

National Air Pollution Control Programme Report

Update 2021

Summary of public consultation submissions March 2021

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Introduction

The public consultation on Ireland's update to the National Air Pollution Control Programme (NAPCP) was open for submissions from 9 December, 2020 to 22 January, 2021. A total of 72 unique submissions were received.

Only a small number of submissions were specifically related to the actual draft NAPCP document itself and its requirements as set out by Europe. The majority were instead comments on air pollution in general, and how it can be addressed. While these submissions could not be directly incorporated into the NAPCP itself at this time, they give a valuable "snapshot" of public feelings on the issue, and will instead feed into our ongoing work in the area including the finalisation of the National Clean Air Strategy (CAS) and further regulations on the domestic use of solid fuel.

It is important to note that this summary does not purport to be a comprehensive overview of all submissions received, nor include all points made in submissions. It is instead designed to serve as an overview of the points made most frequently and give a sample of other relevant points.

In addition, responses are provided to the main points raised in submissions which dealt primarily with the NAPCP itself. All submissions to the consultation were reviewed and considered ahead of the official submission to Europe of the finalised update to the NAPCP.

We would like to thank everyone who took the time to submit a response to the consultation.

1 General Points

1.1 Annual ceilings vs Ambient Air Quality

There are two key components of air quality, namely our annual total emissions (ceilings) and our localised short term production of pollutants, known as our ambient air quality. While emissions relate to the total amount of pollutants emitted over the course of a year, ambient air quality is more localised. It is a result of the concentration of pollutants and local weather conditions at a given location and a given time. It varies from day to day, and even from hour to hour.

With regard to annual emissions, Ireland is faced with achieving specific targets under a number of international and European agreements such as the International Convention on Long Range Transboundary Air Pollution (CLRTAP) and the EU National Emission Ceilings (NEC) Directive.

In addition, the Clean Air for Europe (CAFE) Directive underpins our responsibilities for our ambient air quality and sets maximum concentration levels allowed per hour at any location for a range of priority pollutants that impact on human health.

The NAPCP is a technical reporting document which sets out in detail the current position in relation to our air quality and identifies the pathways towards compliance for each pollutant, based upon existing and future policy measures which have been adopted at Government level and which are included in the EPA inventory and projections report (EPA, IIR 2020).

For the most part, the NAPCP reports on the annual emissions levels. At present, it does not provide an estimate of the impact of current policies and measures on our ambient air quality, as detailed projections are not currently available. We are working to address this for the next update to the NAPCP, which is due in 2023.

In relation to compliance to current air quality goals, there are differences between our emissions, ambient air quality and ambitions in this area. For example, we are compliant with our annual emissions targets and our ambient air quality limits for fine particulate matter ($PM_{2.5}$). However we still have greater ambition in relation to $PM_{2.5}$, and therefore more work is required to ensure the release of particulate matter from residential burning is reduced, to ensure better local air quality for everyone.

2 Submissions in relation to analysis of the NAPCP draft document

Just five of the submissions received provided an actual analysis of the NAPCP document. They are generally critical overall; despite demonstrating a pathway towards compliance for all key pollutants, the common consensus is that the NAPCP doesn't go far enough towards helping us achieve our air quality commitments. Some of the main points include:

- The update "recycles existing, weak, policies and commitments which to date, have failed to achieve meaningful emissions reductions and compliance with climate and air quality directives".
- 2. Compliance with reduction targets for NMVOC, NO_X and NH₃ "does not look to be robust and resilient".
- 3. Concern is expressed about the adjustments allowed in NMVOC and NO_X measurements.
- 4. Too much focus is placed on success to date.
- 5. More ambitious goals need to be set for emissions from certain sectors, and there needs to be a more thorough breakdown of key plans.
- 6. The CAS should have been published first, or alternatively, the NAPCP should not make reference to a document which is not yet publically available.
- 7. The report does not set out what happens if or when there is a breach of the legal limits of air pollution.
- 8. The NAPCP does not comprehensively and holistically link climate action with air quality and public health.
- 9. The NAPCP does not acknowledge there are strong links between social deprivation and air pollution/poor health.
- 10. There is criticism that the Department of Health is not formally considered a key stakeholder for the purposes of the NAPCP.

2.1 Responses

Responses to the above points are listed below:

- The NAPCP is by nature a technical reporting document, which must follow formatting and
 content requirements as set by the European Commission. By its very nature, it relies heavily
 on the analysis of the effectiveness of all cross-government policies and measures to date as
 set out in the detailed inventory and projections provided annually by the EPA.
- 2. The annual inventory and projection figures included in the NAPCP are calculated using the appropriate methodology as set out by the Commission. The data is submitted to the EU on a regular basis who to determine our compliance. The data and the methodology used are regularly reviewed by the EU to check that it is appropriate and accurate.
- 3. Adjustments to the data are approved by the EU on an annual basis and are only allowed in line with the process prescribed by the Directive.
- 4. As already outlined, the NAPCP by nature relies heavily on available detailed analysis of the effectiveness of measures to date, and the expected effectiveness of future measures. It is not a full comprehensive list of all the policies, plans, measures and actions that are in place or in development which will contribute to ongoing improvements in air quality, as the impacts of many of these are not easily calculated.
- 5. Again, there is little scope for inclusion of measures which are currently in the early stages of consideration, or which may be considered in the future. This means that some of the points above and throughout the submissions, while valid in their own right, are not directly relevant to the requirements of the NAPCP. In order to include measures outside the scope of the information included in the EPA projections, detailed supporting analysis and technical information of the impact on air quality would be required.
- 6. The CAS will be published in 2021 and will provide the strategic policy framework necessary to identify and promote the integrated measures and actions across Government that are required to reduce air pollution and promote cleaner air, while delivering on wider national objectives.

In line with the commitment given in the Programme for Government, the CAS will outline measures for moving towards a full nationwide residential solid fuel regulation. It has therefore

been decided to postpone the finalisation and launch of the Strategy pending the outcome of the solid fuels consultation.

A number of the issues raised in the submissions will be dealt with in the context of the CAS. As we finalise the document, we will give further consideration to the points raised in the submission process where appropriate.

- 7. Any breaches of the Directive are dealt with in line with the appropriate procedures at EU or national level. It is not a requirement to outline this within the NAPCP.
- 8. While the health impacts of poor air quality are always a key concern, it is not necessary to outline these concerns within the technical NAPCP document itself.
- The same situation applies with respect to the socio-economic aspects and impacts of poor air quality. While these are key concerns, it is not appropriate to outline them under the formal requirements of the NAPCP.
- 10. The public bodies and agencies listed in the NAPCP are the main competent authorities who have direct responsibilities for particular elements of the Programme. It does not follow that other bodies, such as the Department of Health, are not considered key stakeholders in the development of policy and measures to improve air quality. Instead, it merely means that such bodies are not directly responsible for the implementation and/or monitoring of the measures included in the document.

Finally, it should be noted that we will begin development of our next NAPCP towards the end of this year, for submission in 2023 as per the reporting requirements. This version will be aligned with the CAS and we will continue to improve our reporting procedures.

We will also consider the points raised and learnings taken from this consultation.

3 Submissions in relation to Solid Fuels

There is widespread support for further regulation of solid fuels. Main points in submissions received include:

- Calls for either the immediate banning of smoky coal across the State, a national ban on all smoky fuels including turf, or a gradual phasing out of all solid fuel burning in the country.
- Such regulations should be supported by the expansion of grant schemes for retrofitting.
- Reference to how Census 2016 shows that in certain areas, only very small numbers of households rely on solid fuel as their primary source of heating, and a suggestion that a complete ban on solid fuel would be easier to implement in these areas.
- Consideration should be given in relation to respecting traditional turf cutting rights.
- Potential associated measures to discourage turf cutting should be considered even in these cases, such as:
 - o A cap on peat harvesting to quantities reasonably required by a household.
 - o Incentives to keep peat in the ground.
 - A voluntary State purchase scheme for turf cutting rights.
 - A free retrofit for those in fuel poverty who have held turf cutting rights for a number of years.
- Further information is required regarding the different levels of PM_{2.5} emissions between coal, wood and turf.
- Concerns were expressed that there are signs of consumers moving to black market coal to avoid carbon tax.
- An associated concern that there needs to be a better way "to capture the real tonnages and emissions from the whole solid fuel sector".
- Greater enforcement by local authorities of the existing regulations is required.

- An independent laboratory should be established in Ireland to test for compliance with regulations.
- Greater awareness and improved labelling is needed in supporting the distinction between dry
 wood and wet wood, and the associated impacts on heating efficiency and pollution emitted
 from wet wood.
- Consideration should be given to the "vital" role that wood pellets and woodchip will play in our transition to a low carbon economy, but they must be used in a manner that does not negatively impact air quality.
- Consideration should also be given to appliances (stoves) in which wood is burned. This could include regulations to ensure that only EcoDesign stoves can be sold.
- There should be regulation of wood fuels in Ireland to meet European standards.
- Firewood should be regulated to ensure that no firewood may be placed for sale where the moisture content is above 20%.
- A reform of fuel regulations must be coupled to a package of measures to end fuel poverty (such as wider eligibility and increased payment for the fuel allowance; and low cost/free district heating).
- A 'neutralisation apparatus' could be used in chimneys.
- Building regulations should be updated to eliminate fossil fuel heating systems from new builds.
- The use of plastic in the bagging of solid fuels should be prohibited, given the impact on the environment.

Note: All such points were particularly valid in the context of a further public consultation, on the development of a new solid fuel regulation for Ireland, which commenced within weeks of the public consultation on the NAPCP closing. All who made submissions to the NAPCP were therefore contacted and invited to also make submissions to the consultation on solid fuel regulation, so that these points could be formally entered into that process.

4 Submissions in relation to Retrofitting

Approximately 20 submissions made reference to the role of retrofitting as a means to lower emissions from domestic homes, with many saying that consideration also needs to be given to other measures to reduce the risk of fuel poverty. Main points included:

- Concern that target of 600,000 heat pumps by 2030 are unlikely to be achieved.
- There should be a "massive" increase in the speed at which home energy retrofits are carried out.
- The Government should devise a detailed roadmap to bring the entire housing stock to low and zero pollution methods of heating earlier than 2030.
- A retrofitting programme that prioritises areas with the worst quality air should be introduced.
- In relation to grants currently available for retrofitting:
 - o They are not generous enough.
 - They can be too difficult to access.
 - Having to pay upfront and claim back is not ideal.
 - There should be higher grant payments for low income families who are dependent on solid fuels.
- A Domestic Support Scheme for Renewable Heat (D-SSRH) should be considered where homeowners would receive an incentive to burn dry, certified firewood and would be required to install an EcoDesign stove.
- Improvement works should be made cheaper and more accessible from the start, possibly through tax breaks, more subsidies for products, and/or greater discounts.
- Funding should also be made available to agencies to guide applicants through the paperwork involved for applying for such funding.
- There should be a surcharge on the sale of non-principal residences with low BER to incentivise upgrades.
- Minimum standards should be introduced for rented accommodation.

• Incentivise shared heating systems whereby a block of apartments, etc., would share one system rather than having individual systems in each apartment.

5 Submissions in relation to Transport

The majority of submissions received to the consultation included acknowledgement of the need to address transport emissions, and proposals on how to so. Common themes include:

- Concern that targets of one million electric vehicles (EVs) by 2030 is unlikely to be achieved.
- There should be greater investment in active travel (i.e. walking and cycling infrastructure) and public transport.
- Specific measures should be introduced for the HGV sector, e.g. reduce their ability to transit through urban areas where possible.
- There were calls for the introduction of congestion charges and/or Low Emissions Zones in cities.
- There were also calls for a ban on engine idling.

Public transport

Virtually all submissions that considered the transport sector called for greater investment in public transport, including in rural areas. Comments include:

- There should be increased Government expenditure on public transport, to include the provision of increased public transport in rural areas.
- There is a need to upgrade Luas and Dart services in Dublin.
- All future procurement of new buses should be electric, and the entire fleet should be transitioned to electric by 2025.
- It should be a priority to finish the Metro North, implement Bus Connects and build at least three other Luas lines covering areas of west and north Dublin.
- Tram lines should also be built in Galway and Cork.
- There is frequently a lack of consideration of investment in public transport beyond Dublin.

Diesel

The use of diesel was another recurring theme, and there were several calls for it to be phased out of certain sectors even ahead of the current proposed 2030 date for the ban on any further sale of internal combustion engine (ICE) vehicles. Comments include:

- There should be a phase-out on the sale of all new petrol and diesel vehicles from 2025 rather than the original date of 2030.
- Vehicle renewal taxes should be raised for all existing diesel vehicles, to discourage their use.
- Tax on diesel fuel should be increased.
- Diesel vehicles should be required to have annual emissions testing.
- All public operated transport vehicles which currently run on diesel should be phased out within five years and replaced by cleaner more efficient non-fossil fuels.
- No new licences should be issued for diesel-run taxis.
- All new taxis should be either hybrid or fully electric.
- The nitrogen dioxide levy applied to all VRT category A vehicles (passengers and SUVs) should be doubled, and applied to all registered vehicles.
- Models to prohibit certain diesel and petrol vehicles from entering major urban city centres on different days should be explored, such as using car registration number plates as in Paris.

Electric vehicles

Several submissions stated that too much emphasis is being placed on transitioning to electric vehicles as a means of addressing transport emissions. Related comments and suggestions include:

- In order to increase update rates of EVs:
 - The EV charging infrastructure should be improved.
 - o Purchase/import taxes should be scrapped.
 - There should be a 25% VAT exemption on purchase.
 - Annual motor tax and road toll charges should be waived.

- A €7,000 scrappage scheme to replace diesel/petrol cars with EVs should be introduced.
- There should be free municipal parking in areas granted by local authorities.
- EV drivers should be granted access to bus lanes.
- Company car tax should be reduced by 50%.
- There should be an exemption from 25% VAT on leasing.
- There should be fiscal compensation for the scrapping of fossil fuel vans when converting to a zero-emissions van.
- Grants/other incentives for electric bikes and scooters should also be introduced.
- The legal position regarding electric scooters should be clarified, and the Bike to Work scheme should be extended to cover these.
- EVs still emit PM_{2.5} from their brake pads, tyres, etc., and this must be considered.
- Conversion to hydrogen or electricity or other similar power should be made a requirement to avail of commercial tax rate for commercial vehicles.

6 Submissions relating to Agriculture

There is widespread recognition of the need to tackle ammonia emissions, as all submissions that included consideration of the agriculture sector acknowledged that action must be taken. The two specific topics raised most frequently in this regard were the size of the national herd, and the methods employed in slurry spreading.

National herd

The majority of submissions which consider the agriculture sector either call for a reduction in the size of the national herd, or are critical of other policies/plans/proposals that would allow it to continue to increase in size.

A related point is made in another submission with respect to intensive pig and poultry farms, which are also a significant source of ammonia emissions. It states that the draft NAPCP has no reference to measures to reduce the number of intensive pig and poultry units.

Slurry Spreading

A number of submissions specifically mentioned slurry spreading. Points raised and suggestions made included:

- Concentrated slurry spreading near high density areas should be restricted.
- The Low Emission Spreading System (LESS) should be made mandatory immediately, as it has been proven to reduce ammonia loss by factors of 25% and more.
- Large farmers should be compelled to install biodigesters.
- All dairy farms should be required to cover their manure (to reduce pollution) and use it to collect and use gas for energy and biogas.
- Gas capture technologies in animal sheds/over slurry tanks should be introduced, to reduce emissions.

Other Comments

Other, more general, comments in relation to agriculture included:

- One submission said that all agricultural scrub burning should cease. Another called for an end to any agricultural burning without prior approval from the Department of Agriculture and the local Fire Officer.
- There should be an immediate introduction of minimum percentage clover in newly seeded grass sward.
- There should be an immediate end to the sale of non-inhibited urea fertilisers.
- There should be a move away from intensive livestock farming. One submission said this
 could include a change in marketing of Irish beef and dairy to a premium product, to maintain
 profitability while reducing intensity. Three others called for specific measures to encourage
 and incentivise farmers to move to less emission intensive farming practices or even leave
 their land go fallow to be re-wilded.
- A licensing system should be put in place for the agricultural sector in order to give permission to spread slurry or any kind of spraying of pesticide, fungicide or herbicide.

- All intensive pig and poultry operations should be phased out, with a view to having more humane, free range and smaller units.
- Farmers should be encouraged to switch from unsustainable farming practices, with appropriate tax incentives and other innovative means, to organic farming and the production of food rather than beef or milk.
- The NAPCP "must consider the financial vulnerability of many family farms and ensure that a
 short-term and long-term vulnerability assessment of the sector is undertaken to meet the
 reduction targets". In addition, while there was acknowledgement that measures are
 necessary to comply with Ireland's ammonia reduction targets, the point was made that such
 measures "must not impose prohibitive costs that compromise the competitiveness of Ireland's
 family farm model."

7 Submissions relating to Industry and Power Generation

A small number of submissions made points related to industry and/or power generation. In the case of industry, these submissions generally call for increased monitoring and enforcement regarding emissions from the sector. Others call for greater consideration to be given to where industrial facilities are located. Comments include:

- It is bad policy to put several big factories very near each other.
- There should be limits and exclusion zones regarding where heavy industry can locate and its concentration where it is in proximity to domestic dwellings or villages.
- Mandatory and stronger sanctions should be introduced for industrial pollution.
- A much tighter regime of air pollution control of industrial emissions both proposed emissions and existing emissions – should be included as a matter of policy in the final revised National Air Pollution Control Programme.
- Using average emission limit values as a means of monitoring and controlling industrial emissions to atmosphere is unsatisfactory, as these averages can mask high-risk emission spikes.

• In the case of chemical or pharmaceutical factories, their "scrubber systems" should be inspected daily to ensure they are functioning properly. State testing on these systems should be legislated for, in order to ensure better air quality.

Power generation

With regard to power generation, submissions generally called for a transition to cleaner sources for generating electricity. One called for the ending of coal-fired generation at Moneypoint to be brought forward from its current date of 2025. Other comments included:

- One submission said that where there are opportunities to transition coal/peat fired power generation plants to combined cycle gas turbine (CCGT) or open cycle gas turbine (OCGT) plants, these should be considered.
- However, another submission doubted whether migration to gas for electricity generation is a sustainable long-term solution, and said the focus should be on renewable energy sources instead.
- There is potential for anaerobic digestion of agricultural manures and slurries to develop into a dispersed collectively operated biogas and bio-methane generation network.

8 Submissions relating to Air Quality Monitoring

Some submissions maintain there is insufficient air quality monitoring across Ireland to give a true picture of emissions, either at any one time or an annual basis. Points raised and examples given included:

- The new <u>www.airquality.ie</u> website is a great improvement on the last, but doesn't go far enough in terms of raw data available.
- There should be incentives for people to co-locate a low cost sensor with the EPA reference monitor.
- There should be investigation of high hourly values, which may be overlooked if things are just averaged out over the course of 24 hours.

- The Air Quality Index for Health (AQIH) is a "lagging" indicator and therefore not wholly satisfactory. An example is given where PM_{2.5} was negligible in Ennis at 12 noon on a particular date, but still AQIH was just 4 ("Fair") because of how emissions levels from the night before were still taken into consideration when calculating it.
- Monitoring should be conducted for Ultra Fine Particles (UFPs) as well as PM_{2.5} and PM₁₀.
- Large parts of the country have no monitoring station or insufficient monitoring.
- One submission was critical of how emissions are averaged over 24 hours in determining exceedances, saying this hides or ignores the dangers of peak emission.

9 Submissions relating to Citizen Engagement and Citizen Science

A small number of submissions contain proposals for improved Citizen Engagement and Citizen Science. Comments made included:

- There should be greater public education about air pollution and its effects. This could comprise a widespread publicity campaign with information on how the choices people make can have an impact on the air quality around them.
- Given the widespread effort to minimise Covid-19 deaths and initial research linking Covidrelated deaths occurred in areas with high levels of air pollution, there should be a proportional effort/information campaign on measures to reduce deaths related to air pollution.
- Two submissions called for measures to allow a roll-out of low-cost sensors/monitors in homes
 and schools, to complement the EPA network. One says there should be a monitor in every
 school. The schools could then broadcast the readings locally, and show the positive effects of
 events such as Clean Air Day, Car Free Day, Cycle to School Day, etc.

10 Miscellaneous other points in submissions

Gas an alternative fuel

One submission outlined what the writer views as the benefits of gas heating as an alternative to solid fuels for domestic homes. It also says that in the transport sector, compressed natural gas (CNG) could replace diesel as it produces less NOx and PM, and this is particularly relevant for HGVs as electric vehicles are not a practical alternative there.

However, three other submissions warned against the promotion of gas as a "cleaner" alternative, saying that while it may produce less PM_{2.5}, it is a major contributor to greenhouse gases.

Fines/enforcement

Submissions called for greater fines and increased enforcement of current and future legislation. Related points/suggested included:

- Fines/warnings for households which are excessively polluting, and a reporting mechanism, should be introduced.
- A call to establish a hotline, "where the public can be whistleblowers".
- Almost all prosecutions taken by the EPA are in the District Court- this suggests that such
 offences are not taken seriously enough, and mandatory sanctions should be introduced.

General health warnings

Health warnings should be attached on diesel cars, solid fuel, etc., in the same manner as there is on cigarettes.

Waste management

Finally, while not specifically linked to air quality, three submissions called for either alternative waste management processes, or the strengthening of enforcement of current legislation.