



**Roinn Cumarsáide, Gníomhaithe  
ar son na hAeráide & Comhshaoil**

Department of Communications,  
Climate Action & Environment

# **Air Pollution and Residential Solid Fuel Policy in Ireland**

**Working Group on  
Strategies and  
Review 56  
22 - 25<sup>th</sup> May 2018**



# Ireland...the basic facts



- Population 4.7m
- Area 70,273 km
- Capital Dublin
- Electricity
  - 70 % fossil fuel,
  - 23 % wind
- Home heat - solid fuel
  - <5% energy demand
  - ~50% of PM<sub>2.5</sub>



# National Policy Context.

- No *measured* exceedances of EU clean air limits
  - General narrative ...*air quality is good compared to other countries...* policy perspective: '**solved problem**'
- However, perspectives are changing, informed by...
  - Better understanding of health impacts - media coverage
    - **Quantitative estimates** of health impacts (WHO/EEA)
    - Not just local issue but **regional and global** issue
    - **Linked to climate change** both policy/science levels
  - Reported **exceedance WHO PM** health based guidelines
  - Program to **upscale** monitoring & modelling



# Impacts of Air Pollution in Ireland

- **Health Impacts**

- Premature mortality (2013)

- **1,600** in Ireland
  - ~1,500 particulate matter
  - ~100 NO<sub>2</sub> and Ozone

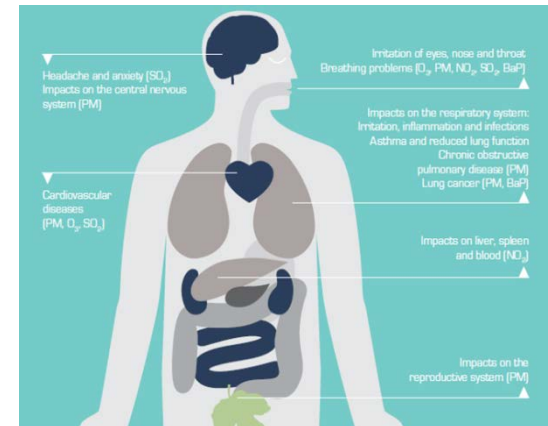
- (~500,000 in EU)

- Ill health

- Reduced productivity
- Increased medical intervention
- Hospital admissions

- **Economic impacts**

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



Source: Air Quality in Europe 2016 (EEA), EU Clean Air Package Impact Assessment



# Clean Air Strategy - Consultation



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## Cleaning Our Air

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



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

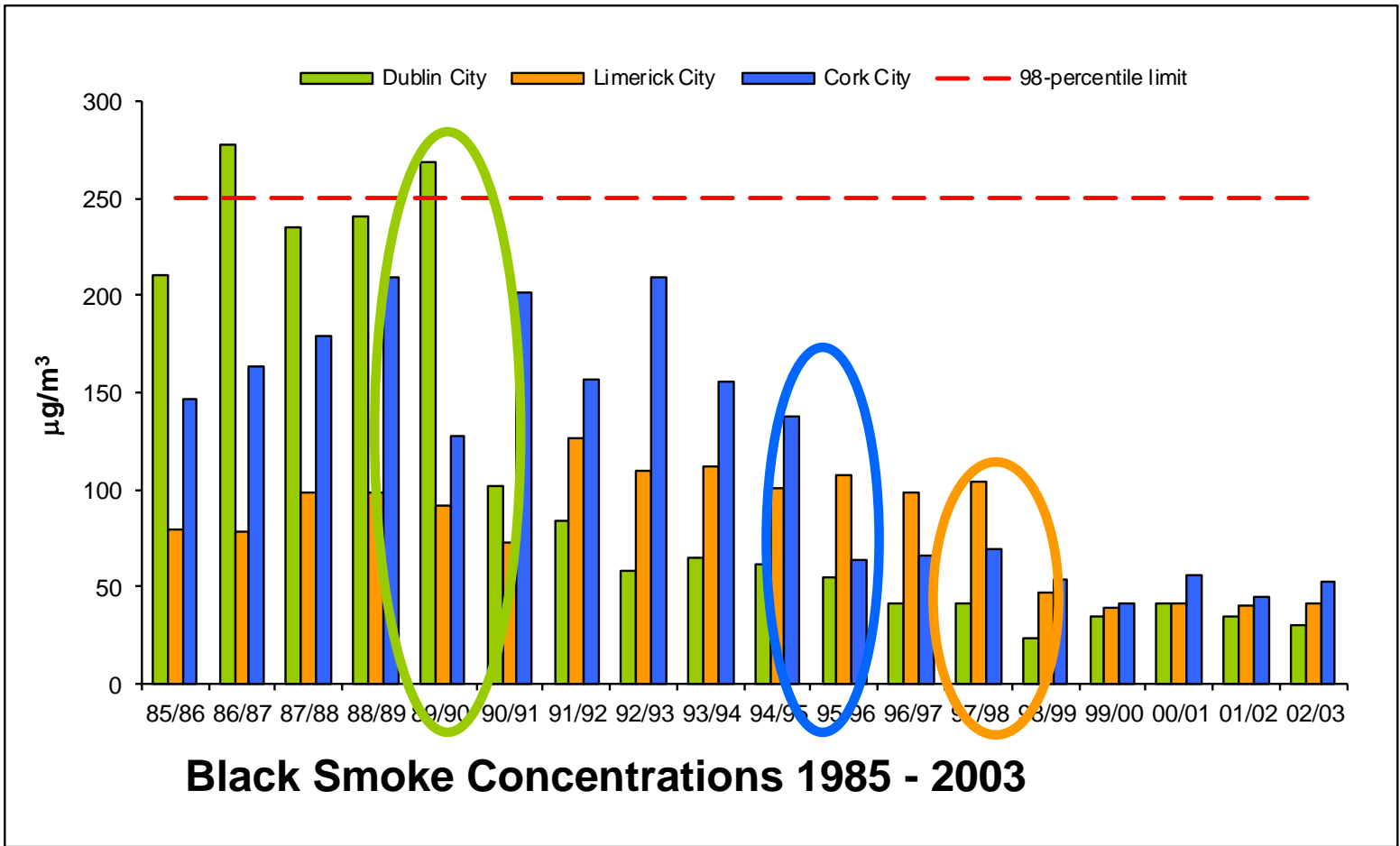


# Smoky Coal Ban in Dublin

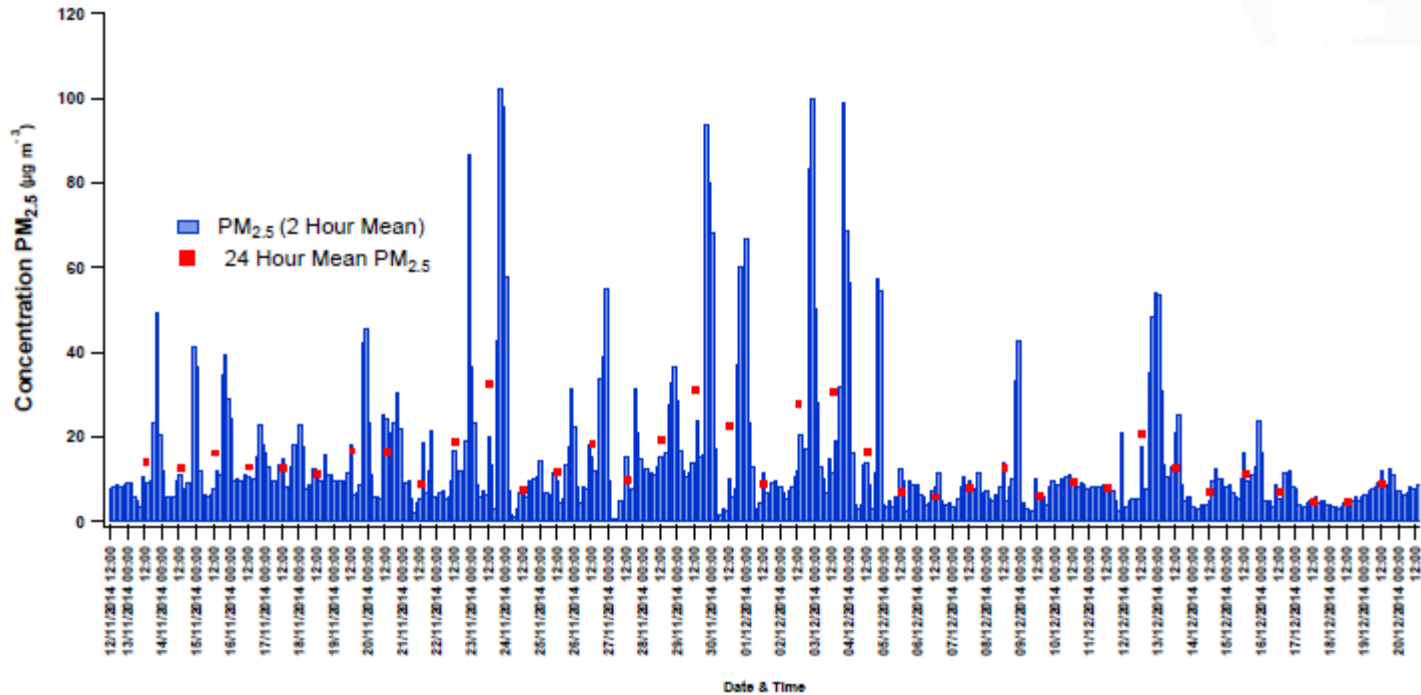
- Severe smogs in Dublin 1980s
  - Breach (then) EEC black smoke limits
- Ban marketing, Dublin 1990
  - Promoted shift to cleaner fuels
  - Low cost to exchequer
  - Fuel poverty - social welfare payments
  - ~350 fewer deaths/year (Lancet 2002)
  - Extended **Low Smoke Zones** to major cities and towns



# Effect of 'Smoky' Coal Ban.



# PM<sub>2.5</sub> outside Low Smoke Zones



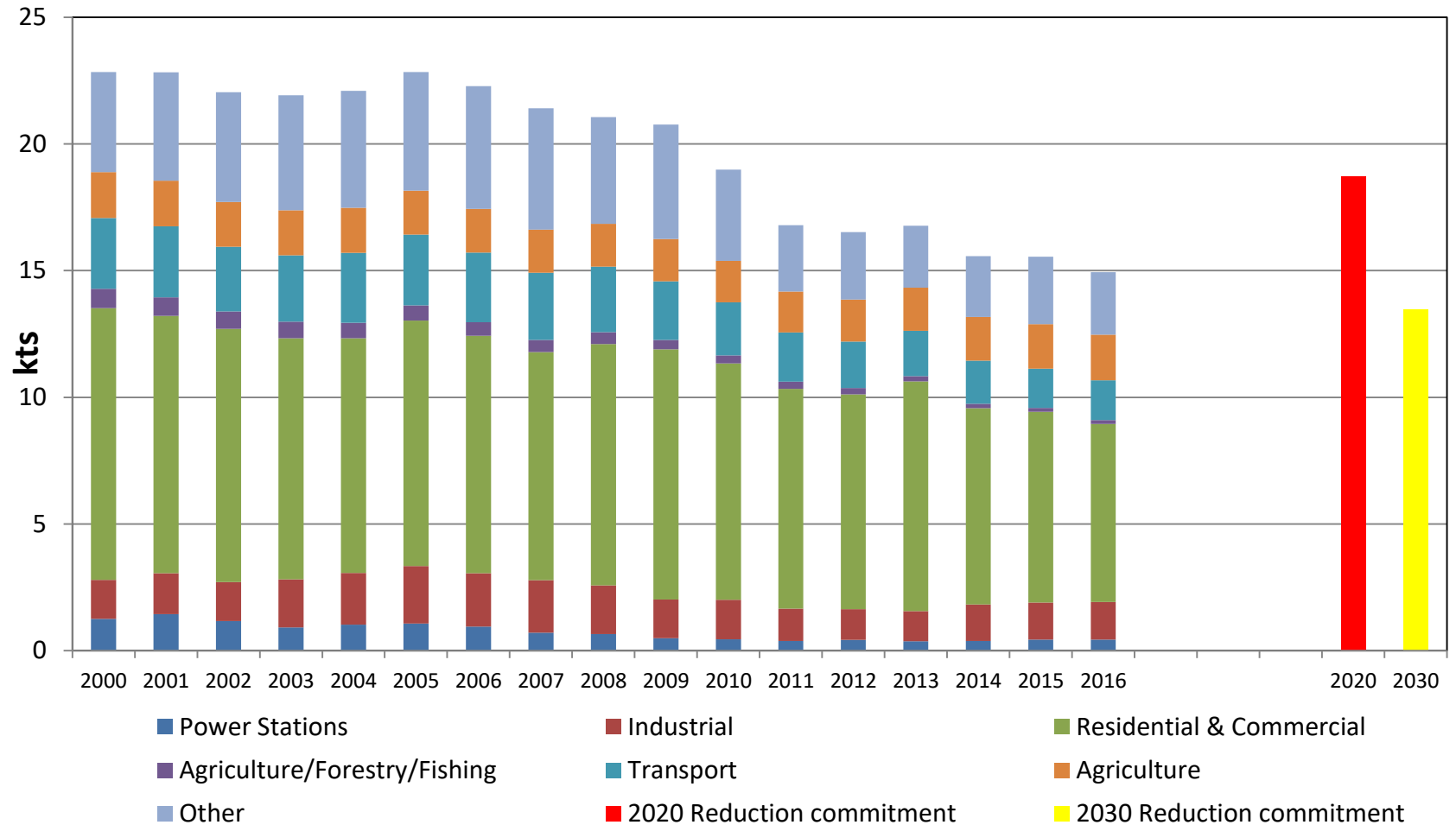
- PM<sub>2.5</sub> up to 10 times higher during evening hours

(Source: EPA SAPHIRE Project (UCC))

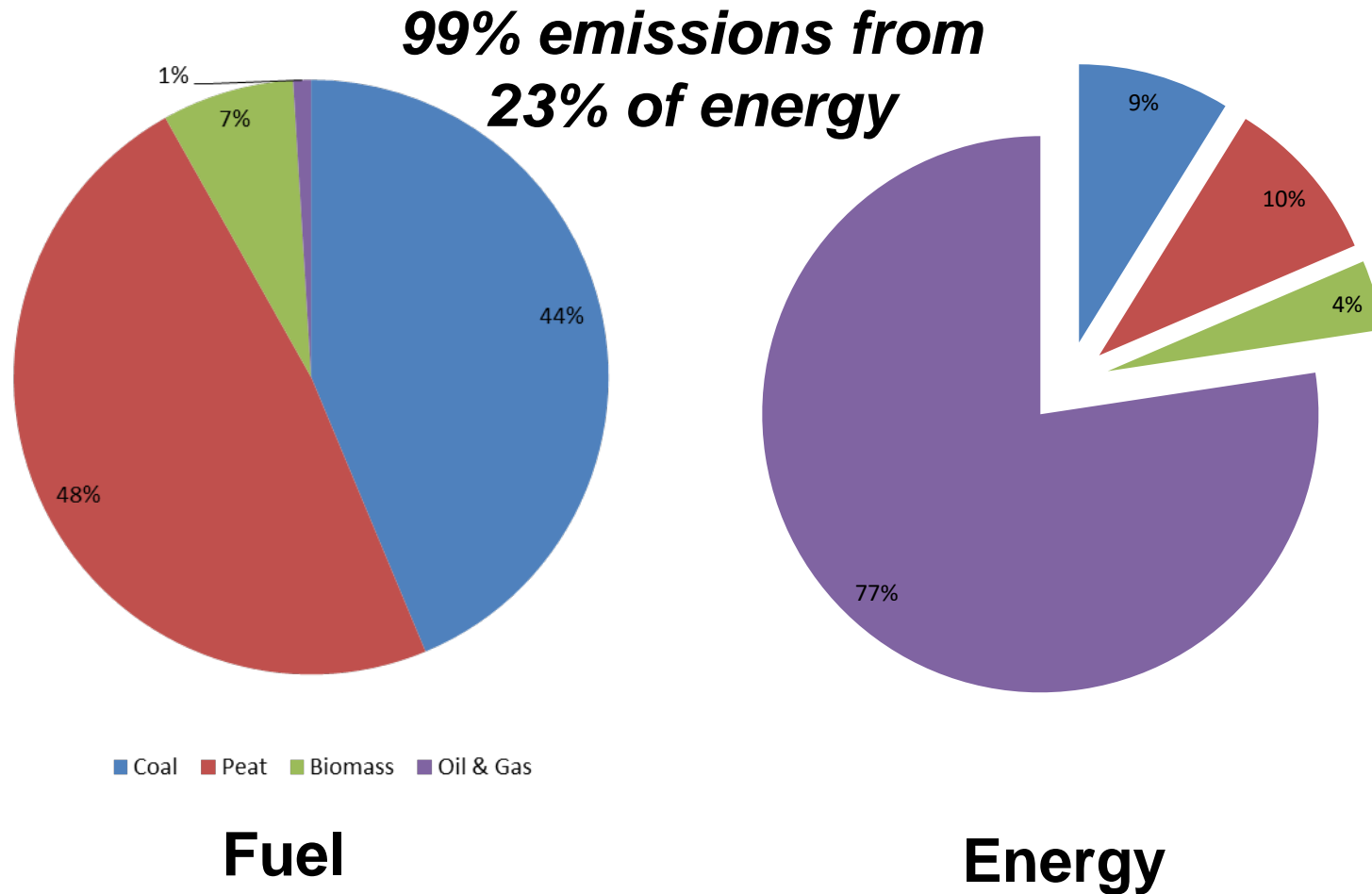




# PM<sub>2.5</sub> trend - Gothenburg Protocol



# Residential PM<sub>2.5</sub> by fuel, energy (2016)



# Residential sector

- Phase out coal - nationwide Low Smoke Zone
  - 12 month transition - Autumn 2018/19
  - Enforcement important
    - EPA Registration requirements
    - Auditing and labelling scheme
- Promoting cleaner alternatives
  - Links to national energy efficiency programmes
  - Promoting Ecodesign emission standards for stoves from 2019



Approved Fuel



# Ambiguity over wood...

- Carbon 'neutral' under UNFCCC
  - Not pollution neutral!
- Renewable heat targets 2020/30
  - National support **excludes residential heat**
- Carbon tax - rebate for biomass blends
  - But only 'low smoke' blends
- Voluntary wood fuel quality standard
  - Promote greater uptake



# ...and peat



# New Builds – no chimneys!



(e.g. Air source heat pump)





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*Thank you for listening*

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