

Clean Air Strategy for Northern Ireland

A Public Discussion Document November 2020

Abridged Version

Sustainability at the heart of a living, working, active landscape valued by everyone.







Introduction

Exposure to air pollution over a long time can reduce the time that people live by affecting how their lungs and hearts work.

DAERA wants to reduce the harmful effects that air pollution can have on our health and on the nature that surrounds us. That is why we are asking your views on how we should do this. This document explains where air pollution comes from and how it can harm us. On page 3 we ask you some important questions on how you think we should reduce air pollution.

The Air and Environmental Quality Unit would really like to hear your thought and ideas about how we can reduce air pollution, so you can respond to this document:



• Telephone: 028 9056 9893 if you have any queries about the format of the document. If you have a hearing difficulty you can contact the Department via Text Relay. Dial 18001 028 9056 9893.



Email: casni@daera-ni.gov.uk



Visit our webpage at: http://www.daera-ni.gov.uk/clean_air_strategy_discussion_document



Write to: Air and Environment Quality
 Klondyke Building
 Gasworks Business Park
 Cromac Avenue
 Belfast, BT7 2JA



Clean air is vital for human health and our natural environment.

Where does polluted air come from?



Source: https://kids.airqualityni.co.uk/where-does-air-pollution-come-from

There are lots of familiar images within this picture and all of these are sources of air pollution, such as:

- Transport (air, rail, road);
- Home heating;
- Agriculture and industry (factories).

Not all sources produce the same amount or type of air pollution. Trains and buses are helpful because they help to reduce the numbers of cars on the road and that is a good thing for air pollution.

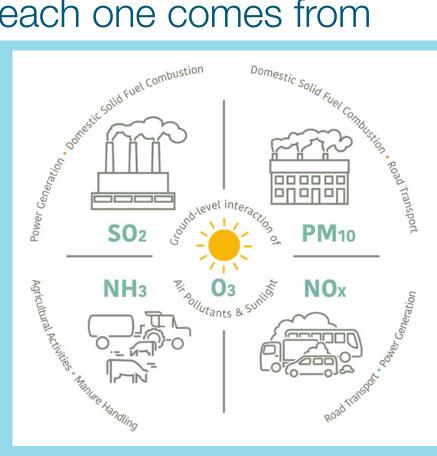


You may also notice some people cycling and walking in the image; this is known as 'active travel'. Choosing active travel is really good because it causes no pollution at all and can help you stay fit and healthy.

So why is polluted air bad for us?

Sometimes the air can get polluted because the weather can stop the pollution from escaping. At times like these the air pollution can make it hard to breathe. Elderly people or people with existing heart or breathing problems may notice this more.

The main air pollutants and where each one comes from



The pollutants all have a unique name, they are;

- SO₂ Sulphur Dioxide
- PM Particulate Matter this comes in larger PM10 or smaller PM_{2.5} sizes
- NH₃ Ammonia
- NO_x Nitrogen Oxides
- O₃ Ground level Ozone

Source: https://www.airqualityni.co.uk/documents/technical-reports/0369 DAERA Air Pollution_Report_2017_screen_Feb_19.pdf

Clean Air Strategy for Northern Ireland A Public Discussion Document - Abridged Version November 2020



The Department of Agriculture, Environment and Rural Affairs (DAERA) is responsible for advising and working with other Northern Ireland Departments and local councils to develop ways of reducing the number and type of activities that lead to air pollution. They also help to fund councils to monitor air pollution and they have a website and a mobile phone app where you can find information about the pollutants and how they affect you. You can find the website HERE and the link to download the app HERE.

There is also law that helps us to know what levels of pollutants are not safe. DAERA has to monitor air and then publish an annual report on the levels recorded here. The annual Air Quality Reports can be viewed **HERE**.

How is transport bad for our air?

Vehicles like cars, lorries, tractors and motorbikes all use our roads. They all cause air pollution, most commonly nitrogen dioxide and particulate matter. Other forms of transport such as airplanes and trains also cause air pollution. Other forms of transport, such as aeroplanes and trains also cause pollution. Nitrogen dioxide and particulate matter are the most common pollutants released from vehicles.

The pollutants can come from the fuel that you put into the vehicle or from the brakes and tyres. When people are going to and from work in the morning and early evening the levels of these pollutants are at their highest. Most of these vehicles will be cars and as they on the road beside the footpath it is easy for us to breathe lots of polluted air straight into our bodies and lungs.

The law in place to protect us sets out limits for nitrogen dioxide and particulate matter. However, nitrogen dioxide levels in Northern Ireland

Clean Air Strategy for Northern Ireland A Public Discussion Document - Abridged Version November 2020



have, on occasion, been higher than the limits set and so through a United Kingdom wide Action Plan, Northern Ireland has put forward actions to reduce nitrogen dioxide levels. Some of these measures include new buses like the Glider, which you can see below.



Levels of vehicle pollutants are still too high and there is more we can do to reduce them. Trying to leave the car at home and take the train or bus when you go out will make a big difference, or even better walking or cycling to your destination would leave no trace of pollution at all.

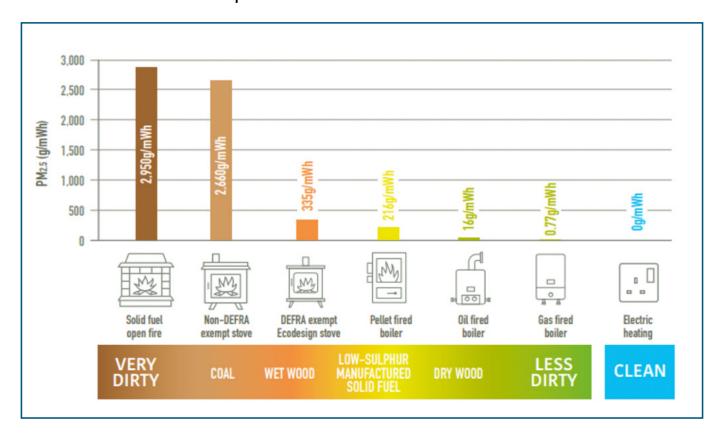
Home Heating

Heating our homes can pollute our air, especially when we burn materials like wood and coal. These household emissions are usually highest in the winter when people feel colder and use their heating or fires more often. Pollutants such as particulate matter and polycyclic aromatic hydrocarbons (PAHs) are the most common pollutants.

Clean Air Strategy for Northern Ireland A Public Discussion Document - Abridged Version November 2020



This image¹ shows different ways to heat your home and how much particulate matter they release. The dirtiest methods like burning solid fuels release the most particulate matter into the air.



Legislation allows councils to declare smoke control areas (SCAs). They exist to reduce levels of pollutants from fuels as they restrict either how you burn the fuel or what type you fuel you can burn, but these SCAs only cover small areas of Northern Ireland.

Sometimes DAERA has to issue air pollution alerts, to let vulnerable people know that levels of pollution are high and might affect their health. This is because the weather, combined with pollution from road traffic and other sources like home heating can make levels of pollution very high. It is therefore very important that we focus on ways to heat our homes which are less dirty and keep levels of air pollution as low as possible.

¹ https://www.airqualityni.co.uk/documents/technical-reports/0369 DAERA Air Pollution Report 2017_screen_Feb_19.pdf



Agriculture

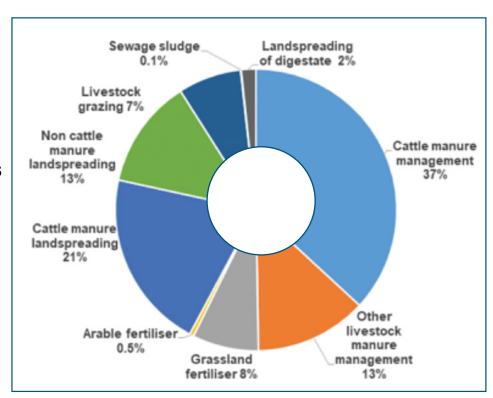
Agriculture is an important part of Northern Ireland's economy, however it is also a major producer of air pollutants.

Ammonia is an air pollutant emitted from agriculture that also forms particulate matter. Ammonia emissions from agriculture occur largely from animal manure and slurry however proper management of dung and urine can reduce ammonia emissions.

At high concentrations ammonia can negatively affect the health of plants and ecosystems. Sensitive habitats, like upland bogs, provide homes for lots of our protected insects and plants, in Northern Ireland many of our sensitive habitats are being damaged by excess ammonia. The UK reports on the status of these protected species and sensitive habits every 6 years.

Through legislation the UK is required to reduce ammonia by 16% by 2030 from a 2005 level. Large pig and poultry farms have permits which control ammonia emissions.

The pie chart shows the activities that contribute to the production of



ammonia in Northern Ireland.



Industry

There are lots of different industries in Northern Ireland and they are needed to provide food and make items that we use every day, such as furniture. However, they can also produce lots of air pollution, like particulate matter and nitrogen dioxide.



Another set of pollutants from industry are greenhouse gases, for example carbon dioxide. These pollutants are very important because in large volumes over long periods of time they cause climate change.

There are laws in place to protect us from too many emissions from these businesses, however there is more that can be done to reduce these levels even further. This can include increasing the amount of energy we use that comes from renewable sources like wind turbines.



How do you think we can make things better?

In this section we would like to ask you to think about some questions around air quality in Northern Ireland. If you have some ideas to share on how we can make air quality in Northern Ireland better we would love to hear from you.

Do we need to monitor air pollution more Northern Ireland? (Q4)

Should more towns and cities be designated as smoke control areas (Q13)?

How can we encourage people to walk and cycle instead of using their cars?
(Q9)

How can we help people in Northern Ireland to understand how important clean air is? (Q28)

Do we need to ban the sale of wet wood and smoky fuels in Northern Ireland? (Q15)



How can I get a copy of this document in another format?

You can get a copy of this document in other formats; including

- Paper Copy
- Large Print
- Braille
- Audio CD/MP3
- Other languages

The central point of contact for the implementation and review of the Public Discussion Document, or to get a copy of this document in another format is:



• Telephone: 028 9056 9893 if you have any queries about the format of the document. If you have a hearing difficulty you can contact the Department via Text Relay. Dial 18001 028 9056 9893.



· Email: casni@daera-ni.gov.uk



Visit our webpage at: http://www.daera-ni.gov.uk/clean_air_strategy_discussion_document



Write to: Air and Environment Quality
 Klondyke Building
 Gasworks Business Park
 Cromac Avenue
 Belfast, BT7 2JA