361	29,489	2226	5564	5008	60,648
2017-2035	335,491	573,363	42,002	102,545	86,617	1,140,018

Air pollution – Economic Costs



Total NHS & social care cost due to PM_{2.5} and NO₂

England	PM _{2.5}	NO ₂
Total cost in 2017	£76.1 million	£81.06 million
Total cost 2017 - 2035	£9.4 billion	£9.2 billion

What do we need to do – Westminster/UK



- Vehicle Excise Duty & fuel duty income spent on transport options that improve air quality



- Real world emissions testing for all vehicles



- Ban on all new diesel (and petrol) and support for transition

What do we need to do - Wales



- A cross-government clean air strategy including:
 - Independent monitoring & assessment network
 - National Advisory Board
 - Clean Air Zones including charging options in main cities
 - Annual Clean Air Plan for every local authority (in conjunction with PSBs) with control measures
 - Strategic Development Plans and regional transport authorities must consider air quality



- Clean Air Fund to finance local government action



- Increased measurement and reporting of air pollution near schools



- Improve pollution monitoring, awareness campaigns and public health alerts

What do we need to do - Wales



A Clean Air Act for Wales including:

- Enshrine in law WHO air quality guidelines;
- Mandate Welsh Government to produce a statutory air quality strategy every 5 years;
- Provide a statutory duty on local authorities to appropriately monitor and assess air pollution, and take action against it;
- Introduce a 'right to breathe' whereby local authorities are obliged to inform vulnerable groups when certain levels are breached.

What powers does Wales have?

- Old Government of Wales Act 2006:
- **6. Environmental protection**, including pollution, nuisances and hazardous substances. Collection, management and disposal of waste. Land drainage and land improvement. Countryside and open spaces (including the designation and regulation of national parks and areas of outstanding natural beauty). Nature conservation and sites of special scientific interest. Protection of natural habitats, coast and marine environment (including seabed). Biodiversity. Genetically modified organisms. Smallholdings and allotments. Common land. Town and village greens. Burial and cremation.
- New schedule 7a and 7b don't list air pollution as a 'Reserved Matter'

Existing Welsh precedent - Environment (Wales) 2016



- Placing a duty on Welsh Ministers to ensure that 'net Welsh emissions' of greenhouse gases are at least 80% below the 1990-1995 baseline by 2050.
- Requiring Welsh Ministers to specify by regulation one or more interim targets for emissions reductions.
- Requiring Welsh Ministers to publish carbon budgets for five year periods that should ensure the delivery of emissions targets. The first budgetary period will be 2016-2020.
- Setting out provisions for the definition of 'net Welsh emissions', establishing carbon units, the definition of greenhouse gases and the calculation of gasses from international aviation and shipping.

What is happening at a EU-level?

- The 2008 Ambient Air Quality Directive (2008/50/EC) sets legally binding limits and target values for concentrations of major air pollutants. It merges and replaces nearly all the previous EU air quality legislation and incorporates the 4th daughter directive.
- It sets limit values for lead (Pb), nitrogen dioxide (NO₂), particulate matter (PM₁₀ and PM_{2.5}), sulphur dioxide (SO₂), benzene, carbon monoxide (CO), certain toxic heavy metals (arsenic, cadmium, nickel and benzo(a)pyrene) and polycyclic aromatic hydrocarbons (PaH) and ozone (O₃). There is a target value and a long-term objective for ozone is intended to provide protection for vegetation.

Reserved or devolved?

- Air pollution falls within the 82 policy areas where non-legislative common frameworks *may* be required rather than areas they believe are Reserved
- **Environmental quality - air quality** - Policies and regulations that aim to reduce harmful emissions and concentrations of air pollutants that can damage human health and the environment, including in relation to national emission ceilings, ambient air quality, industrial emissions and relevant product standards. This includes regulations that implement international commitments under the UNECE Convention on Long-range Transboundary Air Pollution and Kiev Protocol to the UNECE Aarhus Convention.

Secondary legislation

- Air Quality (Scotland) Amendment Regulations 2016 – powers from s87 of the Environment Act 1995
- In April 2016, the Scottish Government became the first country in Europe to adopt the WHO recommended guideline value for PM_{2.5} of 10 µg/m³ annual mean
- Welsh Government could use this section of the Environment Act 1995 to bring forward our own regulations

Cross-Party Group for a Clean Air Act



Opposition debates

Clean Air Act debate



BLF Cymru Wales @blfwales · Sep 18

Fantastic start to the Clean Air debate from @AngelaBurnsAM. We look forward to hearing a range of views from across the @AssemblyWales today & hope that this takes us one step closer to delivering a new #CleanAir bill, sooner rather than later. #CleanAirAct #AirPollution #ToxicAir



BLF Cymru Wales @blfwales · Sep 18

A very broad and globally aware account from @DavidMeldingAM. It is indeed great to see the cross-party support for tackling #AirPollution. It's an incredibly important issue that goes far beyond party politics, with a focus on delivering the right to breathe #CleanAir.



Clean Air Act debate



BLF Cymru Wales @blfwales · Sep 18

Some great points from

[@JennyRathbone](#)

regarding the need for urgent action and the important role 'Behaviour change' plays in delivering [#CleanAir](#) for the people of [#Wales](#). Thank you for your continued support for our [#AirPollution](#) work in Cardiff and beyond.



BLF Cymru Wales @blfwales · Sep 18

Great to hear an update from [@wgmin_rural](#) on the progress being made with the [#CleanAir](#) Act. We're glad the minster has reinforced the message that [#AirPollution](#) is the biggest environmental public health risk & feel reassured that this will be met with bold, urgent action.



Clean Air Act debate



BLF Cymru Wales @blfwales · Sep 18

Fantastic to see @LlyrGruffydd hit the nail on the head in the #CleanAir debate. We would not drink dirty water, so why do we allow ourselves, our children, our family and friends to breathe dirty air. #AirPollution #CleanAirAct #SomethingCardifferent



BLF Cymru Wales @blfwales · Sep 18

An important point made beautifully by @MohammadAsghar. This isn't just about #TheAirWeBreathe but the impact the actions we take today will have for #FutureGenerations. We must lay the foundations of a #CleanAir legacy to protect our health & the well-being of future generations





Clean Air Act debate

To propose that the National Assembly of Wales:

1. Notes that Wales has some of the worst air quality in the UK and that some areas have breached EU regulations for several years, culminating in the Welsh Government being taken to court for its lack of action.
2. Regrets that around 2,000 people die early each year (6 per cent of all deaths in Wales) as a result of poor air quality.
3. Further notes that air pollution exacerbates existing lung conditions and is a cause of asthma and lung cancer, and that long-term impacts of poor air quality are not yet fully understood.
4. Calls on this Assembly to pass and enact a clean air bill in this Assembly term before the next Assembly elections.
5. Believes that the act should:
 - a) enshrine in law World Health Organisation air quality guidelines;
 - b) mandate the Welsh Government to produce a statutory air quality strategy every 5 years;
 - c) provide a statutory duty on local authorities to appropriately monitor and assess air pollution, and take action against it;
 - d) introduce a 'right to breathe' whereby local authorities are obliged to inform vulnerable groups when certain levels breach recommended guidance.

Clean Air Act debate

To propose that the National Assembly for Wales:

- Notes that unacceptable levels of air pollution persist in some areas of Wales, the UK and Europe.
- Regrets that some estimates suggest long term exposure to poor air quality is a contributory factor in the death of as many as 36,000 people in the UK, and as many as 1,400 people in Wales.
- Further notes that short term exposure to air pollution can exacerbate respiratory disease, that long term exposure increases morbidity and mortality risk from lung cancer and other conditions, and that we may expect other health impacts of poor air quality to be identified as the scientific understanding evolves.
- Welcomes positive action by Welsh Government including the introduction of permanent 50mph speed limits, the delivery of the Clean Air Day campaign and the development of a Clean Air Plan for Wales.
- Calls on the UK and Welsh governments to use all available legislative and non-legislative actions to improve air quality.

Morgan Academy offer of help with a Clean Air Bill

What will the Morgan Academy do?

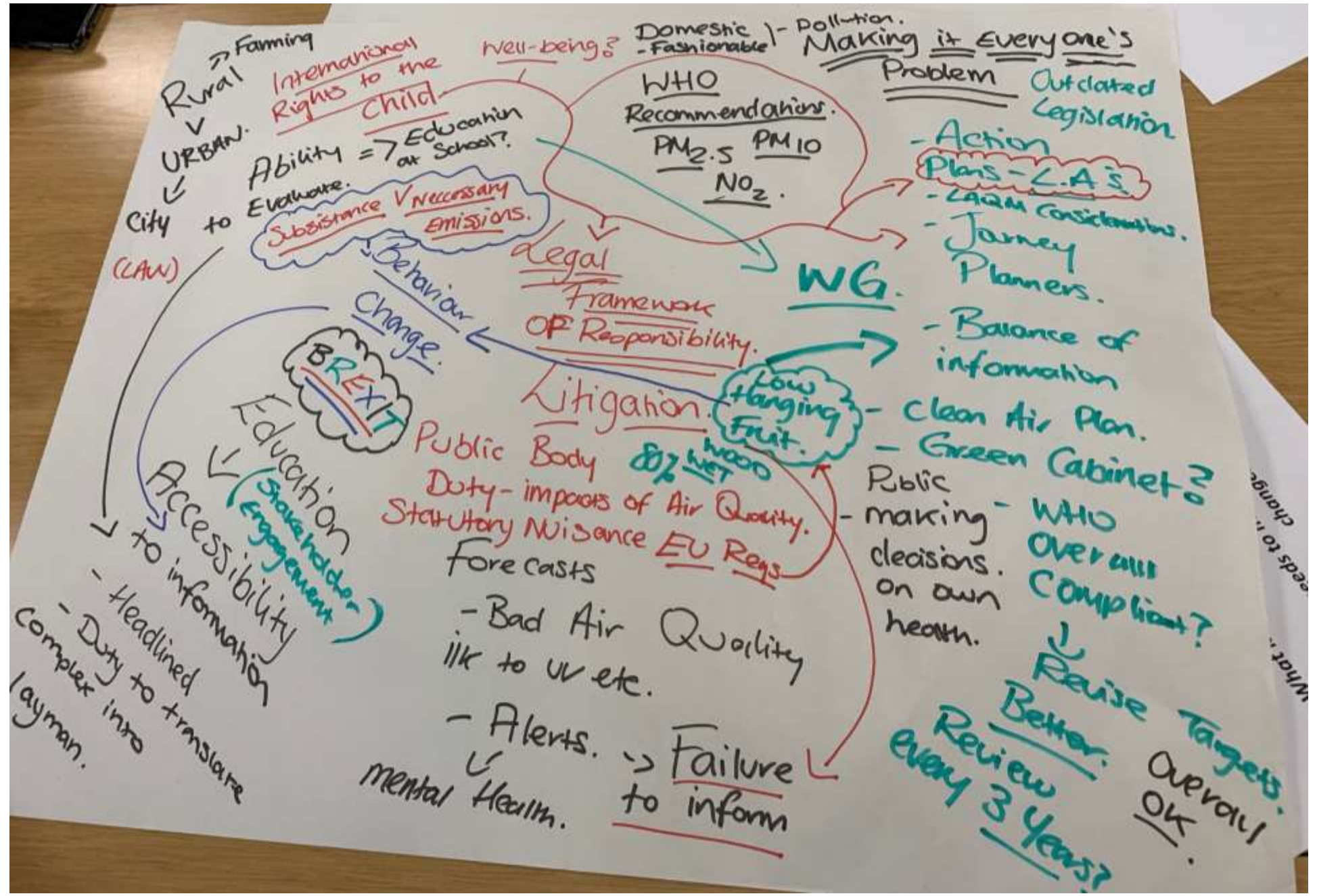
- The aim is to establish a stakeholder group external to government, able to **bring to bear on the forthcoming policy process, independent voices from research, civil society and communities.**
- The first meeting focussed on summarising the threats to **public health, challenges in data collection, deficiencies in the current legal framework and crucially, the positive opportunity to influence a new legislative policy** in Wales.

Group Questions:

Do we need a Clean Air Act for Wales?

What key changes does it need to make?

What needs to happen to make those changes?



What next?

- Green paper by the end of the year?
- White paper/Draft Bill before the election
- Morgan Academy offer

Any questions?