

Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil Department of Communications, Climate Action & Environment



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Conclusions on the Clean Air Dialogue with Ireland

Ireland has made significant progress in reducing air pollution and improving air quality, to the benefit of public health and welfare, the environment and its ecosystems, as well as reducing health and other costs to society resulting from air pollution.

For 2015 there have been no monitored or reported exceedances of the EU ambient air quality standards based on measurements at the current national network sites. In addition, apart from an exceedance of the NO_x ceiling in 2010, emissions of key air pollutants are currently below the relevant national ceilings under the National Emissions Ceiling Directive (NEC Directive).

However, air pollution still has a significant health impact in Ireland and projected economic trends will likely increase emissions and thus push Ireland closer to prescribed limits, particularly in relation to NO_x. For 2013, the European Environment Agency estimates that in the region of 1,600 premature deaths were attributable to fine particulate matter and other air pollutants in Ireland. In addition, estimates indicate that air pollution has health-related costs in Ireland of over € 2 billion per year, including the loss of 382,000 workdays per year¹.

The continued commitment to clean air policy, as evidenced by the current development of a national Clean Air Strategy for Ireland, is therefore important and necessary in the context of ongoing economic recovery and the renewed upwards trend in emissions. This commitment is

¹ Impact Assessment for the European Commission Integrated Clean Air Package (2013)

consistent with, and will contribute to, European Union objectives to achieve levels of air quality that do not give rise to significant negative impacts on, and risk to, human health and the environment²; and specifically that outdoor air quality in the Union will move closer to WHO recommended levels. It can also contribute to EU climate action objectives, for example, through efforts to reduce black carbon and ground level ozone.

This Clean Air Dialogue has proven invaluable in promoting a more detailed understanding of the approach to clean air policy in Ireland, through the elaboration of specific national policies and measures implemented in Ireland; the Dialogue facilitated an informal and open exchange of views on the successes and future challenges facing clean air policy in Ireland and the interlinkages with EU policy and legislation. It also provided insights on options for enhancing the efforts in Ireland based on wider experiences, including from other Member States. Generally, relevant experiences of other Member States in relation to clean air policy could be useful for Ireland and could be facilitated through the upcoming peer-to-peer tool under the EU Environmental Implementation Review.

The Clean Air Dialogue with Ireland concludes that:

The anticipated agricultural intensification and growth in Ireland will need to be closely monitored. Provisional information on emission projections presented at the dialogue indicates that Ireland can determine a pathway to comply with its reduction commitment on ammonia in 2020 and 2030 under the revised NEC Directive. The first national air pollution control programme to be finalised in 2019 under the revised NEC Directive, will be an important milestone for Ireland to formally demonstrate its capability to combine expansion in the agriculture sector with a pathway to reduce ammonia emissions, consistent with efforts to reduce greenhouse gases and nitrates from the agricultural sector.

Relevant experiences of other Member States in relation to ammonia mitigation could be useful for Ireland.

2. The continued reliance on petroleum based road transport means that NO₂ levels will remain a problem pollutant in cities and towns in Ireland. The problem will likely be exacerbated with the anticipated continued economic recovery driving an increase in road traffic, and NO₂ concentrations would be expected to rise accordingly. Coupled with particular meteorological conditions providing for the build-up of NO₂, it is possible that levels of NO₂ above the limit value will be recorded at monitoring stations in the near future. The risks of this occurring require

² 7th Environment Action Programme to 2020 'Living well, within the limits of our planet'



preparations, in both the short and medium-term, to reduce NO_x emissions from the current and future fleets of road vehicles.

Ireland is already considering a broad range of possible policies and measures to promote low carbon transport, sustainable urban development and congestion-reduction objectives, which can deliver clean air benefits, however, negative impacts on clean air can also arise. Clean air considerations could be more deeply integrated into national transport policy to deliver greater clean air benefits by being prepared to address any adverse clean air impacts, as the case with diesel vehicles has shown. In addition, clearly identifying the multiple benefits of policies and measures can also enhance accessibility to relevant EU funding.

Also as highlighted by the European Semester report on Ireland³, the differences in the taxation of diesel and gasoline for road use are environmentally unjustified, as diesel is taxed at a lower rate, although it emits more air pollutants. An equal treatment of transport fuels would lead to environmental improvements. A similar case applies in relation to vehicle registration and annual motor tax as well as value-added tax (VAT). Strategic retrofitting of abatement systems on city buses and public transport has been shown to be a cost effective way to reduce NO_x emissions in many European cities. In addition many different forms of traffic access restrictions have been successfully introduced in many European cities in recent years and could act templates, particularly for short and medium term planning in Dublin.

Many policies and measures to reduce NO_x emissions will also reduce the emissions of fine particles, and thereby contribute to lower the current health and thus economic cost of air pollution in urban areas. This will contribute to bringing Ireland closer to compliance with the WHO guidelines on $PM_{2.5}$.

3. Expanding the ban on smoky coal will reduce health costs from residential solid fuel use in Ireland. It will be important to ensure that an integrated policy approach is taken to avoid perverse effects, for example, to ensure that coal is replaced by cleaner, more efficient low carbon alternatives. The design and implementation of support measures will need to reflect this consideration.

Residential solid fuel heating is the largest source of $PM_{2.5}$ and PAHs (responsible for over 50% and 90% respectively) in Ireland - despite providing less than 5% of national energy demand - so there is a need to tackle this source. The specific policies and measures to address residential emissions are primarily a matter for national policy as EU policy and legislation has focused more

 $^{^{3}\} https://ec.europa.eu/info/publications/2017-european-semester-country-reports_en$



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on other sectors (e.g. transport and industrial emissions), though EU clean air and climate objectives require that action is taken to address such key sources.

The continued practice of using solid fuel open fires for home heating is inherently inefficient and highly polluting of the atmosphere. The emissions from residential solid fuel combustion are dependent on the combustion installation used, operator practice and the fuel used. Regarding stoves, in the absence of national standards, the early introduction of the requirements of the Eco Design Directive could be considered as a means to improve air quality and reduce the emissions from solid fuel appliances for sale on the market in Ireland.

Replacing coal with biomass, as part of de-carbonising residential heating, will in itself not necessarily have a major health improvement impact. However, measures to reduce reliance on open fires nationally by promoting cleaner, more efficient low carbon alternatives would deliver both clean air and climate benefits, likely in a cost effective manner.

Ireland already has extensive programmes to renovate residential buildings to deliver the interlinked aims of energy efficiency, eradication of energy poverty, reducing greenhouse gasses, cleaner air as well as the promotion of green jobs. A further expansion of these programmes would be relevant to promote Ireland's transition to cleaner, low carbon alternatives, including improving the air quality.

4. The Commission encourages Ireland to make full use of the EU funding mechanisms, including the LIFE programme (both traditional projects and Integrated Projects), and to maximise synergy effects between objectives in the Rural Development Programme and the Operational Programmes under the Structural Funds with air quality and emission reduction objectives in Air Quality Plans and the National Air Pollution Control Programme.

For future use of EU funding, Ireland could consider programmes with air quality as the primary objective under the Thematic Objective for the environment in addition to those which include air quality as a co-benefit under the Thematic Objective for the transition to a low carbon economy.

Results from projects in the past or on-going under the LIFE programme and under research programmes such as FP7 and Horizon 2020 could provide contacts throughout Europe and inspiration for concrete actions in Ireland.

5. Good air quality management depends on an effective air quality monitoring system. Regular review of the **monitoring network** is needed to ensure that the sampling sites remain valid over time in accordance with the requirements of Ambient Air Quality Directive, so that they are spatially representative, and provide estimates of both the highest concentrations, as well the



more general concentrations to which the population is exposed for significant periods. This is fundamental to robust air quality assessment and management and for the dissemination of reliable real-time information to the public on the current air quality status. The Commission welcomes the national plan to improve and expand the current monitoring network and related air quality modelling capacity. The plan should be implemented by the EPA without delay.

The Commission is very keen to learn from the experiences in Ireland on communication and information to the public on air quality.

6. Agricultural burning by its nature releases air pollution to the atmosphere, as well as causing a range of other environment impacts. In addition uncontrolled fires can cause much greater environment and commercial damage than anticipated. The scale of the issue in Ireland is relatively unclear due to a lack of national data sets and a detailed inventory of burning activities. A concerted effort to gather and collate the relevant data to enable quantification of the scale of the problem is necessary to better understand the impact on air and the wider environment, and to allow for inclusion of estimates in the national emission inventory.

It seems relevant also to look at experiences of other Member States which ban agricultural burning to consider their approach including their national enforcement provisions to deter illegal burning. In addition to potential reductions in emissions of air pollution, greater cobenefits would accrue to protection of forestry and other lands, wildlife and biodiversity.

7. On emissions from shipping, the upcoming IMO requirement for 0.5 % sulphur standard for marine fuel oil from 2020 will significantly reduce sulphur emissions from shipping around the coast of Ireland and in its ports, however will not be as protective as the standards now applying in Sulphur Emission Control Areas (SECA) in the North Sea and the Baltic Sea.

The question of establishing a NO_x Emission Control Area (NECA) in the Irish Sea (in cooperation with the UK, for example, from 2021 in parallel to the similar control areas in the North Sea and the Baltic Sea) could be considered, given the contribution of national navigation to overall national NO_x emissions (7%) and the future challenge of complying with the national NO_x emission reduction commitment.

Measures to reduce emissions in port, for example, use of shore side electricity could be relevant particularly where such emissions contribute to air pollution in urban areas.

Good governance including stakeholder involvement is essential to effective clean air policy formulation, so as to maximise the co-benefits of action in other areas including in transport,



climate change and agriculture; and to increase public acceptance of necessary transitions and trade-offs. Societal adjustments will be more effectively achieved when close coordination of policies and co-benefits are being pursued.

To deliver changes on the ground and maximise the potential of existing legislation, efforts should continue to be made to ensure effective implementation and enforcement of the legislation.