The Stop Climate Chaos Coalition

Submission to the Department of Communications, Climate Action & Environment
Initial Consultation on Ireland's National Energy & Climate Plan 2021-2030

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Introduction

The Stop Climate Chaos Coalition welcomes the opportunity to provide a submission to inform the preparation of Ireland's integrated National Energy and Climate Plan under the proposed Regulation on the Governance of the Energy Union.

Stop Climate Chaos is the civil society coalition campaigning for Ireland to do its fair share to tackle climate change. The Coalition's 33 members[1] include many of Ireland's leading international development, environmental, youth and faith-based organisations. Preventing climate breakdown is the defining global challenge of our age. Stop Climate Chaos (SCC) was launched in 2007 based on a recognition by members that the objectives which our organisations serve are under significant threat from the global advance of disastrous climate change. Current levels of ambition and action on climate change fall far short of what is needed to deliver on the temperature limits set out in the Paris Agreement.

The context of this response is that current mitigation policy is completely insufficient for Ireland to meet its 2020 and 2030 EU climate obligations. Both national and international authorities have consistently emphasised that Ireland's policy response, the National Mitigation Plan, suffers from fundamental weaknesses. These have been evident from the very outset, most notably the absence of new, near-term, targeted and quantifiable measures. The unsurprising result of this approach has been continuous, significant and escalating increases in Ireland's emissions, particularly in the agriculture and transport sectors. It has been evident for some time that the state will therefore fail to achieve its 2020 emission reduction obligation under the EU Effort Sharing Decision. It is also now alarming that EPA projections are already calling into question the achievement of EU 2030 obligations.

We consider the development of Ireland's first National Energy Climate Plan (NECP) to be an opportunity to reflect on the reasons for, and necessary responses to, the marked implementation gap associated with Irish climate policy. Our central concern is that the finalised NECP must not mirror the errors of approach of the National Mitigation Plan by failing to provide the impetus, level of detail and ambition that are needed to realise legal obligations related to climate, energy efficiency, and renewable energy. It follows that the subsequent draft for consultation of the NECP must not merely '*take account of*' the National Mitigation Plan but ensure its revision.

The key message of this submission is that the NECP must be rooted in transparency and accountability and include new quantified time-bound policies and measures for all sectors based on a carbon budget. The starting point must be the incorporation of targeted actions to implement the Citizens' Assembly 2017 recommendations and ensuring integration of these into Departmental strategies. By

[1] Afri, BirdWatch Ireland, Christian Aid Ireland, Comhlámh, Community Work Ireland, Concern Worldwide, Cultivate, Cyclist.ie, Dublin Friends of the Earth, Eco Congregation Ireland, ECO UNESCO, Feasta, Fossil Free TCD, Friends of the Earth, Good Energies Alliance Ireland, Self Help Africa, Jesuit Centre for Faith and Justice, Just Forests, Kimmage Development Studies Centre, Latin America Solidarity Centre (LASC), Liberia Solidarity Group, Methodist Church of Ireland – Council of Social Responsibility, Mountmellick Environmental Group, National Youth Council of Ireland, Oxfam Ireland, Peoples Climate Ireland, Presentation Ireland, Tearfund Ireland, Trócaire, An Taisce, VITA, VOICE., and Young Friends of the Earth.

linking the Assembly's work with the NECP and incorporating its recommendations, the NECP can end Ireland's climate laggard status. The NECP can also instigate the transformational change that is urgently needed in order to meet EU 2030 obligations and ensure the state does its fair share of the global effort to deliver on the temperature limits adopted in the Paris Agreement. Every year of delay in reaching a necessary 5% annual emission reduction rate – as outlined in this submission – increases the challenge over the long-term, drives up the cost of transition and undermines Ireland's opportunity to benefit from the emergence of the green global economy.

This submission also responds to the energy security dimension of the NECP. We consider the NECP to be an opportunity to integrate Ireland's energy security objectives (and associated analysis) with its decarbonisation obligations. It is essential that the NECP highlights that a failure to decarbonise coupled with a business-as-usual approach rooted in new and additional natural gas sources for electricity generation is itself a significant energy security risk. An independent report commissioned by the Stop Climate Chaos coalition has specifically analysed these energy security risks in the context of commitments under the Paris Agreement (see also report provided in separate Appendix).

The first section of our submission addresses the primary objectives of the NECP and makes recommendations on the necessary approach to its development based on national policy and Paris Agreement obligations. The second section addresses relevant consultation questions. A summary of our recommendations is provided in the list below:

Recommendations

- The 13 recommendations of the Citizens' Assembly on climate action should be taken as a starting point in the context of questions posed in the consultation paper as to what additional measures are necessary in order to meet 2030 climate and energy obligations.
- It is essential that the NECP constitutes a clear and formal revision of the NMP. The Minister should formally begin the process of revising the National Mitigation Plan by requesting a periodic review from the Advisory Council.
- SCC underlines the need for a comprehensive consultation including through public meetings and early engagement with the Special Joint Committee on Climate Action and the National Dialogue on Climate Action.
- Ireland's National Policy Position should be revised to align the national 2050 transition objective with the temperature goals of the Paris Agreement and the conclusions of the recent IPCC report on 1.5C. This indicates the appropriate 2050 target is "net zero" greenhouse gas emissions.
- The NECP should include an overall, economy-wide, carbon budget for the period to 2050, consistent with a Paris-aligned pathway to "net zero" emissions by 2050.
- Within that overall budget, the NECP should determine a carbon budget for the five year timeframe it covers and proceed to allocate available emissions and reduction efforts between sectors to achieve the continuous, substantial and sustained decarbonisation that is required economy wide.
- The NECP should specify how the direction and the actions, in addition to delivering towards the dimensions of the Energy Union, are contributing to the

country's fulfilment of the Paris Agreements long term objective. This includes defining sectorial pathways towards full decarbonisation.

- It is essential that modelling and associated scenario planning assess new mitigation measures on the basis of a Paris compatible pathway.
- The NECP should also prioritise transparency and make available up to date information on implementation and impact of current ***and*** planned measures.
- Where concessions and 'flexibilities' may be utilised, it is essential that these are clearly stated within the NECP, including the reasoning for their utilisation and the projected impacts. Non-compliance costs arising due to insufficient action on EU targets should also be clarified in the NECP.
- The NECP should include measures to realign investment to achieve the goals of the 2009 Smarter Travel Policy, increasing the share of transport investment that goes to walking, cycling and clean public transport.
- The NECP should outline what an environmentally and socially sustainable level of carbon sink is, while giving considerations to biodiversity, recreation and agriculture.
- The NECP should include as a mitigation measure restoration of Ireland's peatlands as a means of emissions reduction and carbon storage.
- The NECP should establish milestone national targets every two years to 2030 to ensure that Ireland keeps on track to achieve its RES target, as well as plans to allow communities and citizens to participate in the energy transition.
- The NECP should end peat burning for electricity as the PSO levy expires and include a commitment not to cross-subsidise with cofired biomass.
- The NECP should detail all fossil fuel subsidies and include a strategy for their removal.
- The NECP should end coal burning for electricity before the end of the life of Moneypoint coal power station in 2025 and ensure a just transition plan is developed to support all those who are working in the fossil fuel industry in Ireland.
- The NECP should indicate Ireland's long-term objective for the renovation of its building stock.
- The NECP should include a strategy to guarantee that new housing stock meets the highest levels of energy efficiency with near zero emissions as part of the State's 2050 low-carbon transition
- Assessment of Ireland's energy security as part of the NECP process, including analysis of the resilience of the Irish energy assessment, must be in accordance with the achievement of Ireland's national and international decarbonisation obligations.
- The NECP should not incorrectly align long-term security of energy supply with natural gas sources which would serve to lock-in increasing emissions. It should seek to ensure security is based on an indigenous decarbonised energy system through renewable energy coupled with the use of synthetic chemical fuels ("electrofuels").
- The NECP should support the phase out of fossil fuel supply, including a plan for the cessation of offshore fossil fuel exploration based on the Petroleum and Other Minerals Development (Amendment) (Climate Emergency Measures) Bill 2018, currently under consideration in the Dáil.

- All proposed infrastructure, including designated PCIs, which threaten lock-in ongoing fossil fuel usage, must be reviewed in view of the achievement of Paris Agreement objectives.
- All Government decisions that may impact emissions must be accompanied by a “climate audit” which estimates the emissions impact, and which is published.
- All individual climate policies should be socially and rurally proofed and that Government commit to proactively manage impacts and smooth the transition for affected workers, enterprises and communities.

2017 Citizens' Assembly Recommendations

In November 2017, following four days of presentations from international and national experts, Ireland's Citizens' Assembly voted to make 13 recommendations for state action on climate change. These recommendations include practical proposals across the main polluting sectors. The Assembly were actively engaged in the preparation of these recommendations and voted strongly in favour of their adoption having received presentations from national and international experts, including the Assistant Secretary General of the Department of Communication, Climate Action and the Environment.

Recommendation
The 13 recommendations should be taken as starting point in the context of questions posed in the consultation paper as to what additional measures are necessary in order to meet 2030 climate and energy obligations.

The Special Joint Committee on Climate Action is currently meeting with relevant Government Departments and will produce conclusions in January 2019 on how the Assembly's recommendations can *'inform the further implementation of Ireland's National Mitigation Plan as well as the development of Ireland's draft Integrated National Energy and Climate Plan*'. In this way, the Assembly proposals and associated conclusions of the Special Joint Committee are integral elements of NECP analysis and development.

It is worth underling that this followed one of the largest state consultations state on government policy-making, which received close to 1,200 submissions from members of the public, businesses, community groups and NGOs. Taking into account the initial deadline of 31 December 2018 for the initial draft NECP, there is insufficient time available to carry out an extensive public consultation on 2030 climate and energy obligations and implementation through the NECP. As noted by the IIEA, it is therefore important that the Department incorporates and builds on existing input from the public, in particular the recommendations of the Citizens' Assembly.

In short, a defining feature of the success of the NECP will be how the Assembly's proposals, and the associated mandate provided to Government, are respected. It is incumbent on the Department that the Assembly recommendations feature as actions assigned to relevant Departments in the form of time-bound targeted measures. It is important to note that commitments to merely consider Assembly recommendations or a failure to specify how recommendations will be actioned by Departments, would constitute a rejection of the work of the Assembly and the Special Joint Committee and fundamentally undermine the integrity of the NECP.

Revision of Ireland's National Mitigation Plan

In July 2018, Ireland's Climate Change Advisory Council produced its second Annual Review report, which provides an independent, expert assessment of Ireland's performance on climate change. The Council concluded that Ireland is 'completely off course' in its response to climate change. It noted that at the current rate Ireland will not meet both its 2020 and 2030 EU and crucially that the National Mitigation Plan does not put Ireland on a pathway to a low-carbon transition.

As part of the 2018 European Semester process, the European Commission stated in its country report on Ireland that the National Mitigation Plan offers 'few specific new mitigation measures' and concluded that 'existing climate change mitigation efforts will not enable Ireland to achieve its Europe 2020 climate goals domestically. Only limited progress has been achieved in decarbonising key parts of the economy, mainly in agriculture, road transport and the residential sector.'

The Coalition welcomes the statements by former Minister Naughten and Minister Bruton that the NECP process facilitates the reopening of the National Mitigation Plan and will provide a significantly more detailed and effective roadmap, including clear timelines and new sectoral initiatives. As noted by the IIEA in its recent NECP analysis, the Climate Change Advisory Council may review the NMP in light of significant developments in EU law, which would enable the Minister to submit to Government a revised National Mitigation Plan.

Recommendation
It is essential that the NECP constitutes a clear and formal revision of the NMP, as opposed to an appendage to it. In order to integrate the NECP into the framework of the Climate Action and Low Carbon Development Act 2015, the Minister should formally begin the process of revising the National Mitigation Plan by requesting a periodic review from the Council.

Consultation Process

We welcome the clear information on how the NECP will be developed over the year ahead, including two further consultations in January and April 2019. These subsequent consultations should include information on the Commission's initial assessment, as well as information on the basis for amendments/updates made. It is also important that this process allows for meetings with relevant officials, in addition to the option for written input. The Stop Climate Chaos coalition would welcome the opportunity to arrange such meetings with NGO stakeholders.

Public participation in the preparation of plans such as NECPs is provided by Article 7 of the Aarhus Convention, as well as procedural rights under relevant international human rights law. Effective participation in the preparation of NECPs requires access to relevant information, the opportunity to evaluate all elements of the draft plan and provide concrete feedback

We support the recommendation in the IIEA's NECP analysis that determining and achieving these targets necessitates both "traditional" public consultations, and additional proactive measures to ensure appropriate review and feedback from citizens. SCC underlines the need for comprehensive public engagement taking into account the IIEA's analysis that 65% of the €21.8bn climate-related investment put forward in the National Development Plan is expected to come from non-exchequer sources.

We welcome the commitment to incorporate the NECP '*into the multi-level discussions to be held in the framework of the National Dialogue on Climate Action.'* In the National Dialogue, the public should be asked for views on NECP development based on the how to to achieve the required emissions reduction, rather than on whether we should make the reductions or how much to reduce , taking into account the latest scientific evidence and knowledge of the implications of a failure to act, ambitiously and fairly on climate change.

We note the commitment that '*The NECP will also be discussed by the Oireachtas Committee on Communications Climate Action and Environment and by the Special Joint Committee on Climate Action in 2018 and 2019*.' It is important that both Committees have the opportunity to examine the first draft of the NECP when all options are still open. This would also necessitate a meeting with the Special Joint Committee early in January 2019, taking into account the Committee remit to produce conclusions in this month on integration of the Citizens' Assembly proposals into the NECP.

Recommendation
SCC underlines the need for comprehensive consultation including through public meetings and early engagement with the Special Joint Committee on Climate Action and the National Dialogue on Climate Action.

National Policy Position

In Section 3 'Template Requirements' a summary of relevant EU and national policies is noted. However, we note with concern that the National Policy Position on Climate Action and Low Carbon Development is not noted in the list of national policies to be taken into account. The National Policy Position is the cornerstone of Ireland's response to climate change, and the low carbon transition objective to 2050 set out in the National Policy Position is of fundamental importance to NECP development. Omitting a pathway to 2050 objectives runs the risk of undermining or making action costlier in the future, when steeper reductions and more rapid change will be required.

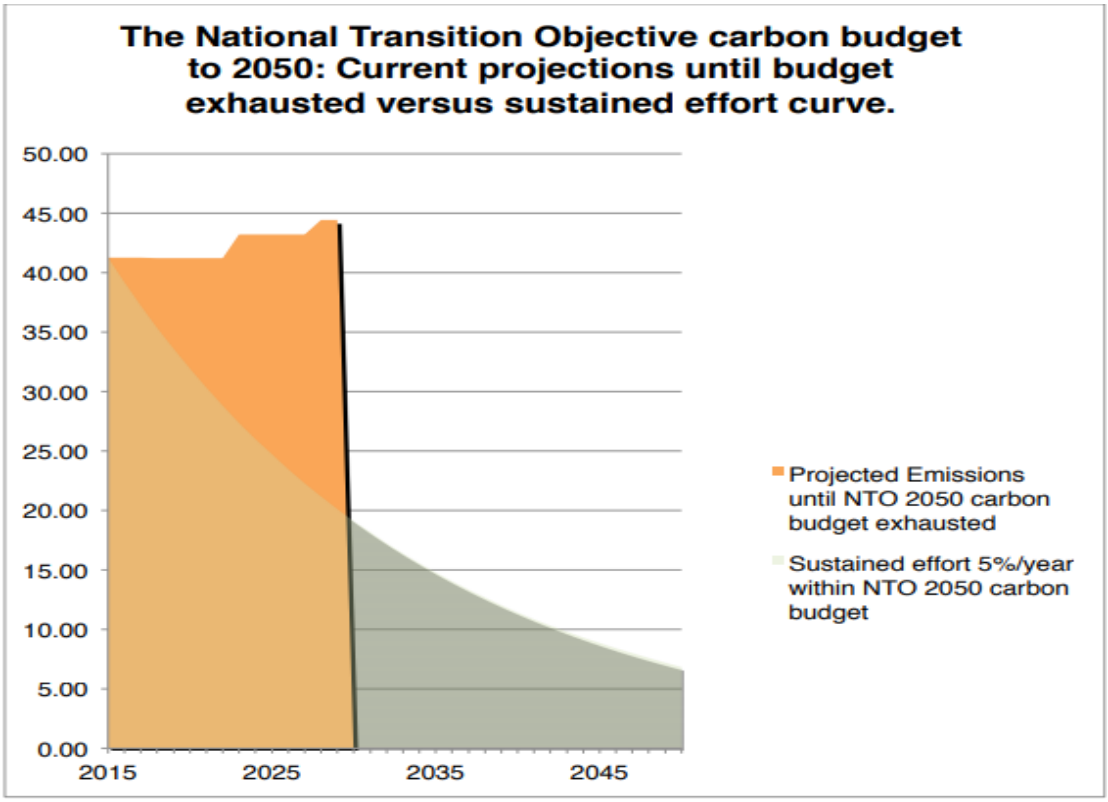
The National Policy Position is also essential given that mitigation planning to 2050 and beyond will be a central obligation under the Governance Regulation. Under Article 14 Ireland must also produce a long-term climate strategy with a decarbonisation pathway towards 2050 **that is consistent with its NECP**. The NECP template also includes several elements focused on long-term (post 2030 action), and the Governance Regulation demands consistency between the 2030 plans and long-term climate strategies.

The National Policy Position, adopted by the Government in 2014 (pre-Paris), defines the 2050 mitigation target as at least an 80% reduction in combined annual emissions from energy, transport, and buildings, and an approach to carbon neutrality in agriculture and land-use that doesn't compromise sustainable food production. The policy ring-fences all available national greenhouse gas sinks from land use to be counted as offsets against agriculture-related emissions; requiring all other sectors to undertake collective emissions cuts of at least 80% compared to 1990 levels, with no offsetting "flexibility".

The NECP process also offers an opportunity to consider the adequacy of Ireland's current 2050 objective in light of three things: the Energy White Paper, the Paris Agreement and the IPCC 1.5C report. The 2015 Energy White Paper set a reduction target of 80 to 95% in energy emissions (not just electricity emissions) by 2050. That target is in line with the EU's stated objective, since 2009, of achieving an 80-95% reduction by 2050. The Irish national policy position, the Energy White Paper and the EU commitment all precede the Paris Agreement and are predicated on a temperature goal of limiting global warming to 2C. Paris, of course, agreed a new temperature goal of "limiting warming to *well below* 2C and to pursue efforts to limit warming to 1,5C." In light of that, and the recent IPCC report on 1.5C, which concludes "net zero" is the appropriate target for 2050, Irish and EU 2050 targets will have to be revised.

Stop Climate Chaos has previously undertaken analysis of this pathway for electricity, building and transport sectors. Our existing 2050 target requires Ireland to reduce emissions by 5% year-on-year, every year, between now and 2050. Expressed as a carbon budget for the period 2016-2050, this amounted to a limit on combined emissions from all sectors except agriculture of, at most, 653 million tonnes of carbon dioxide. Yet, based on 2016 EPA analysis, emissions are projected to increase to nearly two and a half times that limit, a total of 1585 million tonnes of CO2 – an overshoot of 932 million tonnes. Current and proposed measures noted in

the National Mitigation would result an overshoot of the 2050 objective by almost one billion tonnes of carbon dioxide. The total available carbon budget for 2016-2050 would already be exhausted by 2030 on the current business-as-usual emissions trajectory (see graph below).



Carbon budgets are better planning tools, as they reflect the "zero sum" nature of the trade-offs of remaining emissions across sectors and across time. If we continue to emit more now, we must emit even less in the future as it is total emissions (i.e. the area under the curve) that matters. We cannot continue with business-as-usual until 2040 and then crash emissions, we must bend the curve now. Moreover, if one sector is allowed a greater share of the available budget, some other sector(s) must be allocated less.

The Stop Climate Chaos coalition welcomed the adoption of a carbon budget framework in the National Mitigation Plan (NMP) in the context of EU 2020 and (then) proposed 2030 obligations. However, this framework was not rigorously applied in the NMP as a planning tool and not simply an evaluation tool, in particular in relation to budget allocations between sectors and linking to quantified mitigation measures.

Recommendation
In addition to addressing the gap between current projections and Ireland's 2020 and 2030 EU targets (see below, in order to provide a useful guide for policy development and implementation to 2050, we recommend that the NECP -

- Revise Ireland's National Policy Position to align the national 2050 transition objective with the temperature goals of the Paris Agreement and the

conclusions of the recent IPCC report on 1.5C. This indicates the appropriate 2050 target is “net zero” greenhouse gas emissions.

- The NECP should include an overall, economy-wide, carbon budget for the period to 2050, consistent with a Paris-aligned pathway to “net zero” emissions by 2050.
- Within that overall budget, the NECP should determine a carbon budget for the five year timeframe it covers and proceed to allocate available emissions and reduction efforts between sectors to achieve the continuous, substantial and sustained decarbonisation that is required economy wide.

Paris Agreement Compatible

The consultation paper refers to the EU's commitment under the Paris Agreement to a reduction of at least 40% in emissions by 2030, relative to 1990 levels (section 2.3 'Objectives, targets and contributions to be taken into account'). It is important to note that this commitment and application in the form of national targets (which is itself a key issue of concern in the NECP) constitutes the minimum ambition level that the NECP is required to deliver. None of the 2030 targets - agreed or currently under negotiation - are ambitious enough for the EU to deliver on its commitments under the Paris Agreement. The UNEP's latest Emissions Gap report calls upon countries like the EU to reduce its projected 2030 emissions by another 25% to comply with a 2 degrees scenario.

Section 3.1.1 of the NECP template stipulates that policies and measures for the non-ETS 2030 target should be provided "with an outlook to the long-term vision and goal to become a low-carbon economy with a 50 years perspective and achieving a balance between emissions and removals in accordance with the Paris Agreement." National and EU targets to 2030 must be reviewed in view of the temperature goals adopted in Paris, and as with all other committed countries, Ireland will be required to ratchet up its ambition and ramp up wide-reaching policy implementation to achieve these goals.

Recommendations:

- The NECP should specify how the direction and the actions, in addition to delivering towards the dimensions of the Energy Union, are contributing to the country's fulfilment of the Paris Agreements long term objective. This includes defining sectorial pathways towards full decarbonisation.
- It is essential that **modelling and associated scenario planning assess new mitigation measures on the basis of a Paris compatible pathway**.
- Also in accordance with the Paris Agreement, NECPs should include a robust and specific process for how ambition in the plan will be scaled up over time and ensure that each update of the plan is more ambitious than the previous one.

The NECP should be clear on the growing and significant gap between the Government's commit under the Paris Agreement and what is needed to deliver on its core objectives. According to calculations by the Climate Equity Calculator, a tool developed by the Stockholm Environment Institute to estimate the fair share effort for individual countries, Ireland must reduce all greenhouse gas emissions to zero within a decade to do its fair share of keeping global warming within the bare 2°C limit. In addition, Ireland would have to finance additional overseas mitigation measures. Previous Stop Climate Chaos analysis based on the Climate Fair Shares model has shown that within the limits indicated by the Agreement, Ireland's entire annual carbon budget would be exhausted by emissions from the agricultural sector alone by 2025. All existing EU and Irish targets will have to be radically revised strengthened in the light of the Paris goals, and because of the cumulative nature of carbon dioxide pollution.

Recommendation:

The NECP must indicate in detail how Ireland is preparing to strengthen ambition and set the agenda in terms of approach for climate policy planning in line with the goals of the Paris Agreement.

Question 1: Taking into account the National Mitigation Plan, the National Development Plan 2018-2027 and Ireland's target under the Effort Sharing Regulation, what further measures to reduce non-ETS emissions do you believe Ireland should take?

Governance, Transparency and Planning

The latest EPA projections indicate that non-ETS emissions will only be 1% below 2005 levels in 2020, compared to the reduction target of 20%, and compared to the previous projection of a 4-6% reduction. In relation to Ireland's 30% reduction target for non-ETS sectors, the associated carbon budget is approximately 383 MtCO2e for 2021 to 2030. The EPA's projections indicate that Ireland will exceed the allowable carbon budget by between 47-52Mt over the period to 2030, even assuming the allowed-for flexibilities are fully used. As noted above, **the NECP should specify how the Government intends to close this emissions gap to target by producing an appropriate carbon budget to 2030 and set out detailed objectives and planned policy measures to be adopted to deliver on these objectives for at least a five yearly period**.

It is essential that the NECP institutes a transformative approach which overcomes fundamental weaknesses in the NMP. In particular, the NECP must include new quantifiable actions and measures that are a progression beyond past efforts. As noted above, **we put forward relevant proposals of the Citizens' Assembly (see in particular 2,3 8, 9 10, 11, 13) as the primary new additional measures to ensure compliance with Ireland's non-ETS obligations.**

To have a fair chance of keeping temperature rise to even 2ºC, research undertaken by Oeko Institute concludes that the overall 2030 GHG emission reduction target for the EU would have to be at least 55%, which would result in a target of at least 47% reduction in the non-ETS sectors**. Analysis by CAN Europe indicates that this would entail a reduction by Ireland of 56%**. While recognising that Ireland's national commitment under the Effort Sharing Regulation has already been set at a 30% reduction, it is important to be clear that **this target is not Paris consistent**. It is therefore essential that **new policies and measures prioritise near-term implementation and ratcheting up of ambition significantly beyond the 30% target based on Paris objectives**.

Recommendation:
We should learn from previous failures to meet 2020 targets and establish within the NECP a **governance framework** that will ensure progress is monitored, reviewed and is ultimately successful. A trajectory demonstrating how the targets will be met should be established in each sector (electricity, transport and heating), as well as per technology. The NECP should also **prioritise transparency** and make available up to date information on implementation of current and planned measures.

As noted by the Advisory Council, actions should linked to expected outcomes or impacts to allow effective planning for further efforts required to close the emissions gap. Policies and measures outlined in the NECP will only be considered credible where they:

1. Indicate a progression beyond past reporting (where necessary),
2. Are consistent with the level of ambition required to meet the corresponding carbon budget,
3. Provide comprehensive sectoral coverage (for each of the targets, respectively) and
4. Are reported with a level of detail that allows for external assessment of the previous three criteria.

Recommendation:
Stop Climate Chaos is of the view that the non-ETS targets should be reached through increased efforts in policies and measures that create lasting emissions reductions through structural transformation. Where concessions and 'flexibilities' may be utilised, it is essential that **these are clearly stated within the NECP, including the reasoning for their utilisation and the projected impacts**. This includes in particular:
- Offsetting from land use, land use change and forestry (LULUCF) activities
- One-off use of ETS permits for compliance
-'Safety reserve' giving certain Member States the option of using pre-2020 surplus to achieve their 2030 targets

National Development Plan
Given the importance of infrastructure development and investment to the delivery of obligations under the EU Effort Sharing Regulation, it is necessary for the NECP to build on commitments made in the National Development Plan (NDP). In particular, the NECP should ensure fundamental weaknesses in NDP are resolved: The NDP does not specify the amount of emissions reductions which may be achieved by these investments nor does it include or require assessments of the impact of the noted infrastructure proposals on Ireland's obligations under the EU energy, climate and air quality policies**. It is essential that such prior analyses are carried out for all infrastructure investments proposed in the NECP, particularly in the transport and home heating sector.** The NDP was also adopted without a prior Strategic Environmental Assessment and no assessment of GHG impact and includes a strong bias towards continued investment in road projects (see further in Transport section below).

Recommendation
All Government decisions that may impact emissions must be accompanied by a "climate audit" which estimates the emissions impact, and which is published.

Transport
As noted by Ireland's Climate Change Advisory Council, progress in tackling transport emissions remains very limited. Transport is the only sector to have increased its share of emissions since 1990. In fact, emissions have doubled since 1990 to one fifth of Ireland's total. Transport emissions are projected to increase by at least 17% over the period 2017 – 2020.

In 2009, the Government adopted 'Smarter Travel' as national policy. The policy included the following targets to be met by 2020:

- The transport sector making a meaningful contribution to Ireland's EU climate change commitments by reducing greenhouse gas emissions;

- 500,000 more people taking alternative means to commute to work so that the total share of commuting by car drops from 65% to 45%;
- Walking, cycling and public transport rising to 55% of total commuter journeys to work;
- The total kilometres travelled by car not increasing significantly from 2009 levels.

Recommendation
The Stop Climate Chaos Coalition recommends that the NECP includes measures to realign investment to achieve the goals of the 2009 Smarter Travel Policy, increasing the share of transport investment that goes to walking, cycling and clean public transport.

Ireland's 2017 National Mitigation Plan includes the target that from 2030 all new cars and vans sold in Ireland will be either electric or hybrid. **The NECP should go further by introducing new incentives and necessary infrastructure to accelerate the immediate adoption of electric vehicles and by bringing to an end the use of petrol and diesel for transport**. This process has already begun in the UK and France whose governments both announced in July that they will end sales of petrol and diesel vehicles by 2040.

A National Cycling Policy Framework was adopted in 2009 but almost none of its measures has been implemented. Subsequently a Greater Dublin Transport Strategy was adopted in 2016 which envisages an increase in GHG emissions from the Dublin Area of about 12% between 2016 and 2035. Despite lack of measures and investment to incentivise behavioural change to switch to low carbon transport modes, 70% of journeys into Dublin city centre are by people using sustainable modes of transport (such as bus, train, light rail, walking and cycling), and this level is increasing year on year.

Both the National Planning Framework (NPF) and National Development Plan (NDP) were published over the summer of 2018 with the NPF outlining the need for walkable communities and investment in the provision of public transport, cycling and walking infrastructure. However in the NDP, detailing the capital investment, a large proportion of funding is going on motorways and a second runway at Dublin Airport. **Major realignment of the transport budget would be needed to drive the necessary behavioural change.**

Agriculture
In relation to emissions not covered by the EU Emissions Trading Scheme (EU ETS), agriculture is responsible for the largest share (42%). The EPA projections indicate that agriculture emissions will increase by between 3-4 per cent by 2020 and 6-7 per cent by 2030 based on an expansion of animal numbers, particularly for the dairy herd.

The national objective is that total annual emissions from agriculture in 2050 will be no more than what is absorbed annually by Ireland's carbon sinks (i.e., forests, peatlands, and grasslands).In their brief on the NMP, the IIEA detailed how under current projections to 2030, the agriculture sector could take up over 51% of Ireland's total carbon budget, leaving little scope for manoeuvre or flexibility in other sectors.

There has been no substantive discussion within Irish society on the current policy push towards intensification. This is despite the wider implications and challenges created for addressing Ireland's climate challenge. Furthermore, the option of reducing emissions by decreasing herd sizes and directing and diversifying farming away from non-sustainable models has not been promoted as a viable policy option.

Recommendation:
To sufficiently off-set agricultural emissions, the NECP needs to outline what an environmentally and socially sustainable level of carbon sink is, while giving considerations to biodiversity, recreation and agriculture.

The dominant model of farming in Ireland is heavily dependent upon policy and incentive structures and a considerable proportion of Irish farms are economically vulnerable and nonviable without current subsidies. The Government should be encouraging an economically smart pathway for agriculture and the rural economy by promoting sustainable land use diversification.

Recommendation:

We have argued that Ireland's current agriculture and land use policy is neither 'climate-smart' nor sustainable, and Ireland should be supporting farmers to transition away from ruminant production to a more sustainable model of farming. This can be achieved by **encouraging High Nature Value farming, incentivising low carbon farming and promoting and supporting healthier and less ecologically damaging human diets**.

The NMP refers to the use of forestry and bio-energy as suggested offsets for agriculture-related greenhouse gases. In early 2017, Ireland was criticised by the European climate action network, Carbon Market Watch, for advocating for the use of forestry offsets to meet Effort Sharing targets. We recommend that Ireland advocate for reducing or removing the option to use forestry offsets to meet its targets. We have argued that the use of land sinks to offset agricultural emissions will achieve only a small fraction of the required emissions reduction as such land sequestration is impermanent and highly uncertain (See Mackey et al, 2013). If incorrectly sited, widespread afforestation, which creates fundamental changes in ecosystem function and structure, can present threats to elements of Ireland's biodiversity and aquatic systems over the long-term (See Graham et al, 2013). Forest policy needs to be equally cognisant of the far-reaching environmental implications of afforestation alongside the social and economic impacts; structural diversity of forestry is important.

Because of peat extraction, disturbance, and related activities (e.g., combustion, horticulture), Irish peatlands (most of which are moderately or severely damaged) have become a source of carbon emissions. In their healthy state, peatlands will not only store carbon, but also continue to absorb CO2 as they expand. In Ireland, near intact peatlands may actively sequester, on average, 57,402 tonnes of carbon per year.67 For this potential to be realised however, stronger enforcement to protect peatlands, rewetting and restoration, and using alternative non-peat sources for energy production will be required. Based on the recognition of the value of peatlands as long-term carbon sinks, Scotland's Draft Climate Change Plan (2017-

2032) includes target-driven plans for peatland restoration. A similar approach can easily be adopted in Ireland.

Recommendations:
- Restoring Ireland's peatlands as a means of emissions reduction and carbon storage is an obvious measure which should be included in the NECP.
- We have previously argued that if adequately managed, sequestered carbon in peatlands can provide a cheap mitigation measure, and produce important income in terms of agri-climate environmental measures under the Rural Development Plan Regulations. Such measures can be complementary to other environmental obligations, such as the Birds Directive and commitments under the National Peatland Strategy and the EU Biodiversity Strategy.

Non Compliance Costs

It is a significant concern that the National Mitigation Plan has facilitated delayed action and investment and knowingly exposed Irish society to financial penalties in order to comply with its EU Effort Sharing Decision targets to 2020 and Effort Sharing Regulation targets to 2030. Analysis by the Department of Public Expenditure & Reform, and by UCC, has shown that without new, immediate and substantive efforts to cut emissions, Ireland faces financial penalties in the region of €500 million by 2020 for failing to comply with our EU climate and renewable energy commitments. The IIEA has noted that Ireland may face non-compliance costs of between €3bn and €6bn by 2030 for failing to reduce emissions unless further action is taken.

Our Coalition supports the view of the Advisory Council that purchase of allowances should be utilised as a measure last resort measure given that it constitutes a use of public funds to meet obligations that produce no local benefits or national investment in the low-carbon transition.

Recommendation:
It essential that these costs, or attempts to prevent or minimise them, should be acknowledged in the NECP. The likely impact of proposed policy measures in reducing these costs should also be included in the analysis of implications section of each five-year plan.

Question 2: How do you believe Ireland's national contribution towards the EU's 2030 renewable energy target of 32% should be determined?

Ireland should set an ambitious target for Renewable Energy that is aligned with the Paris Agreement. We should use this NECP to re-establish our commitment to renewable energy, and develop a plan that will allow Ireland to benefit from the significant renewable energy resources on and around our island. There are many opportunities within the renewable energy sector, and we should set out a plan that encourages activity and provides certainty for investment in this sector.

As the overall EU target for renewable energy is not compatible with the Paris Agreement, Ireland should define its contribution in line with a more ambitious renewable energy scenario. Research undertaken by the Climate Action Network Europe demonstrates that by 2030 45% of energy should be from renewable sources to align with the Paris Agreement. Detailed analysis by Ecofys (2017) indicates that this would entail a 2030 RES target of 45.3%

Recommendation

Milestone national targets should be established every two years to 2030 to ensure that Ireland keeps on track to achieve its RES target. The overall plan also needs to demonstrate how the 2030 targets will set us up to have an economy that is decarbonised by 2050. If we are to achieve net zero carbon emissions by 2050, then 2030 is a vital stepping stone and the targets for 2030 should be viewed in that light.

Question 3: How do you believe the contribution to be made from the individual sectors (i.e. electricity, heat and transport) should be determined?
Question 4: What policies and measures do you believe Ireland should adopt to achieve its renewable energy contribution and what are the grounds for your recommendations?

Ireland is unlikely to meet its EU 2020 target of generating 16 per cent of its energy from renewable sources, almost half of which must come from renewable electricity. The NECP should detail the specific policy challenges which resulted in insufficient progress and, as noted in the proposed Governance Regulation, set out necessary changes in investment behaviour and incentives across the entire policy spectrum. **The projected impact of both existing *and planned* policies and measures on RES and Energy Efficiency targets should be included in the NECP template**.

Ambitious targets should be set within the electricity, heat and transport sectors, with plans for at least 70% of electricity to come from renewable sources by 2030. The NECP should describe a rapid decarbonisation of the electricity sector. This is particularly important for the decarbonisation of other sectors which are basing much of their decarbonisation on a decarbonised electricity system (heat pumps, electric vehicles etc).

Recommendation:
The NECP should include detail on the following measures -
• Plans to increase district heating using waste heat from power plants and industry and heat generated from bioenergy, and renewable electricity converted to heat and thermal storage.
• Plans to improve interconnection, storage, load shifting and smart grid investment to ensure we make the most use of variable energy sources.
• Commitments to support all technologies, including solar, offshore wind and microgeneration to ensure a mix of technologies is developed in Ireland. Onshore wind will of course always provide an excellent source of renewable energy for Ireland but diversification within the system is essential.
• Plans to allow communities and citizens to participate in the energy transition. Existing policies set out support for community and citizen participation, but have failed to deliver policy changes that actually allow this to happen, such as supports for community scale microgeneration, support for community owned energy projects, and the establishment of trusted intermediary agencies.

Community Energy
The 2015 White Paper on energy recognises the scale of the challenge of transitioning our energy system to zero carbon, and in particular, acknowledges the importance of citizen and community participation in the transition process. While local opposition can present a significant barrier to the expansion of the renewable sector in Ireland, communities can also play a considerable and positive role in the transition to a low carbon society.

Community ownership is central to achieving public acceptance of renewable energy projects and towards climate policy more generally, and a change in development model to encompass community ownership helps foster a positive effect on public attitudes. While the draft plan acknowledges it is considering price support for micro-

generation, there is no clear indication of any plan to establish a framework for community ownership, as is the case in other European countries. There has been a significant increase in recent years in renewable generation; nevertheless, local communities in Ireland own less than 0.3% of this. This contrasts sharply with other European countries – such as Germany – where 1.5 million citizens generate solar electricity on their roofs and in their communities and where households own over 50% of all renewable energy.

Currently in Ireland, there is no national strategy for community energy. Energy policy provides little regard to the potential role of community energy, and provides no clear incentive to support the development of community energy in Ireland. There is no guaranteed Feed-in-Tariff offered for exporting small scale electricity generation to the grid. There is scope for significant investment in solar power generation in Ireland. Solar power offers a unique opportunity to provide diversity in electricity generation and for citizens and communities to participate in and take ownership of the renewable transition. Households and communities could reduce their demand for fossil fuel electricity, lower their energy bills, and generate an income from the excess clean energy they produce. Without a guaranteed payment for micro-generation, including solar, however, this "rooftop revolution" will not happen in Ireland.

Recommendation:
We recommend that a fair price be provided for solar electricity supplied to the grid, the introduction of measures to enable community-led projects such as simplifying grid access, and the implementation of a Danish-style shared ownership scheme mandating that developer-led projects offer 20% of the equity to local communities.

Decarbonisation Objectives
While the NMP acknowledged the need to diversify Ireland's renewable sector and to phase out energy from peat and coal, it failed to provide new or clear information provided on how and when these objectives will be achieved. The NECP should seek to resolve these weaknesses, also taking into account that realisation of Ireland's renewable energy commitments are intimately related to rapid decreases in overall fossil fuel energy, including fossil gas, in accordance with Ireland's 2015 energy White Paper commitments. The Irish energy system is over 90% dependent on fossil fuels, therefore the NECP needs to include a plan for phasing these fuels out of our energy system.

Recommendation:
At a minimum the NECP should include the following commitments;
• End coal burning for electricity before the end of the life of Moneypoint coal power station in 2025.
• End subsidies to fossil fuel energy generation though capacity market payments.
• Ensure a just transition plan is developed to support those who are working in the fossil fuel industry in Ireland. Ensure the plan includes re-training opportunities for employees and avoids shock closures and overnight redundancies.
• Ensure decisions on infrastructure, new buildings and new transport are taken with the targets for 2030 in mind. Buildings constructed from 2019 onwards should not be constructed with fossil fuel boilers (this locks the building users into using fossil fuels for at least 15 years, or requires them to undertake an expensive retrofit), similarly transport fleet, such as new busses, should not be fossil fuel based.

Peat Subsidy

There are several sections of the NECP template that touch upon bioenergy. Section 2.1.2.v and vi of the NECP template ask specifically for trajectories on bioenergy. Ireland's approach to biofuel usage in electricity is fundamentally unsustainable. The primary support is for the burning of biomass along with peat for electricity generation. Incredibly, although described and approved by the European Commission as a renewable energy support, it requires that 70% peat be burned alongside biomass to qualify for the subsidy. Co-firing is going on at Bord na Mona's Edenderry, Co Offaly power station and is planned for two other peat-fired stations. While the Public Service Obligation support for peat will end in 2019, proposed support for biomass co-fired with peat would subsidise continued peat-fired electricity generation. As peat-fired electricity generation is of itself uneconomic, the net result of the subsidy is significantly higher GHG emissions than if no support scheme was in place. EPA projections demonstrate that moving them to co-firing with biomass will lead to a direct net increase in emissions from the electricity sector as well as an indirect increase in emissions from the heating sector (by diverting biomass from it.) As noted by the Advisory Council, *'this would be an environmentally harmful subsidy resulting in substantially higher emissions of greenhouse gases at significant direct cost to the nation*.' In the absence of such strong governance and enforcement criteria for biomass, there is a very high likelihood that biomass is likely to result in higher emissions even than the displaced peat or coal use.

Recommendation:

As a minimum, the NECP should

- End peat burning for electricity as the PSO levy expires, and a commitment not to cross subsidies peat burning for electricity into the future through cross subsidisation of co-fired biomass.
- Cap support to bioenergy at a level that it would prevent additional tree harvesting and increasing reliance of imports. This requires detailed information on biomass projections in all sectors (electricity, transport, heating and cooling and non-energy sectors), as well as the levels of projected biomass imports and the technologies for biomass use.
- End for support for bioenergy in sectors where there are better alternatives available (especially in electricity), while efficiency measures should be prioritised. Bioenergy support schemes should not contribute to the depletion of carbon stocks and sinks.

Other Fossil Fuel Subsidies

The decarbonisation objectives in the NECPs are only credible if commitments and plans to fully phase out fossil fuel subsidies are included. There are many supports currently in place which either directly or indirectly subsidise the continued use of fossil fuels.

In relation to the NECP template, there are several sections which relate to policies and measures surrounding fossil fuels and its subsidies:

- In section 3.1.3.vi.a Member States have to list, if applicable, national policies, timelines and measures planned to phase out energy subsidies, including for fossil fuel. It is worth underling that the qualifier "if applicable" does not excuse Ireland from detailing phase-out efforts in its NECP, as all

EU member states have already committed to phasing out fossil fuel subsidies.

- In section 4.6.iii, Member States must provide a description of energy subsidies, including for fossil fuels. Plans for monitoring progress on fossil fuel subsidies phase-out should also be addressed in other sections on energy supplies, including Section 2.3.i, 3.3.i. and 3.3.iii.

Recommendation

The NECP template should detail all fossil fuel subsidies and a strategy for their removal must be developed as part of the NECP process.

Question 5: Bearing in mind Ireland's current state of progress on energy efficiency, what contribution do you believe Ireland should make to the EU indicative energy efficiency target of 32.5% by 2030, and why?
Question 6: What indicative national milestones for energy efficiency do you believe that Ireland should set for 2030, 2040 and 2050, and why?

Ireland should set an ambitious target for increasing energy efficiency. Ireland has proved very good at implementing energy efficiency measures and in retrofitting housing and buildings. All plans for energy efficiency need to ensure overall emissions reductions, and overall reductions in fossil fuel based energy.

The targets for Ireland should be based on the amount of energy use, rather than on a % more efficient. Analysis commissioned by CAN Europe demonstrates that Ireland should target maximum final energy consumption by 2030 at 10.32 Mtoe, and maximum primary energy consumption at 12.29 Mtoe.

Recommendation
The NECP should indicate Ireland's long-term objective for the renovation of its building stock (in section 2.2.iii).
It should also clearly spell out what a highly energy efficient and decarbonised national building stock means by explicitly referring to

i) a drastic reduction of energy consumption in the building sector through efficiency measures,
ii) the use of renewable energy to cover the remaining energy needs of the building stock and
iii) the integration of the building sector into a flexible and renewables based energy system.

Question 7: What policies and measures do you believe Ireland should adopt to achieve its energy efficiency contribution and what are the grounds for your recommendations?

Ireland has significant potential to improve the energy efficiency of new buildings while also making use of domestic renewable energy resources. In line with the EU Energy Performance of Buildings Directive, new Building Regulations (based on 'Nearly Zero Energy Buildings' requirements) are to be implemented which will allow for improved energy performance and significant reductions in emissions. While such initiatives are to be welcomed, the National Mitigation Plan does not address new measures to ensure that all new buildings adopt the highest energy efficiency standards. For example, in the domestic sector, each new development could follow the Home Performance Index (the national certification system for quality and sustainable residential developments). Regarding the non-domestic sector, current regulations dating from 2008 do not represent good industry practice. Many of the most progressive companies in the construction sector in Ireland have been working to a standard which considerably exceeds the current 2008 building regulations. The Sustainable Energy Authority Ireland has estimated that to achieve 2020 energy efficiency targets around 75,000 homes will need to be upgraded every year between now and 2020, three times the rate achieved in 2014.

Recommendations:

- Only measuring the operational energy of buildings is not sufficient and there is a need to move to a 'Life Cycle Approach' where the energy used at all stages of the construction, operation, maintenance and end of life are taken into account. The impacts of the construction of a building can account for between 30 and 50% of the overall impacts. It is increasingly important to achieve the best energy and carbon savings over the life of the building rather than just at the operational stage.
- Moving beyond 2020, a strategy is required to guarantee that new housing stock meets the highest levels of energy efficiency with near zero emissions as part of the State's 2050 low-carbon transition. In order for the objectives of the Paris Agreement to be achieved, the World Green Building Council has stated that all new buildings must operate at net zero carbon from 2030 and that 100% of buildings must operate at net zero carbon by 2050.

Question 8: In terms of the areas of energy security identified in the template, are you satisfied with the resilience of Ireland's national and regional (with other Member States) energy systems and if not, what suggestions would you make for improvement?
Question 9: What policies and measures do you believe Ireland should adopt to achieve its energy security objectives and what are the grounds for your recommendations?

SCC welcomes the opportunity to comment on Ireland's long-term energy security. It is essential that energy security objectives (and associated analysis) must not be simplistically divorced from decarbonisation obligations. It is equally important the Department highlights that a failure to decarbonise and a business as usual approach rooted in natural gas for electricity generation is itself a significant energy security risk.

An independent report commissioned by Stop Climate Chaos has specifically analysed current energy security risks in the context of commitments under the Paris Agreement (see also report provided in separate Appendix). [2] The authors present an independent peer evaluation of recent recommendations from the Irish Academy of Engineering concerning natural gas supply. Their findings include -

- Based on Ireland's large natural resource of variable renewable energy coupled with the use of synthetic chemical fuels ("electrofuels") for very large scale energy storage, rapid fossil fuel phase out is not only technically feasible, but **can progressively eliminate the security-of-supply risks associated with all imported fossil fuels**, while simultaneously decarbonising with the scale and urgency demanded by good faith participation in the Paris agreement.
- **Any energy policy involving the displacement of other fossil fuels specifically in favour of natural gas, even on a "transitional" basis, would greatly escalate that security-of-supply risk while simultaneously failing to achieve the required speed of decarbonisation of the Irish energy system**. This arises from relying — by design — on a single, high carbon, fuel (natural gas) for the stability the electricity system, while tacitly assuming progressive electrification of significant proportions of current transport and heating energy demand. Given limited indigenous natural gas supply, this would introduce, by design, a potential single point of failure for almost the entire energy system.
- The report of the Irish Academy Engineering is mistaken in severely underestimating the rate at which CO_2 emissions from the Irish energy system must now be eliminated and in its discounting of the technical and economic feasibility of such rapid decarbonisation.

[2] Barry McMullin , Paul Price , James Carton , Kevin Anderson, Is, Natural Gas "Essential for Ireland's Future Energy Security"? A Critical Response to the Irish Academy of Engineering, November 2018

The authors also highlight fundamental weaknesses in the scenarios of the International Energy Agency (IEA) in that scenario planning does not align with the legally binding decarbonisation obligations under the Paris Agreement. The IEA's scenarios including their Sustainable Development Scenario equates to a carbon budget with only 50% chance of stabilising global temperature at 2°C . This critique of the IEA's approach is explained in detail in a recent Oil Change International report, which concludes:"… *By accepting a mere 50 percent probability of success* [in meeting the 2°C limit], *by assuming negative emissions technologies will be invented, and by assuming unrealistically low non-energy emissions, the SDS significantly understates the degree of change in energy systems needed to achieve the* [Paris Agreement] *goals.*

Recommendation
- Assessment of Ireland's energy security as part of the NECP process, including analysis of the resilience of the Irish energy assessment, must integrate and be in accordance with the achievement of Ireland's national and international decarbonisation obligations.
- The NECP should not incorrectly align long-term security of energy supply with natural gas sources. It should seek to ensure security is based on an indigenous decarbonised energy system through renewable energy coupled with the use of synthetic chemical fuels ("electrofuels") for very large scale energy storage.

The authors' findings also decisively reject the contention put forward by the Minister of State (and the IAE) that continued exploration for indigenous fossil fuels is in the national interest of Ireland. The authors note that, taking into account the known physical constraints of the Paris Climate Agreement there is no credible case to be made for bringing new fossil fuel resources into production: any such additional production would inevitably add to total global atmospheric concentration of CO_2.

In the context of the state's ongoing support for fossil fuel exploration, it is important to be clear that more gas is not the same as more energy security and ending fossil fuel licencing does not threaten Ireland's security of supply. This point is supported by Gas Networks Ireland (GNI) who carry out regular analyses of gas supplies and related infrastructure. GNI have repeatedly emphasised that for Ireland the future supply of gas is secure with no suggestion that new gas sources are necessitated in the short, medium or long-term. As detailed in GNI's annual reports on the gas network, Ireland and Northern Ireland are strongly connected to the UK gas system. This secure integration to such a major gas system greatly mitigates Ireland's security of supply risks, in comparison with many other European countries

Recommendation
The NECP should support the phase out of fossil fuel including a plan for the cessation of offshore fossil fuel exploration based on the *Petroleum and Other Minerals Development (Amendment) (Climate Emergency Measures)* Bill 2018, currently under consideration in the Dáil .

Question 10: Taking into account the EU electricity interconnection target, what do you believe should be Ireland's priorities in terms of further electricity interconnection, and Why?
Question 11: What policies and measures do you believe Ireland should adopt to achieve its electricity interconnection objective and what are the grounds for your recommendations?
Question 12: What electricity and gas transmission infrastructure projects would you consider to be of greatest importance in terms of Ireland's achievement of the objectives, targets and contributions under the 5 dimensions of the Energy Union strategy?
Question 13: What policies and measures do you believe Ireland should adopt to achieve its energy transmission objectives and what are the grounds for your recommendations?

In relation to Questions 10 to 13, the Stop Climate Chaos coalition has limited its response to gas infrastructure development. We would note that Question 12 on gas transmission incorrectly presupposes that investment in gas transmission supports the achievement of EU obligations. The state's analysis of security of gas supply in Ireland should not be simply equated with the EU Projects of Common Interest listing which is a separate process undertaken without environmental screening and principally focused on projects supporting exports to other Member States.

Natural gas is an important component of Ireland's current energy mix and the Commission for the Regulation of Utilities produces regular analyses of Irish gas supplies and network infrastructure. It is important to be clear that **new gas sources, including LNG infrastructure, is not the same as increased energy security.** While additional gas sources may be considered advantageous by certain parties, LNG infrastructure and associated supply has not been deemed necessary for energy security by the Commission. As detailed in annual reports of Gas Networks Ireland, Ireland is already strongly connected to the UK gas system. This secure integration to such a major gas system greatly mitigates Ireland's security of supply risks in comparison with many other European countries (see Gas Networks Ireland, Network Development Plan 2017 approved by the Commission for Regulation of Utilities). LNG should also be differentiated from other gas sources as the supply is dependent on commercial contracts and (unlike existing source of gas supply) the safe transportation and delivery of LNG cannot be guaranteed by the state.

The introduction of new gas transmission infrastructure, including as part of the proposed PCI Shannon LNG project, runs the risk of the state 'locking in' the burning of fossil fuels, **thereby preventing the transition to renewable technologies, at the very time when the state is already failing to meet its emission reduction commitments**. This risk of fossil fuel lock-in relates to both gas supply and demand: the introduction of new gas sources entails the construction of new extraction, processing and network infrastructure which will remain in place for decades (with significant costs potentially falling on the state and ultimately met by citizens). New gas supplies also bolsters ongoing, and potentially increased, gas usage by homes and businesses at the very time when national and EU climate and energy obligations necessitate that such demand is met by greater energy efficiency measures and renewable sources.

Any plans for new fossil fuel infrastructure, such as the proposed Liquefied Natural Gas terminals cannot be supported within the context of decarbonising our energy system. Manchester University and Teeside University jointly produced a major analysis in 2017 on the link between natural gas and climate change. Their report underlines that 'Liquefied Natural Gas (LNG) transport increases the climate change impact of natural gas supply chains'. It is noted that 'the additional energy required for LNG transportation (for liquefaction, shipping and regasification) adds a burden for LNG of approximately an additional 20% over the total emissions from combustion and *short-distance pipeline transport'*. Crucially, the report concludes that in order to reach the Paris Agreement objectives '*within two decades fossil fuel use, including gas, must have all but ceased, with complete decarbonisation following soon after*.'

In relation to the proposed Shannon LNG facility, it is highly likely that supplies would emanate from the process of hydraulic fracturing (i.e. 'fracking') in the US. Due to the range of negative effects on the environment, health, local communities and the climate, a ban on fracking for the exploration and extraction of fossil fuels in Ireland was introduced in the Petroleum And Other Minerals Development (Prohibition Of Onshore Hydraulic Fracturing) Act 2017. Facilitating exploration and extraction through fracking in another jurisdiction does not align with the state's own position on fracked hydrocarbons as reflected in the 2017 Act.

Fossil fuel investment also carries major risks and private sector investment must be directed away from fossil fuels towards sustainable alternatives. Taking into account obligations under the Paris Agreement, several leading financial authorities, including the Governor of the Bank of England, Mark Carney, have highlighted the risks of fossil fuel assets becoming stranded. An increasing number of legal scholars and regulators have warned that fiduciaries who fail to consider climate change risks in their investment analyses and decisions could be liable for breaching their fiduciary duty in the future, exposing them to litigation risk. The European Commission has stated in its report on the State of the Energy Union that *'Support should only be given if in line with the long-term energy policy of the European Union, avoiding stranded assets and carbon lock-in*.'

Recommendation

Given the integration of security and decarbonisation objectives under the EU Energy Union strategy, all proposed infrastructure, including designated PCIs which threaten lock-in ongoing fossil fuel usage, must be reviewed in view of the achievement of Paris Agreement objectives.

Are there any other comments or observations that you wish to make?

In relation to Ireland's second National SDG Implementation Plan to be delivered by the end of 2019, NECP should **support the development of a transparent, well-resourced Policy Coherence for Development mechanism** to identify, remove and prevent inconsistencies between departmental policies in order to ensure delivery of Ireland's climate obligations. DCCAE, in close consultation with DFAT and civil society organisations, should also **ensure policy coherence with climate obligations in engagements in UN fora**. We note with concern that protection of agri-food targets/trade has previously dominated Government engagement and messaging at many multilateral negotiations, including at the UNFCCC during negotiation of the Paris Agreement.

There is considerable need for a plan, on how to respond to the social and economic needs of individuals and communities affected by the phasing out of fossil fuels. A cross-agency task force (as is often created when large multinational employers close down) supported by political initiative and engagement and charged with the responsibility of identifying alternative, good quality, sustainable job opportunities for affected communities would help minimise and avert the impending impact on employment. Shifting subsidies into other policies and sectors is essential to progress a sustainable approach to energy poverty, provide retraining and alternative jobs to replace those that must be phased out, and renewable-based energy security.

Recommendation:
We support the recommendation from the IIEA (2017) that individual climate policies be socially and rurally proofed and that Government commit to proactively manage impacts and smooth the transition for affected workers, enterprises and communities.
