

National Clean Air Policy

ESTG Annual Conference 2018

Climate Change and the Environment: A New Reality

25th April 2017

Micheal Young
Environment Advisory Unit
DCCAE

Presentation Outline

National policy context

Changed perspective on air pollution & health

Developing a Clean Air Strategy

Conclusions



National Policy Context (1).

 Little historic heavy 'smokestack' industry – 'new' economy based on cleaner industries

- Modern vehicle fleet NO₂ concerns in urban areas
- Upwind of Europe reduces transboundary pollution

- Problems with city smogs PM from solid fuels
 - 'Smoky' coal ban effective intervention where applied

National Policy Context (2).

- No EPA measured exceedances of EU limits
 - General narrative ...air quality in Ireland is good compared to other EU countries... was perceived as 'solved problem'
- However, perspectives are changing, informed by...
 - Better understanding of health impacts media coverage
 - Quantitative estimates of health impacts (EEA)
 - Not just local issue but regional and global issue
 - Linked to climate change both policy/science levels
 - Reported exceedance of WHO health based guidelines
 - Recognition that more monitoring & modelling needed



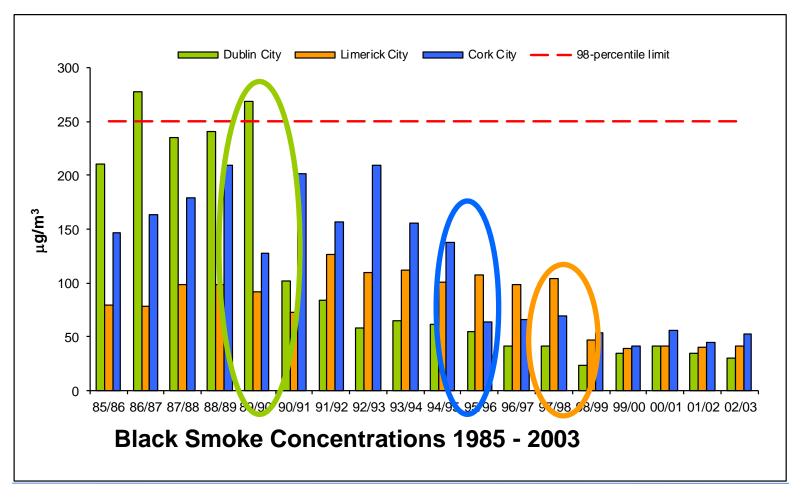
Smoky Coal Ban in Dublin

- Severe smogs in Dublin 1980s
 - Breach (then) EEC smoke limits
- Ban marketing, Dublin 1990
 - ~350 fewer deaths per year (Lancet 2002)
- Now applied in 27 Low smoke zones (pop. >15,000)
- Minister announced the nationwide ban
 - Regulations signed shortly.





Effect of 'Smoky' Coal Ban.





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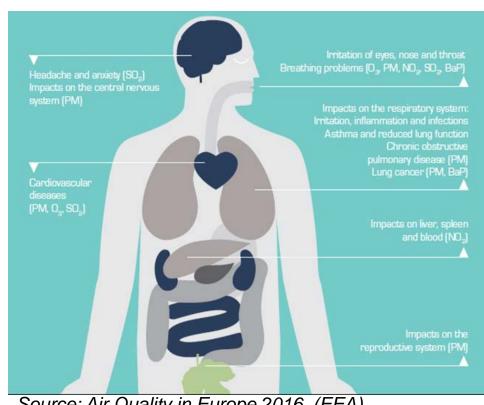
Developing a Clean Air Strategy

Timeline for developing the Clean Air Strategy



Health Effects of Air Pollution

- Respiratory disease
- Cardiovascular disease
 - Heart attack and stroke
- Recent findings...
 - Low birth weights
 - Brain function /cognition in children
- WHO classify air pollution
 - Carcinogenic to humans
 - Diesel exhaust carcinogenic
 - Health effects below EU limits

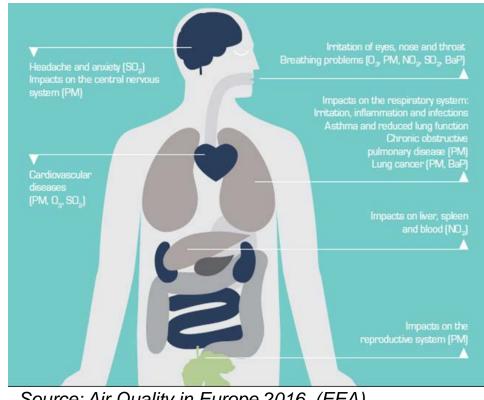






Health Impacts of Air Pollution

- Premature mortality (2013)
 - ~500,000 in EU
 - 1,600 in Ireland
 - ~1,500 Particulate matter
 - ~100 NO₂ and Ozone
- Ill health
 - Reduced productivity
 - Increased medical intervention
 - Hospital admissions



Source: Air Quality in Europe 2016 (EEA)



Associated Economic Costs

EU

- €15bn from lost workdays,
- €4bn healthcare costs,
- €3bn crop yield loss and
- €1bn damage to buildings
- Environment damage
 e.g. forests, lakes etc.

Ireland

- ~1.3% GDP in Ireland
- €2 bn per year
- 382,000 workdays per year



Source: EU Clean Air Package Impact Assessment

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Summary/Conclusions



Clean Air Strategy - Consultation



Cleaning Our Air

Public Consultation to inform the development of a National Clean Air Strategy



- Clean air vision
- Sectoral issues
 - Residential
 - Transport
 - Agriculture
 - Energy
 - Industry
- Air quality infrastructure
 - monitoring, modelling, research
- Communication and Awareness



Align with national strategies/policies



A Clean Air vision for Ireland (1/2)

Clean air is vital to good public health

Health effects even at low levels of air pollution

- Align clean air and climate policy
 - Local, regional, transboundary and global impacts



A Clean Air vision for Ireland (2/2)

- Achieve EU and international targets for 2020 & 2030
 - EU National Emission Ceilings Directive 2016/2284

- Transition from solid fuels for home heating
 - 5% of national energy demand => ~50% of PM_{2.5} pollution
- Move from EU levels to WHO guideline values?
 - EU 7th Environment Action Programme



Residential Sector

- Extend 'smoky' coal ban nationwide \(\bar{\gamma} \)
 - 12 month transition Autumn 2018 (last audit)
 - Ban on marketing Autumn 2019
- Local authority enforcement is key
 - Cover all Local Authorities
 - Updating ESTG training programme
 - Consider merits of regional approach (WERLA model)
 - Multi agency enforcement e.g. Revenue, Garda etc.
 - EPA review NIECE to include Climate/Air theme



0.7% Sulphur Coa

Residential Sector

- How to address emissions from other solid fuels?
 - Role for fiscal measures?
 - Emission standards for stoves (EU Ecodesign)?
 - Fuel quality standards e.g. WFQA for wood?
 - Links to national energy efficiency programmes



Agriculture Sector



- How to reduce ammonia expansion?
 - Low emission slurry spreading
 - Slurry covers/lagoons
- Odour nuisance
- Agricultural burning









Country air...





Transport Sector

- Major source of NO₂ emissions
- Address vehicle/road/fuel taxation and AQ issues?
 - Identified by Taxation Strategy Group
- Pilot a retro-fit programme for older buses
- Diesel Particulate Filter (DPF) removal?
 - Services advertised online NCT pilot







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Conclusions

Significant health impacts from air pollution

Requires a whole of government approach

- Synergies with climate policy
 - though tensions too e.g. biomass, diesel vehicles

Challenges with 2020/2030 targets - ammonia



Conclusions

- Residential solid fuels key source air pollution
 - ~5% of energy demand => ~50% of PM_{2.5} pollution
- Nationwide coal ban
 - Local authority enforcement is key
 - Covers all local authorities
 - Considering a regional approach
 - Multi agency enforcement e.g. Revenue, Garda etc.





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Thank you for your attention.

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