Draft NECP 2021-2030 Consultation
Strategic Energy Policy Division
Department of Communications Climate Action & Environment
29-31 Adelaide Road
Dublin 2

Sent via email to: energy.consultation@dccaegov.ie

22nd February 2019

Re: Submission on Ireland’s Draft National Energy and Climate Plan 2021-2030

Dear Sir/Madam,

The An Taisce Climate Committee welcomes the opportunity to comment on the Draft National Energy and Climate Plan 2021-2030.

Please acknowledge receipt of our submission.

Kind regards,

Philip Kearney
Chair of the An Taisce Climate Committee
An Taisce's Response to the DCCAE Public Consultation on:

Ireland’s Draft National Energy and Climate Plan 2021-2030

February 2019
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An Taisce’s analysis of the Draft NECP is given below. Also attached is our recent submission to the Joint Oireachtas Committee on Climate Action, Getting Ireland’s climate action "back on track": What exactly does it mean? (An Taisce, 2019).

1. Key Points in this Submission

- Ireland’s Draft National Energy and Climate Plan (NECP) fails to deliver energy or agriculture emission reduction, or any coherent climate action aligned with commitment to the Paris Agreement. Therefore, it requires urgent revision by the end of 2019 to ensure that the finalised NECP includes ambitious plans for substantial and sustained reductions in annual GHG emissions.
- The Draft NECP (hereafter “the Draft”) shows no realisation in government that greenhouse gas (GHG) emissions must now go down very fast, no matter what. The climate system does not “care” about economics or population, only about accumulating amounts of long-lived climate pollutants, carbon dioxide and nitrous oxide, and changes in emission rates of shorter-lived GHGs such as methane and black carbon. This is what a mitigation imperative means.
- All four Draft scenarios fail by approximately only ‘flat-lining’ total annual fossil fuel CO₂ emissions from 2015 to 2040, thereby continuing to add about the same amount of CO₂ every year to accumulate further in the atmosphere.
- The Draft is not constrained by any stated quota limit to cumulative CO₂, to be aligned with a fair share of the global carbon budget for the Paris temperature objectives, therefore it is not a climate action plan that is coherent with the EU’s or Ireland’s own climate plan.
- The Draft even fails to show scenarios coherent with Ireland’s existing climate policy, widely understood as a linear annual reduction in CO₂ to at least an 80% reduction in 2050 compared to 1990 (see “back on track” document).
- The Draft’s data projections show no reduction in annual GHG emissions from agriculture and land use to 2035 – methane and nitrous oxide emissions from livestock and nitrogen fertiliser use increase. Therefore no approach to carbon neutrality in this sector is shown nor any contribution from it to overall decarbonisation as required by the National Policy Position.
- The Draft should assume emission reduction as a driving imperative that must be met by economy-energy modelling within the ‘fair share’ carbon budget limits of the Paris objectives. But instead, contrary to the European Governance Regulation (EU-GR) requirements, Ireland’s Draft NECP assumes that business-as-usual demand growth will be met without decarbonisation.
- The Draft shows a move to lower carbon intensity fossil energy in energy supply – less coal and peat, but much more gas and little change in oil use. Commitment to

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1 Back on Track: [http://tinyurl.com/y8n6vfwe](http://tinyurl.com/y8n6vfwe)
Paris requires urgent reductions in aggregate oil and gas CO\textsubscript{2} emissions as well as from coal and peat.

- The NECP proposes some exploratory investigation of the potential for deployment of (still high cost and immature) carbon capture and storage technologies (CCS), but the scale and timing is not quantified in detail, the scope is limited to natural gas and industrial process emissions only (i.e. not oil) and certainly would remain minimal in the period to at least 2030. That being the case, deep emissions reduction are already urgently required within that period that can only be effectively achieved by commensurate absolute reductions in consumption of all fossil fuels beginning immediately.

- The Draft is based on projected increases in emissions from agriculture, which cannot be offset by mitigation in other less prolific emitting sectors. As such the Draft is a plan for increases which breach the linear reduction pathway needed in the 2020-2030 period and exposes the State to substantial and potentially punitive compliance costs. This is not a responsible course of action for government to advocate.

- The Citizens’ Assembly recommendations should have been addressed in the Draft and must be in the final report, the urgency now needed for climate action requires it.

- Stranded asset investments in gas infrastructure such as the proposed Shannon LNG terminal must not be pursued. It is a waste of time and resources to invest in a high carbon fuel that only adds to unsustainable energy and climate insecurity.

- In terms of Climate Action Network Europe’s five pillars for transformative NECPs\textsuperscript{3} we find that the Draft: fails to deliver sufficient ambition; does not meet a long-term Paris check; has policies that are incoherent and lack consistency even with existing plans; uses technical loopholes (undermining climate mitigation effectiveness) and fails to report all fossil fuel subsidies.

- The Draft was published in a barely readable light blue font with a large ‘DRAFT’ watermark. This is a basic communications error that needs to be avoided in future,. Even a draft plan needs to be in an easily readable black font with no watermark.

- On transparency, DCCAE’s NECP consultations have shown a welcome increased commitment to publishing data (as required by the EU-GR). However, the Draft fails to show how views were taken into account if at all. For example the basic point that limiting future cumulative CO\textsubscript{2} is core to climate action has been ignored although it is clearly made in the EU-GR and in An Taisce’s submission to the initial NECP consultation\textsuperscript{4}.


\textsuperscript{4} An Taisce submission on initial NECP consultation: https://docs.google.com/document/d/1RHz4wcWSTvfEf9Wub_vWh1h-01wMwyAmQ3pyes2UP1Q/edit
2. An Taisce Analysis of the Four NECP Energy Scenarios

Firstly, we note that the Draft shows four scenarios (based on high/low oil price and existing/additional measures). This will likely be rejected by the European Commission as the NECP template allows for two scenarios only. Moreover, as further outlined below, the Draft scenarios cannot be said to deliver material emission reductions at all, let alone reductions at a rate aligned with a European Union ”long-term strategy for greenhouse gas emissions reduction in accordance with the Paris Agreement, taking into account the Member States' draft integrated national energy and climate plans” (EU-GR Article 15).

The charts below (Figures 1-3) show national fossil fuel CO² emissions for the 4 NECP scenarios, annual and cumulative, and include representative Paris-aligned (green) and linear NPP/NMP (purple) pathways. The finalised NECP should include such charts otherwise it will not show the emissions pathways of the scenarios that critically determine future cumulative energy CO₂ emissions.

An Taisce have calculated the Draft’s scenario emissions using the fossil fuel primary energy data given in the Draft. A Paris-aligned pathway is now nearly impossible without extreme near-term decarbonisation rates of fossil energy reduction (Glynn et al., 2019⁵). Therefore even limiting the overshoot of Ireland's estimated remaining "well below 2ºC" carbon quota requires deep near-term decarbonisation including significant demand reduction until near-zero emissions energy is available and a period of net negative emissions following net zero annual CO₂ emissions (McMullin et al, 2019⁶).

Given that this science on Paris-aligned emission pathways and carbon quota is now available and that the EU-GR (in the preamble and Article 15) specifically outlines the need for increased ambition and the planning required to achieve negative emissions it is alarming that the Draft entirely fails to address these critically important issues. It therefore completely fails to align Ireland’s NECP with Ireland’s or the EU’s commitment to the Paris Agreement.

It is particularly concerning that NECP 1 shows the coal-fired Moneypoint power station staying open until 2031 despite previous government commitments to close it by 2025. It seems this scenario ignores this existing measure. Keeping Moneypoint open should be an option even in a scenario that only models existing measures?

Figure 4 shows a five year energy CO₂ carbon budget for 2019-2023 now needed to get “back on track” with the National Policy Position linear pathway (An Taisce, 2019). Limiting cumulative emissions requires immediate action otherwise efforts will fail.

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⁵ Glynn et al., 2019: https://www.tandfonline.com/doi/abs/10.1080/14693062.2018.1464893
⁶ McMullin et al, 2019: https://tinyurl.com/IENETS-NCQ-CCS-CDR
Figure 1: Annual fossil energy emissions in the four Draft NECP scenarios compared with: 'flatlining' emissions from the Paris Agreement year of 2015, a linear National Policy Position pathway, and an exponential reduction curve meeting a Paris-aligned national CO² quota (NCQ) for Ireland without overshoot.
Figure 2: Cumulative fossil energy emissions in the four Draft NECP scenarios compared with: ‘flatlining’ emissions from the Paris Agreement year of 2015, a linear National Policy Position pathway, and an exponential reduction curve meeting a Paris-aligned national CO$_2$ quota (NCQ) for Ireland without overshoot. After overshoot a period of negative emissions would be needed to return to the quota level.
Figure 3: Total and By-Fuel Primary Energy Demand for the NECP 1 scenario, assuming high oil prices and existing measures. Right axis and black line show total energy demand. Left axis shows individual fuels and renewables.
The Draft notes the National Development Plan and the €500m Climate Action Fund. The fact is that these monies will only be counted as effective climate mitigation if the actual pathway achieved shows substantial and sustained reductions in total emissions. If, as seems clear in many cases, the NDP goes toward funding counterproductive projects that support increased emissions (roads and airports) or focuses on cost-saving efficiencies that free up monies to cause more emissions, then efforts to finance climate action will be cancelled out and rendered futile. Committing to spending monies is not enough, actual and rapid year on year emission reductions are required, starting immediately. Ireland’s failure to act on climate to date means that much harder choices now need to be made, such as reducing high input and high emissions activities like building data centres, frequent flying or ruminant numbers. The Draft NECP fails to understand this reality making future choices and impacts ever more difficult.

Figure 4: An Taisce analysis showing five year energy CO\textsubscript{2} carbon budget for 2019-2023 needed to get “back on track” with the National Policy Position linear pathway (An Taisce, 2019)

Ireland: 5 year carbon budget for 2019-2023 to get back on track (NPP): Total = 169 MtCO\textsubscript{2}

Average 2019-2023 to get climate action back on track: -2.3 MtCO\textsubscript{2}/year

Need to cut fossil fuel CO\textsubscript{2} by 6% to 7% per year

Even if ‘back on track’ by 2023, Ireland would still be 37 MtCO\textsubscript{2} in excess of linear 2014-2050 NPP cumulative CO\textsubscript{2} budget
3. Agriculture and Land-Use: Contrary to policy the Draft NECP fails to set a carbon neutrality pathway

The National Policy Position (NPP) objective as acknowledged by the Draft NECP (p. 5) is for Ireland’s objective “to become carbon neutral in the agricultural and land use sectors, including forestry, by 2050” with an approach “which does not compromise capacity for sustainable food production”. (See the An Taisce, 2019, “back on track” document showing the linear pathway to the carbon neutrality target.) However, the Draft NECP fails to acknowledge the complete failure of current policy to set a course for this objective, as is evident from the land use data supplied in the NECP Annex I Part 2 Excel sheet. Animal numbers and increased nitrogen fertiliser use increase agriculture emissions to 2035. LULUCF emissions also increase from 3.5 MtCO$_2$/yr to 5.9 MtCO$_2$/yr by 2040, particularly due to forest harvest rates exceeding the relevant previous planting rates and due to ongoing carbon loss from land due to drainage of organic soils and large-scale extraction of peat for energy and horticultural use.

![Figure 5: Teagasc projection of Nitrogen fertiliser use for modelled abatement scenarios (Teagasc 2018). Added black arrow shows rise to 2018 value of 408,000 tonnes (up 38% from the 2012 value of 296,000 tonnes), a far faster rise than shown by the modelling or by the submitted Draft NECP Annex I data.](image)

Unacceptably, the NECP scenarios using data supplied by Teagasc, all show identical values for projected data under both WEM and WAM scenarios, indicating that Ireland does not intend to manage these emissions at all and has no declared plan for WAM ambition, despite the declared intention to set a NPP-aligned pathway and despite the fact that the non-ETS Climate Action Regulation target, including agriculture, must be met. The Teagasc mitigation abatement scenario modelling has already failed to show the extraordinary acceleration in
emissions and nitrogen fertiliser use that is actually taking place. Therefore DCCAE need to require Teagasc to deliver modelling that reflects this reality (as per Figure 5) and to show how enforced policy could ensure that additional measures in agricultural mitigation will deliver year on year emission reductions. Intentionally increasing methane emissions is resulting in a serious increase in Ireland’s responsibility for global warming. Serious climate action policy in agriculture and land use (including anaerobic digestion) will require caps on ruminant production and particularly on limiting nitrogen fertiliser use.

From 2000 to 2010, Ireland did in fact steadily decrease agricultural emissions due to reduced subsidies and the milk quota that provided limits on production enabling efficiencies to result in emission reduction (fewer dairy cows producing the same amount of milk per year and reductions in nitrogen fertiliser use). This pathway was on course for agriculture to meet a 20% reduction in its emissions by 2020. However, all of these savings (relative to the reference year of 2005) have now been undone by expansionary agriculture policy. This is dominated by increased dairy production, up over 50%, driven by a 38% increase in nitrogen fertiliser use since 2012 that has boosted grass production to support a much larger herd. Increased milk production is strongly coupled to increased nitrous oxide soil emissions, increased ammonia air pollution (in excess of EU limits) and increased methane emissions from cattle digestion of increased amounts of grass and imported feed.

Emissions from Agriculture (corresponding to IPCC Sector 3.) are projected to increase by 9.3% and 9.8% by 2030 and 2040 respectively compared to 2005 levels. Emissions from LULUCF are projected to increase by 21.5% and 19% by 2030 and 2040 respectively compared to 2016 levels. Draft NECP, p197.

This statement shows an abject failure to meet Ireland’s own NPP target pathway or to meet the EU 2030 non-ETS target. The final NECP needs to show measures that do set a path for climate neutrality. Increasing total fertiliser use as has occurred and as is further proposed for agriculture and biogas production would also seem opposite to the acknowledged need to reduce the N-fertiliser loads that result in nitrate water pollution and ammonia pollution (already exceeding EU limits). Placing limits or progressively higher taxation on total nitrogen fertiliser imports would seems to be advisable in order to realise land use efficiency in terms of carbon opportunity costs before making the planned large scale investments in biogas production from increased grass supply. This seems even more important given that the planetary boundary in the nitrogen cycle has already been far exceeded by human activity (Rockström et al., 2009) and Ireland is already exceeding nitrate limits through ongoing nitrates derogations from EU regulations. Studies of dietary change required for future sustainable global food supply also strongly justify reserving nitrogen fertiliser for direct-to-human food production rather than using it in low-efficiency conversion to produce feedstock for animal agriculture or anaerobic digestion (EAT-Lancet, 2019).

4. Societal shift requires large-scale and ongoing engagement that actually results in cuts in emissions

The finalised NECP urgently needs to address the reality that far greater citizen awareness and understanding of climate change is essential to ensuring effective societal system-level
responses in this climate emergency. Ongoing media campaigns similar to those for drink driving and smoking should be run. It is not adequate to run a schools programme and neglect to ensure adults are truly aware and really understand the extent of the crisis. It is remiss to educate young people on the climate crisis and allow them see the previous generations treat it so frivolously thereby compromising their future.

As highlighted in the Draft there are many plans for community energy. These should be acted upon with urgency as community-based energy generation has the potential to transform citizen engagement with and understanding of our energy system. While many new large scale energy developments are being contested the easy win is small scale, community-based energy production that benefits the community. Coupled with local (where possible) or regional storage and distribution, more of the national grid is available to provide power elsewhere.

Greater efforts must be made to promote and engage communities with local power generation as well as efficiency measures. While the SEAI have responsibility for the many support programmes in Ireland there is need for more locally-based facilitators, especially in rural areas, to raise awareness and assist with a local vision. Coupled with a national media campaign more people will engage and support new renewable, community-based energy infrastructure.

5. Rapid transition from fossil fuel use including limiting gas and oil needs to start now

Official Ireland needs to acknowledge the wishes of the Citizens’ Assembly and the wider population and transition rapidly away from fossil fuel use. The system is imploding while it clings to an out-dated practice of burning fossil fuel.

Exploration for fossil fuel and extraction of peat must stop immediately with investment in transition for all workers involved. On a global level, to the greatest extent possible, reserves of fossil fuel and peat must be kept in the ground. The relevant government department dealing with exploration should be redirected to zero-carbon renewables deployment, community energy and supporting the research and development of local energy solutions.

Development of new fossil fuel infrastructure must not be permitted. Instead the money available for infrastructure must be spent on offshore wind and smaller scale renewable energy projects which, when properly managed to extend throughout the whole country, will limit the need for large contentious onshore projects. Combined with adequate storage and distribution, it can ensure greater energy security at a regional level.

Shannon LNG infrastructure must not be pursued. It is a waste of time and resources to continue to ignore the wishes of the local population, the growing climate-awareness of the public and the reality of sustainable energy security, which depends on avoiding deployment of new fossil fuel infrastructure (Davis and Socolow, 2014; McMullin, et al., 2018⁷). Natural gas (75% fossil carbon by mass) is a ‘natural’ substance just like coal, peat and oil. Burning

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any of them - in Ireland or elsewhere - is rapidly taking us further into a minefield of climate instability. Given the imminent overshoot of Ireland’s Paris-aligned carbon quota it is now too late for natural gas to act as a ‘bridge’ energy source,

6. A low carbon Energy Union requires strong citizen support and urgent low carbon energy deployment

The Draft has too much emphasis on Europe having the potential to enable Ireland’s transition to a low carbon future just like the single market aided economic transition. Similar to the economic crisis however, such dependence will leave Ireland vulnerable to energy shocks. Policies to support community scale energy generation and distribution systems can aid citizen commitment to transition and bolster energy security. An energy crisis across Europe will expose our lack of resilience just as the economic crisis did unless Ireland develops a secure energy system, primarily based on wind and solar (with energy storage to cover intermittency) with strong citizen support and involvement at local level.

7. An NECP that respects civil society input must address all of the Citizens’ Assembly proposals

The Draft takes no account of the recommendations of the Citizens’ Assembly. Even though the Joint Oireachtas Committee on Climate Action has not yet reported on the Citizens’ Assembly recommendations, this does not excuse the Draft’s shocking omission of the deepest engagement on climate change with Irish citizens yet seen. The Assembly’s deliberative democracy process has provided a very strong indication of informed citizen support for increased urgency and strong ambition in delivering effective climate policy, yet the Draft fails to note or respond to any of its recommendations as urgency demands.

The following recommendations were made by the Assembly and must be included in the finalised National Energy & Climate Plan.

1. 97% of the Members recommended that to ensure climate change is at the centre of policy-making in Ireland, as a matter of urgency a new or existing independent body should be resourced appropriately, operate in an open and transparent manner, and be given a broad range of new functions and powers in legislation to urgently address climate change.

2. 100% of the Members recommended that the State should take a leadership role in addressing climate change through mitigation measures, including, for example, retrofitting public buildings, having low carbon public vehicles, renewable generation on public buildings and through adaptation measures including, for example, increasing the resilience of public land and infrastructure.

3. 80% of the Members said they would be willing to pay higher taxes on carbon intensive activities.

4. 96% of the Members recommended that the State should undertake a comprehensive assessment of the vulnerability of all critical infrastructure (including energy, transport, built environment, water and communications) with a view to building resilience to ongoing climate change and extreme weather events. The outcome of this assessment should be implemented. Recognising the significant costs that the State would bear in the event of failure of critical infrastructure, spending on infrastructure should be prioritised to take account of this.

5. 99% of the Members recommended that the State should enable, through legislation, the selling back into the grid of electricity from micro-generation by private citizens (for example energy from solar panels or wind turbines on people’s homes or land) at a price which is at least equivalent to the wholesale price.

6. 100% of the Members recommended that the State should act to ensure the greatest possible levels of community ownership in all future renewable energy projects by encouraging communities to develop their own projects and by requiring that developer-led projects make share offers to communities to encourage greater local involvement and ownership.

7. 97% of the Members recommended that the State should end all subsidies for peat extraction and instead spend that money on peat bog restoration and making proper provision for the protection of the rights of the workers impacted with the majority 61% recommending that the State should end all subsidies on a phased basis over 5 years.

8. 93% of the Members recommended that the number of bus lanes, cycling lanes and park and ride facilities should be greatly increased in the next five years, and much greater priority should be given to these modes over private car use.

9. 96% of the Members recommended that the State should immediately take many steps to support the transition to electric vehicles.

10. 92% of the Members recommended that the State should prioritise the expansion of public transport spending over new road infrastructure spending at a ratio of no less than 2-to-1 to facilitate the broader availability and uptake of public transport options with attention to rural areas.

11. 89% of the Members recommended that there should be a tax on greenhouse gas (GHG) emissions from agriculture. There should be rewards for the farmer for land management that sequesters carbon. Any resulting revenue should be reinvested to support climate friendly agricultural practices.

12. 93% of the Members recommended the State should introduce a standard form of mandatory measurement and reporting of food waste at every level of the food distribution and supply chain, with the objective of reducing food waste in the future.

13. 99% of the Members recommended that the State should review, and revise supports for land use diversification with attention to supports for planting forests and encouraging organic farming.
8. Ireland’s NECP consultation appears tokenistic

The Draft was published in a barely readable light blue font with a large ‘DRAFT’ watermark. This is a basic communications error that needs to be avoided in future consultations, even a draft plan needs to be in an easily readable black font with no watermark.

On transparency, DCCAE’s NECP consultations have shown a welcome increased commitment to publishing data (as is required by the EU-GR). However, the Draft fails to show how views were taken into account, if in fact they were at all. For example the basic point that limiting future cumulative CO₂ is core to climate action has been ignored although it is clearly made in the EU-GR and in An Taisce’s submission to the initial NECP consultation.

Simply stating views provided in consultation submissions falls far short of engaging with or accepting/rejecting them. The final NECP needs to show why substantive contributions were included or rejected, otherwise the consultation process will not be aligned with the EU-GR, the Aarhus Convention, and will rank as tokenism at best in terms of citizen and civil society participation (Arnstein 1969).

An Taisce requests that DCCAE commit more resources to deepening engagement with citizens, NGOs and civil society to increase public understanding and commitment to the urgency of societal change now required.

References
http://tinyurl.com/EU-GR-Dec-2018
http://tinyurl.com/Is-Gas-Essential-for-IE