ZERO WASTE ALLIANCE IRELAND

ZWAI
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Submission to the Department of the Environment, Climate and Communications to Support and Inform the Preparation of the 2023 Climate Action Plan

20 September 2022

Zero Waste Alliance Ireland is a member of

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and

IEN Irish Environmental Network

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1. INTRODUCTION

When the Department of the Environment, Climate and Communications announced a public consultation to support and inform the preparation of Ireland's 2023 Climate Action Plan, we saw this an excellent opportunity to provide feedback on a topic in which Zero Waste Alliance Ireland has a long and continuing interest. While it may appear at first glance that waste management, the achievement of climate goals and the formulation of climate policy are not connected, it is our long-held belief that that the two are intimately connected.

It has always been our policy that the wasting or discarding of substances, materials, manufactured objects and products of every description; and especially their end-of-life fate by incineration or landfilling, resulting in the continuing extraction and processing of yet more raw materials to replace them, have detrimental effects on the Earth's climate. Not only must discarded materials be replaced in the continuing cycle of production, but the processes of extraction, transformation, transport, processing, manufacturing and distribution require yet further energy which could be used more beneficially or avoided completely.

Widespread failure to recover, re-use and recycle discarded substances, materials and products, is a symptom of our European-wide and Irish failure to implement the Circular Economy, with a resulting increase in greenhouse gas emissions, serious damage to ecosystems, major loss of biodiversity, changes in sea level, stronger and more frequent storm events, threats to the security of food supplies, damage to human health, and other adverse consequences of climate change.

For example, the most recent data from the Environmental Protection Agency has shown that in the year 2021, greenhouse gas emissions rose rather than fell; and Ireland used a quarter of its first five-year carbon emissions budget in just

one year. It is therefore imperative that we keep within the binding five-year carbon emissions budget for 2021-2025 (as adopted by the Dáil); and, even more critical, that Ireland succeeds in reducing greenhouse gas emissions by at least 50% by the year 2030. Reaching this target requires achieving a reduction in emissions by more than 8% per annum for the remainder of this decade.

If we had started on this pathway a decade ago; or, better still, two or three decades ago, the rapidity of the necessary reduction in greenhouse gas emissions (the steepness of the downward slope) would not be as great, and measures could have been taken with less urgency. Unfortunately, it is now well past the time for such measures to be taken, in order to reduce emissions rapidly, and to meet the scale and the urgency of the challenge.

If we compare the global response to the Covid-19 pandemic, we can see the problem more clearly. Following the identification of the SARS-CoV-2 virus, the global response to the emergency has been guided by international scientific and public health experts. Vaccines were developed, produced and delivered at a rate and scale not previously seen; the epidemiology of the virus was studied intensively, information was exchanged world-wide among scientists and medical experts; and, in Ireland, Government agencies provided advice about social distancing and hand hygiene, information about the virus was provided widely, public facilities and businesses were advised to close, large public gatherings were cancelled or postponed, and vaccines given freely to the population.

At the same time, funding was provided to mitigate the damaging effects that the Covid-19 pandemic and the measures to prevent its spread were having on the economy. These measures were considered to be necessary precautions, given the immediate threat of the virus; and, in most cases, the work done by Ireland's medical experts and personnel was widely praised, and (again with some exceptions) the Government was applauded for handing the crisis effectively.

In contrast, climate scientists, conservationists, and even the epidemiologists who have guided our response to Covid-19 have spent decades – sometimes their entire careers – trying to influence the political and public discourse to recognise the dangers of rapidly accelerating climate change and the resulting biodiversity loss, while explaining that these crises raise very significant food and water security issues as well as public health concerns.

The slower onset of the linked climate and biodiversity crises (compared to the rapidity of the Covid-19 pandemic) resulted in the implementation of mitigation and adaptation measures being postponed, argued against, and postponed again. It seems that some human societies and governments (especially in countries such as Ireland which are less dramatically affected) have normalised the incremental changes brought on by climate change and biodiversity loss. We barely notice now the silence that was once filled with the sound of our birds and other wildlife; while the loss of insect species is less noticed, but is a more serious long-term problem and threat to food supply.

As the dramatic effects of climate change in the form of large-scale wildfires and massive flooding in susceptible countries are becoming more widely reported, a willingness to act on the evidence-based advice of the scientific community remains largely absent. Government, local authorities and the media continue to recommend individual behavioural changes or relatively minor lifestyle changes as the correct responses to climate change; but this type of advice fails to point out that drastic and far-reaching changes in energy sources, energy demand and use, infrastructure, industry and the way we produce and use products, and our lifestyles, are urgently needed.

The effects of climate chaos are becoming "headline news", from the record heat in Europe, the drought in the Horn of Africa, and the floods in Pakistan; these are clear signals of a climate changed future, in which those who have done least to cause the problems are hit hardest.

Western Europe's dependency on natural gas from the Russian Federation, and the threat of gas supplies being cut off or severely reduced, is a warning sign that all EU Member States, including Ireland, must relinquish our dependence on all fossil fuels, which should ultimately be kept in the ground. We are already witnessing how the increased cost of obtaining natural gas has resulted in higher prices for artificial fertiliser, leading to high cost of food, and ultimately threatening food security. Increasing our use of, and reliance on, natural gas as a temporary source of energy until countries can obtain all energy from renewable sources, is a policy fraught with danger; and we submit is one which Ireland should not follow.

The recovery of essential plant nutrients (nitrogen and phosphorus) lost through wastewater is also important when considering the need for synthetic fertilisers currently used in agriculture. Municipal wastewater treatment plants do not currently recover and recycle phosphorus and nitrogen for re-use in agriculture; and Zero Waste Alliance Ireland has consistently advocated that these vital substances should be conserved, recovered and re-used. The production of artificial fertilisers is a very energy-intensive process, with adverse effects on the climate; and therefore their replacement and curtailment of demand by a transition to regenerative or organic agriculture would have positive climate consequences.

As the Department has stated in its call for expert evidence, "*this decade will be critical if we are to address the climate and biodiversity crisis threatening our safe future on this planet*". Zero Waste Alliance Ireland fully supports that call, and we would add that Ireland is in a climate emergency, and it is of utmost importance that our Government takes immediate action.

2. ZERO WASTE ALLIANCE IRELAND (ZWAI)

Zero Waste Alliance Ireland is therefore pleased to have the opportunity to make this submission in response to the Department's public consultation on the 2023 Climate Action Plan; and at this point we consider that it is appropriate to describe briefly the background to our submission, especially the history, policy, strategy and activities of ZWAI.

2.1 Origin and Early Activities of ZWAI

Zero Waste Alliance Ireland (ZWAI), established in 1999, and registered as a company limited by guarantee in 2004, is a Non-Government Environmental Organisation (eNGO) and a registered charity.

During the past two decades, ZWAI has prepared and submitted to the Irish Government and to State Agencies many policy documents on waste management, on using resources sustainably, on promoting re-use, repair and recycling, and on development and implementation of the Circular Economy. During more recent years (2021 and 2022), ZWAI has additionally responded to the European Commission's call for submissions on a variety of topics in the areas of wastewater and solid wastes.

Our principal objectives are:

i) sharing information, ideas and contacts,

ii) finding and recommending environmentally sustainable and practical solutions for domestic, municipal, industrial and agricultural waste management in Ireland;

iii) lobbying Government and local authorities to implement environmentally sustainable waste management practices, including clean production, elimination of toxic substances, re-use, recycling, segregation of discarded materials at source, and other beneficial practices;

iv) lobbying Government to follow the best international practice and EU recommendations by introducing fiscal and economic measures designed to penalise the manufacturers of products which cannot be re-used, recycled or composted at the end of their useful lives, and to financially support companies making products which can be re-used, recycled or are made from recycled materials;

v) raising public awareness about the long-term damaging human and animal health and economic consequences of landfilling and of the destruction of potentially recyclable or re-usable materials by incineration;

vi) investigating, raising public awareness and lobbying Irish Government departments and agencies about our country's failure to take adequate

care of vulnerable and essential natural resources, including clean water and air, biodiversity, and soil;

vii) advocating changes in domestic and EU legislation to provide for more ecologically appropriate, environmentally sustainable and efficient uses of natural resources; and,

viii) maintaining contact and exchanging information with similar national networks in other countries, and with international zero waste organisations.

2.2 Our Basic Principles

Human communities must behave like natural ones, living comfortably within the natural flow of energy from the sun and plants, producing no wastes which cannot be recycled back into the earth's systems, and guided by new economic values which are in harmony with personal and ecological values.

In nature, the waste products of every living organism serve as raw materials to be transformed by other living creatures, or benefit the planet in other ways. Instead of organising systems that efficiently dispose of or recycle our waste, we need to design systems of production that have little or no waste to begin with.

There are no technical barriers to achieving a "zero waste society", only our habits, our greed as a society, and the current economic structures and policies which have led to the present environmental, social and economic difficulties.

"*Zero Waste*" is a realistic whole-system approach to addressing the problem of society's unsustainable resource flows – it encompasses waste elimination at source through product design and producer responsibility, together with waste reduction strategies further down the supply chain, such as cleaner production, product repairing, dismantling, recycling, re-use and composting.

ZWAI strongly believes that Ireland should have a policy of not sending to other countries our discarded materials for further treatment or recycling, particularly to developing countries where local populations are exposed to dioxins and other very toxic POPs. Relying on other countries' infrastructure to achieve our "recycling" targets is not acceptable from an ecological or societal perspective.

2.3 What We are Doing

One of our principal objectives is to encourage Irish government agencies, Irish local authorities and other organisations to develop and implement environmentally sustainable resources and waste management policies, especially resource efficiency, waste reduction and elimination; to promote reuse, repair and recycling, to develop and implement the Circular Economy, and to recognise that climate change and biodiversity loss are existential threats.

As an environmental NGO, and a not-for-profit company with charitable status since 2005, ZWAI also campaigns for the implementation of the UN Sustainable Development Goals, including (but not limited to) Goal 12, Responsible Consumption and Production; Goal 6, Clean Water and Sanitation (having particular regard to the need to avoid wasting water); and Goal 15, to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, to halt and reverse land degradation and halt biodiversity loss.

Zero Waste Alliance Ireland has prepared many policy documents on waste management, we continue to lobby the Government on the issue of sustainable resource management, and to express our concern at the failure to address Ireland's waste problems at a fundamental level.

In recent years, ZWAI has responded to many Irish and EU public consultations; and, in its role as an environmental NGO, has given presentations and made submissions on:

1. Proposed amendments to the Irish Building Regulations (February 2016 and October 2021);
2. Submission to the Department of Housing, Planning and Local Government on Water Services Policy (April 2018);
3. How the European Union has addressed the problem of plastic waste (March 2019);
4. Response to Irish public consultation on proposed new environmental levies (Nov-2019);
5. Submission on single-use plastic packaging by the food industry (November 2019);
6. Response to a public consultation by the Department of Housing, Planning and Local Government on significant water management issues in Ireland (August 2020);
7. Submission to Department of Environment, Climate and Communications on the proposed introduction of a deposit and return scheme (DRS) for beverage containers (November 2020), and on the legislative framework and scope of a Deposit Return Scheme in Ireland (May 2021);
8. Submission to the European Commission in response to a public consultation on the revision of the Urban Wastewater Treatment Directive (July 2021);
9. Submission to the Joint Oireachtas Committee on Environment and Climate Action on the general scheme of the Circular Economy Bill (October 2021);
10. Feedback to the European Commission in response to a public consultation on the proposed revision of the EU Regulation on Shipments of Waste (January 2022);

11. Feedback to the European Commission in response to a public consultation on protecting, sustainably managing and restoring EU soils, including comments on the updating of the 2006 EU Thematic Strategy on Soil (February 2022);

12. Feedback to the European Commission in response to public consultation on revision of the EU plant and forest reproductive material legislation (March 2022);

13. Providing feedback to the European Commission on the waste-related environmental performance of Ireland and certain other EU Member States, and the probability of their achieving the 2025 recycling targets and the 2035 landfill target (August 2022);

14. Providing feedback to the European Commission on the need to reduce the waste of unwanted or discarded food, at every stage of the food production process (August 2022);

15. Response to the European Commission's public consultation on an integrated action plan for the management of nutrients (August 2022);

16. Several presentations on transforming the construction industry so that it could become climate neutral; and,

17. Several submissions on the separation, recovery and reuse of the phosphorus and nitrogen content of wastewater (2019 to 2022).

It will be clear that ZWAI is primarily concerned with the very serious issue of discarded substances, materials and goods, whether from domestic, commercial or industrial sources, how these become "waste", and how such "waste" may be prevented by re-design along ecological principles. These same ecological principles can be applied to how we abstract and use water as a resource, to the volumes of wastewater produced as a consequence of these uses, and to many climate change mitigation and adaptation strategies.

ZWAI is represented on the Irish Government's Water Forum (An Fóram Uisce) by one of our Directors; ZWAI is a member of the **Irish Environmental Network** (IEN), and is funded by the Department of Communications, Climate Action and the Environment through the IEN.

In 2019 ZWAI became a full member of the **European Environment Bureau** (EEB); and a member of the **Waste Working Group** of the EEB. Through the EEB, we contribute to the development of European Union policy on waste and the Circular Economy. In 2021, the EEB established a **Task Force on the Built Environment**; ZWAI is a member of this group, and we contribute to discussions on sustainability of construction materials, buildings and on the built environment.

3. STEPS WHICH THE GOVERNMENT CAN TAKE TO ELIMINATE OR SEVERELY REDUCE GREENHOUSE GAS EMISSIONS AND CUT COSTS, AND THREE STEPS TO DRIVE A CULTURAL TRANSFORMATION AROUND CLIMATE CHANGE

Friends of the Earth Ireland, a non-governmental organisation similar to ZWAI, and whose work also includes policy analysis, has highlighted some key steps which we would like to endorse in this submission. We also expand upon some of the points highlighted within these steps, which we believe are also of utmost importance and which should be considered in the next Climate Action Plan for Ireland. These steps have been broken down into the four major emission sectors: transport, buildings, electricity and agriculture.

We have expanded these points by providing significant further information, suggestions and policy recommendations in each of these areas or topics.

3.1 Transport: Break our Dependency on Private Cars and Fossil Fuels for Personal Mobility and Freight Transport

1. Promote cycling, walking and buses to schools, with safe cycleways and footpaths, and free school buses for all students (see also 4.1 below);

2. Provide safe segregated cycleways along as many roads as possible; at present, cycling on many Irish rural roads is extremely dangerous, with restricted visibility, blind corners, absence of verges, and heavy (often travelling at high speed) traffic;

3. Provide improved, cheaper and more reliable public transport, especially electrified rail services to rural areas; including reopening of previously closed rail lines which served many towns throughout Ireland;

4. Provide single ticketing for bus and rail transport, so that commuters and users can use all forms of transport on a single ticket;

5. Ensure that transport providers schedule their services so that bus and rail services connect with each other; for example, a rail service to and from Dublin should connect with rural electrified minibus services bringing users to and from mainline railway stations, and thereby providing them with an integrated public transport network serving villages and rural areas;

6. Follow the example of Germany and Austria which provided for their citizens a single cheap ticket (monthly or annually) giving access to all forms of transport for a specified duration (see also 4.1 below);

7. Provide loans to people living in rural Ireland for the purchase of electric vehicles which are currently expensive and beyond the financial reach of many rural dwellers;

8. Prohibit the sale of fossil-fuelled cars from 2026, and gradually increase the amount of road tax on fossil-fuelled vehicles, while having regard to people living in rural areas who depend on having their own transport;

9. Consider introducing "road pricing", which is technically possible and would charge road users according to the location of their travel, the time of day and other variables; for example, a rural dweller travelling between country towns or villages in Ireland would pay only a few cents per kilometre, but a commuter driving to or from Dublin during peak hours would be charged a much higher rate per kilometre; this would be equivalent to the introduction of congestion charges in Dublin, but would have a much wider effect, and could be used to influence demand and reduce traffic congestion which is currently a problem in many Irish towns;

10. In Ireland, only a very small proportion of goods are moved by rail; almost all freight (including heavy bulk freight) is carried by heavy goods vehicles; and this is in direct contrast with nearly all other EU member states; therefore rail freight services should be re-introduced, especially on rail lines serving Ireland's seaports (at one time, nearly all freight arriving by sea into Foynes, Dublin and Cork was carried onwards by rail; but the roads to these ports are now congested by heavy goods vehicles); and,

11. Transport Infrastructure Ireland should implement a policy which recognises that carrying freight by rail is at least five times more energy-efficient then carrying the same quantity of freight by road.

3.2 Buildings: Keep People Warm and Reduce our Inappropriate Dependence On Fossil Fuels for Heating

12. Provide financial support for people who are currently dependent on fossil fuels for heating their homes, and who are suffering from "fuel poverty"; insulate the most deserving people from increases in fossil fuel prices;

13. Natural gas has served Ireland very well for at least three decades, its introduction resulted in greatly improved air quality in Dublin, Cork, Belfast and other cities where people previously burned coal; but now the time has come to replace fossil gas by other renewable sources of heat;

14. Very large quantities of organic material are produced in Ireland which could serve as raw materials for the production of anaerobically generated methane gas; these include pig slurry, cattle slurry, organic wastes from industry, and other digestible materials; if these were to be utilised (as is done extensively in Denmark) they would provide a source of renewable

gas for heating; however, it must be remembered that methane is a more damaging climate-changing greenhouse gas than carbon dioxide, and therefore the widespread production of methane must be considered with caution;

15. Domestic home heating oil is also used extensively in Ireland, particularly in rural areas; and householders should be encouraged to change from this form of heating to air-to-water or ground-source heat pumps using electricity from renewable sources;

16. Large-scale retrofitting of homes and other buildings to improve their BER rating should be speeded up, and financial support (already provided by SEAI) should be greatly improved, especially for deep retrofitting to include heat recovery ventilation, and room temperature control;

17. Commonly available renewable energy for heating homes in rural areas includes the use of wood-fired stoves, burning locally available timber from forest thinnings and other sources; however, this form of heating should be regarded as inappropriate in towns, because of the smoke produced, and the resulting adverse effects on air quality and human health;

3.3 Buildings: Reduce the Carbon Footprint of Building Construction and Building Services

18. Promote, and provide financial support for, building in timber, which is an excellent way to store carbon for at least two or three generations, as is commonly done in Scandinavian and Baltic countries; in Ireland at present, building in timber is frowned on or disregarded by local authority planners, with the result that we have a much smaller number proportionally of timber buildings than in other countries;

19. Recent construction research and pilot scale projects in Scandinavian countries have shown that it is possible, safe and economically viable to construct up to 10 storeys high buildings in timber;

20. Remove the current financial incentive given by EU Emissions Trading Scheme (ETS) to the cement industry to burn large quantities of potentially recyclable materials, especially plastic and paper, which are regarded as "renewable fuels"; burning of these materials is a disincentive to recycling, and provides the cement industry with a relatively cheap source of heat;

21. Government policy on construction materials should take account of the fact that the production of cement hits the climate with a double effect: the intense heat required to produce cement requires large quantities of fuel, the burning of which generates significant quantities of greenhouse gases; while, at the same time, the chemical reaction between the shale and

limestone at a temperature of 1,400°C generates further quantities of carbon dioxide, resulting in further adverse effect on the climate;

22. Government policy on construction materials should encourage the use of hemp-lime, rammed clay or earth, stone or other locally available materials which do not require significant transportation;

23. Prohibit the demolition of buildings unless it can be shown conclusively on scientific or technical evidence that they cannot be reused or repurposed; but if reusing or repurposing of the building is not possible, it should be deconstructed in a way that saves and reuses its materials and components as far as possible; in other words, the construction industry must be forced to embrace the circular economy;

24. Financial support should be provided for the introduction and installation of rainwater harvesting systems in all new buildings, instead of the current attitude of Irish Water which regards rainwater as an inconvenient substance which fills up sewers and surface water drainage systems;

25. Financial support should be provided for the installation of urine-separating toilets in new buildings, and for the storage and collection of urine as an excellent source of phosphorus and nitrogen which are currently in short supply for the production of artificial fertilisers;

26. During the past two decades, the construction of large-scale housing on sites remote from towns and cities, and not served by public transport, has given rise to long-distance commuting to an extent unknown in other EU Member States; in future, all new housing estates and associated developments such as shopping centres should be permitted only within five or ten minutes walking distance of a transportation node, i.e., close to bus and rail interchange locations;

27. New social housing should be based on the above principles of minimal carbon footprint, use of renewable energy for heating, excellent insulation standards, harvesting of rainwater, urine separation; and, where possible, giving people the opportunity to grow some fruit or vegetables for domestic or local use; and,

28. The government should consider, and should seek public support for the introduction of a new Article in the Constitution which would give people the right to having a home which would support their well-being and basic needs.

3.4 Electricity: Ramp up Renewables, Reduce Demand and Guarantee Basic Needs

29. If every suitable rooftop in Ireland were to be equipped with solar photovoltaic panels generating renewable electricity, this would have an incredibly positive affect on electricity demand from the national grid;

30. A feed-in tariff was promised as long ago as 2015, but it is only now being offered to micro-producers of renewable electricity, and the payments to be given or promised are hedged with restrictions; Government and Eirgrid policy should consider micro-producers of electricity as welcome suppliers who would contribute to the stability of the network as a whole; and these micro-producers should not be treated as competitors;

31. Electricity users (households, small businesses, farmers and others) should be encouraged to modify their demand for electricity by using the facility of smart metering which is now available; so that they can save costs by confining heavy demand equipment to times of the day or night when electricity charges per kilowatt hour are much less; and in this way, the peaks and valleys of the daily demand curve can be reduced;

32. For people who cannot install solar photovoltaic, for example people living in apartments or in houses which do not have suitable roofs, a state company should be established, or a private company encouraged, which would allow customers to purchase or rent (lease) an agreed area of solar panels which would supply these customers with electricity; and if more electricity was produced by the panels which they owned or leased, the excess could be sold back to the company, or "banked" for future use; or, if the area of the panels produced less electricity than needed, the customer would be able purchase the shortfall at a reasonable price; and,

33. The current Government policy to encourage the location of data centres in Ireland should be changed so as to discourage any more of these developments unless it can be shown that the excess heat produced can be used to heat homes or businesses in their immediate vicinity; and the practice of data centres purchasing electricity directly from producers of renewable electricity should be halted.

3.5 Agriculture and Land Use: Reduce Chemical Fertilizer, Nitrogen and Phosphorous Recovery from Wastewater Treatment Plants, Speed Up and Extend Rewetting and Revegetation of Peatlands and Bogs

34. Reduce excessive use of synthetic chemical fertilisers, which are causing eutrophication of surface waters and groundwater as a result of run-off from agricultural lands;

35. Recover nitrogen and phosphorous from wastewater treatment plants to produce struvite which can be used as an alternative or replacement for synthetic fertilizers;

36. Embark on a major nationwide program of rewetting and re-vegetating many bogs and peatlands, especially those worked-out peatlands which are in the ownership of companies which are continuing to extract and remove milled peat for horticultural and other purposes; these peatlands are currently carbon emitters, but if they are rewetted and revegetated with sphagnum moss they can become major absorbers and sequesters of carbon, for the benefit of the climate; and,

37. Government policy should reconsider the promotion of large-scale wind farming on extensive peatlands in the Midlands and on upland bogs, as the construction of such windfarms causes damage to the active peat layer, and reduces or eliminates significant areas which would otherwise serve the vital purpose of carbon sequestration.

3.6 Cultural Transformation: Treat Pollution Like We Treat Smoking; Promote a More Healthy Diet

38. Ban fossil fuel advertising, and insist on a public information and education campaign to raise awareness of the urgent need to eliminate our dependence on, and use of, fossil fuels;

39. Promote sustainable diets, as shown by the EAT-Lancet Commission research and report on a sustainable diet for a sustainable planet; this science-based and nutritionally excellent diet will lead to a marked reduction in meat-eating, and the freeing up of land currently used for grazing livestock, so that this land can be transformed to other uses which would benefit the climate;

40. Encourage "farmers markets" where locally produced or grown food can be sold at prices equivalent to, or a lower than, the same items sold in supermarkets; in other EU member states and in Asian and African countries, food shopping in local markets is much less costly than buying the same food in a large supermarket; but in Ireland the reverse is the case, with large multinational supermarkets selling imported or Irish foods (often with preservatives added to improve shelf-life) add prices less than in local farmers markets.

Points 1 to 40 above are based on a smaller original list of points suggested by Friends of the Earth, to which we have added many further points, together with significant further information and policy suggestions.

In section 4 below, we expand further on some of the above points.

4. FURTHER ACTIONS WHICH GOVERNMENT CAN TAKE TO IMPROVE THE DRAFT CLIMATE ACTION PLAN

There may be some duplication with the points in section 3 above, and therefore it is best if both sections are considered together.

4.1 Transport: Reduce our Dependence on Private Cars and Fossil Fuel for Personal Mobility

Cycling, walking and buses to school

- Make it possible, safe and convenient for every child to go to school without using a car by September 2023;
    - Guaranteeing a free school bus place for all children who live more than 1km away from school; invest in a fleet of electric buses and mini-buses;
    - Improve Ireland's rail network and electrify trains;
    - Building safe routes to school for cycling and walking within a 3km radius of every school; and,
    - Closing more school streets to cars and use one way systems to make arrival at school on bike and foot as safe as possible and ban engine idling near schools.

More, cheaper public transport

- The reductions in public transport fares have been popular in Ireland, but Germany's €9-a-month scheme was a runaway success. Trial a similar scheme here for 6 months. Meanwhile, accelerate the roll out of Bus Connects and develop a rural transport plan based on a vision of "*every village, every hour*".

EV loans in rural Ireland, congestion charges in Dublin

- Immediately introduce a state-backed interest-free loan for rural households to buy EVs. Get the most polluting cars, especially SUVs, off our city streets as soon as possible. Introduce a congestion charge in Dublin immediately that escalates by emissions and weight and extend it to other urban areas as more public transport comes on stream.
- See also the road pricing suggestions in paragraph 9 above.

No new fossil fuel cars from 2026

- End the sale of new internal combustion engines (ICE) cars within 3 years. Start by immediately raising VRT on cars based on emissions and weight, so that the highest band is at €5,000 by 2025. Ban the sale of new ICE cars from 2026.

4.2 Buildings: Keep People Warm and Reduce our Dependence on Fossil Fuels for Heating

Insulate people from fossil fuel prices

- Insulate 100,000 homes in 2023, prioritising cheaper measures that save energy and money quickly. The focus must be on reaching those most at risk of energy poverty and those who rely on coal and turf. Don't wait for them to apply to SEAI for a grant, sit down with the likes of the SVP and Age Action to plan a coordinated outreach campaign offering wrap-around supports for retrofitting.

Ban the use of fossil gas

- Ban fossil fuel boilers in new buildings in 2023. Ban the further expansion of the gas distribution network from 2024. Ban the sale of new fossil gas boilers for any building by 2028. Phase out fossil fuel boilers in existing buildings, prioritising residential homes, by 2033. Ensure that everyone has access alternative low-carbon heating options.

Introduce rainwater harvesting systems for all new buildings

- This would dramatically reduce or wastage of clean drinking water for domestic uses including toilet flushing systems, watering land during hotter weather periods, garden taps, etc.

Transform social housing

- Retrofit and install fossil-free heating in all social housing stock to B2, and install solar PV on all feasible social housing units, by 2030.

4.3 Electricity: Ramp up Renewables, Reduce Demand and Guarantee Basic Needs

A rooftop revolution

- Drive a solar PV rooftop revolution: Put solar panels on the roof of every school by 2025, and on the roofs of 1 million homes by 2030.

No more data centres

- Introduce a moratorium on new data centres connecting to the electricity grid until electricity system pressures and gas lock-in risks are transparently and comprehensively addressed.

A right to energy

- Examine the idea of a "Basic Energy Guarantee" as proposed by the New Economics Foundation in Britain and Age Action in Ireland. Every household would get a basic allowance of electricity and gas, at a low rate for everyone, and free for older people and welfare recipients. Usage at above that level would be at the very high market rates or more; aim to have this in place by October 2023.

4.4 Agriculture and Land Use: Reduce Chemical Fertilizer, Speed Up and Extend Rewetting and Revegetation of Peatlands and Bogs

Reduce chemical fertilizers

- The key to reducing air, water and climate pollution from agriculture is reducing the use of chemical nitrogen fertiliser, which grew 28% after 2010 to 408,000 tonnes a year. It has fallen this year due to the skyrocketing price of the fossil fuels used to make it. The Government must ensure that chemical fertiliser use does not rise again in 2023 or 2024 and falls to 2010 levels no later than 2025, and continues to decline steadily to less than 200,000 tonnes by 2030.

Recover nitrogen and phosphorous from wastewater treatment plants to produce struvite which can in turn be used as an alternative to synthetic fertilizers

- The alarming decline in phosphate raw materials and increase in eutrophication has escalated interest in struvite research. Struvite can be used for fertilising land for agricultural uses, with heavy metals and pharmaceuticals removed using plants which can in turn be composted.

- Studies have shown that mineral phosphorus from Morocco will eventually become the only available phosphorus supply available globally, but this resource is contaminated with cadmium which will only add further to the cost of decontamination. Phosphorus can relatively easily be recovered from our wastewater.

Rewet peat soils

- Reward landowners for active maintenance of ecosystems, including rewetting of agricultural peatlands

4.5 Cultural Transformation: Treat Pollution Like we Treat Smoking

Ban fossil fuel advertising

- Ban ads for fossil fuels, ads from companies or public bodies involved in fossil fuel production or distribution and ads about cars, boilers or flights that use fossil fuels.

A public information campaign

- Develop and launch a comprehensive long-term Government information campaign on climate and energy, as we have done on road safety and smoking over decades ads.

Promote sustainable diets

- Mandate the Food Safety Authority of Ireland to revise their "Healthy Eating Guidelines" to take into account of water, air and climate pollution impacts of different food types.

5. CONCLUDING REMARKS

Past and present Irish Government policies have proven to be inadequate for addressing climate change and for implementing the necessary rapid and appropriately targeted actions. The 2023 Climate Action Plan must be free of distortions caused by sectoral interests, by influential industrial lobbying, and must not be influenced by individuals or organisations who fear change, or who deny the urgency needed for action to mitigate accelerating climate change.

The latest scientific evidence is that "tipping points" have already been reached and that a significant degree of climate change, including sea level rise, is most likely to be unstoppable. Even though Ireland may be less detrimentally affected than many other countries, the damaging effects of climate change are being felt globally, and will have repercussions in Ireland. Global food shortages, 100 million climate refugees and other predictions by the United Nations will affect our living standards and finances.

Wealthy countries, and these include Ireland, are being strongly criticised for failing to contribute to the needs of those countries which will be most damaged, and whose citizens will suffer most as result of climate change caused by our lifestyles. These issues must be included in the 2023 Climate Action Plan; and therefore all government departments and agencies must express full commitment to it; there should be no excuses for lack of action, for denial, or for placing the responsibility on individual citizens for climate mitigation actions which they cannot take without the help of government.

Actions at individual levels, and at community level, and in each village, town, city and rural townland are important; and therefore the raising of peoples' awareness is a vital task which must be a key element of the 2023 Climate Action Plan.

In addition to the targets to be achieved by 2030, the Climate Action Plan should include "milestones" to be achieved each year, so that progress can be measured. Without accurate measuring tools (as every carpenter knows), the plan would soon fall apart in a mass of disagreement about who has done what, and how much has been done, or not done. Scientific rigour and evidence-based policies must be the rule, while allowing for changes to be made as new information comes to light, new technologies are developed, and society accepts what has to be done, even if the actions are challenging or uncomfortable.

Finally, addressing climate change is an area where the cost of doing nothing greatly exceeds the cost of mitigation and adaptation.

With the implementation of these suggested measures, and other measures, we trust Ireland will be able to meet the necessary targets by 2030.

[redacted]

Zero Waste Alliance Ireland

This submission was initially researched and written by [redacted] with contributions by [redacted] who enlarged and extended the original text, and edited the submission.

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