Green Party
Marine Policy

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1.0 Introduction, Principles and Immediate Action

The Green Party believes that the planning and management of our marine environment in a coherent, sustainable and socially inclusive manner is crucial to meeting our European and international obligations.

We believe that the current government's focus on “Blue Growth” and “ocean wealth” appear to form the dominant narrative around the marine environment in policy development. While economics is undoubtedly important, the Irish coastal and marine environment is so much more than natural capital and services, and this needs to be clearly acknowledged. Concepts such as natural capital and ecosystem services reframe non-human nature in economic and financial terms alone and this is too narrow. Framing the environment as providing services does not capture the intrinsic value of the marine environment, its intertwined bio-cultural diversity and in particular its intangible cultural heritage. This is not adequately captured by framing culture as a "service". Concepts such as “Blue Justice” serve to balance Blue Growth by allowing considerations of fairness, equity and social inclusion, as well as a recognition of different human value systems.

As a matter of urgency we call on Government to implement our motion on Marine Protected Areas1 which was passed by Seanad Éireann on the 23rd of May 2018. As an island nation off the coast of Europe, we have an opportunity to be a European leader in this area and this motion reflects the ambitious goals, targets and aspirations we can easily fulfil with political leadership.

The motion called on Seanad Éireann to acknowledge:

- that Irish waters are crucial habitats for biodiversity and provide an invaluable source of income for rural areas in tourism, fisheries, research, heritage, energy and more;
- that our seas and ocean are under unprecedented pressure, generated by the combined impacts of climate change, ocean acidification, shipping, fossil fuel exploration, destructive fishing, pollution and use of waters for economic purposes under the Blue Growth agenda;
- that numerous EU and international agreements obligate Ireland to ensure at least 10% of coastal and marine areas be protected before 2020 and 30% by 2030;

1 https://www.oireachtas.ie/en/debates/debate/seanad/2018-05-23/14/https:/www.oireachtas.ie/en/debates/debate/seanad/2018-05-23/14/

- that the Government has yet to deliver promised legislation for the designation and protection of marine protected areas, MPAs, despite Ireland's obligations to achieve good environmental status in our seas under the EU marine strategy framework directive, MSFD, by 2020;
- that Ireland has one of the largest marine areas in the EU by proportion to its size, and thus has an enhanced opportunity to protect key areas of ecological importance in the north-east Atlantic;
- that despite this considerable marine territory, Ireland has only 2.33% of its marine extent covered by MPAs, the second lowest coverage in the EU, and those protections are not sufficient to adequately protect these areas;
- that these sites are almost exclusively located within coastal habitats and river estuaries, leaving ocean species unprotected;
- that ecologically coherent networks of high quality MPAs, managed in collaboration with local stakeholders, are the best tool to conserve marine ecosystems;
- that the importance of our seas to the long-term health of the planet requires a dramatic effort to protect them, along the lines of the Half Earth concept proposed by E. O. Wilson and others;

Called on Seanad Éireann to note with concern:

- that the Government has made marine spatial planning a key aspect of Project 2040 without first developing a framework of MPAs;
- that Ireland has failed in its European and international obligations to protect 10% of its marine waters under Article 13 of the MSFD, the Aichi biodiversity targets, the UN sustainable development goals and OSPAR Convention;
- that Ireland was declared a whale and dolphin sanctuary in 1991, yet cetacean strandings have increased by 350% in the past ten years;
- the Irish Wildlife Trust report 2018 shows that 48 species indigenous to Irish waters are facing extinction;
- that fossil fuel exploration using seismic testing is occurring regularly in Irish waters since 2013, severely impacting on all marine life in the areas it is conducted;
- that responsibilities for marine management are divided between a number of Government Departments, impacting on the effectiveness of species conservation and fisheries management;

As the motion passed, it now stands that a majority within Seanad Éireann calls on the Government to:

- introduce an Oceans Act to protect 50% of Ireland's seas and ocean with an ecologically coherent network of diverse and significant MPAs;
- ensure such legislation contains the mechanisms to identify and designate high quality MPAs and ensure they are managed with respect for sustainable livelihoods and their ecological coherence, as part of a European network;
- ensure such legislation contains financial support for expert staff, monitoring, enforcement and management, utilising available EU moneys under the EMFF, LIFE programme and other sources;
- establish a consultation process within the legislation, involving all key stakeholders from the fisheries, recreational fisheries, tourism, energy, conservation and other relevant sectors to propose and review protections for such protected areas and input into future designations;
- ensure designation of inshore MPAs be community-led as far as practicable, with a robust public consultation process as required under the Aarhus Convention;
- ensure the legislation provides for robust scientific information on habitats, species, heritage sites and geological-geomorphological features to assist in the identification of potential MPAs;
- ensure coherence in marine spatial planning and MPAs by bringing all activities in the marine under the control of one Government Department;
- ensure the Common Fisheries Policy allows for the incorporation of strong Irish MPAs that would prohibit any especially destructive fisheries practices and prioritise an ecosystems-based approach to marine management that distributes the quota amongst Irish and EU vessels in an equitable and ecologically sustainable manner;
- establish a moratorium on the granting of any licences for deep sea mining and fossil fuel exploration in protected Irish waters and prohibit seismic testing within any range of protected areas that would have any deleterious effects;
- implement a ban on microbeads and the mandatory annual monitoring of micro-plastics in Irish waters.

Research and Planning

The recent publication of the government's National Marine Spatial Planning Framework is a welcome first step in addressing the considerable challenge of creating a sustainable marine environment. In continuing this work it is significant to note that Senior Maritime Policy Advisor to the Dutch Government, Lodewijk Abspoel, has cautioned the Irish Government against being too quick to create any borders, boundaries, zones or to draw 'lines' in the first iteration of the NMPF. He emphasised the need to keep a degree of flexibility and open dialogue as the NMPF proceeds through its iterations in keeping with the principle of adaptive management enshrined in the MSFD and MSPD. The Green Party concurs with this progressive method of policy development.

3.1 Understanding the Current Marine Environment

In order to formulate policy around a subject as complex as our marine environment it is crucial to work towards a description of the "as is" situation in terms of existing sectoral development and activities in Ireland's maritime area, including an identification of the future opportunities and constraints for each.

To achieve this, policies must be based on high quality scientific and local cultural evidence. While the Green Party welcome efforts to increase knowledge of our wildlife populations under the ObSERVE programme, marine mapping and coral reef discoveries under the INFOMAR programme and the recording of cultural heritage shipwreck sites by the National Monuments Service there is more work to be done on collecting local cultural information on how local communities are currently using the sea.

There is a drastic need for the responsibility for the marine, and marine planning, to be brought under one department, or a stand-alone department, as current arrangements are leading to suboptimal outcomes and conflicting policies. For example:

- *Harnessing Our Ocean Wealth* sought to assign the Department of Environment a lead role in implementing MSFD in association with "other appropriate departments and agencies". However, it is unclear who has responsibility for cetacean protection or enforcement when it comes to seismic testing – the Petroleum Affairs Division (Department of Communications, Climate Action and Environment) or the NPWS (Department of Arts, Heritage, Regional, Rural

and Gaeltacht Affairs), while reform of foreshore licencing (Department of Housing, Planning and Local Government) has been seriously delayed.

- As per recommendation 2 of the Oireachtas Joint Sub-Committee on Fisheries (p.37) the current governance arrangements are not the "best working model". A streamlining of the processes required to maintain Good Environmental Status (GES) will require the amalgamation of responsible agencies. One Government Department or Agency should have more marine-related activities brought under its aegis based on the Scottish and NI models.
- Government has made Marine Spatial Planning a key aspect of Project 2040, but hasn't designated any of the required MPAs, or even begun a proper consultation process with communities in regard to their use of the marine. This will only work to increase conflict in the marine.
- The GDP of the Irish Seafood Industry is also estimated at €1.1bn and total tourism revenue for the Irish economy in 2016 was c. €7.8 billion. The seafood sector had a turnover of €3.5 billion and provided employment for about 16,300 people in 2010 (full time equivalent). 'Harnessing Ireland's Ocean Wealth' seeks to triple Ireland's seafood exports and yet is not implementing the MPAs that can make this a reality through habitat and stock restoration.
- There are inconsistencies in seafood management that lead to unintended consequences that damage the environment. As just one example, scallop dredging has one of the most severe ecological effect of all marine fisheries[2] because of the damage and mortality it causes the seabed habitat and species that live there. However, in Ireland, while the destructive fishing method of dredging for scallops is legal, hand-diving for scallops is illegal, despite its much lower impact on the environment. Many Irish restaurants refuse to buy scallops sourced from dredging [3]due to the negative environmental impact.[4] Chefs such as JP McManus and sustainable seafood chef and wholesaler Niall Sabongi (of Sustainable Seafood Ireland) import hand dived scallops from Scotland for wholesale and for restaurants. The exit of the United Kindgom from the EU will mean importing sustainable hand-dived scallops from the UK is likely to become more difficult.

2 https://www.int-res.com/abstracts/meps/v311/p1-14/

3 https://www.irishtimes.com/life-and-style/food-and-drink/jp-mcmahon-why-is-it-illegal-to-hand-dive-for-scallops-1.3570268

4 https://www.openseas.org.uk/evidence/

Policy development should also acknowledge and outline the incompatibility of certain marine activities, for example wildlife and fisheries protection as against petroleum exploration. Engaging in both is impossible as healthy fish and wildlife are incompatible with seismic testing and drilling for fossil fuels. The baseline report must provide a clear description of the benefits given by each activity, and the damage being done by others. Only then can a clear decision be made on what our future marine economy can be based on, and what is best for the Irish people as a whole.

Conflicting activities include:

<table>
<tr><td>Use of Ireland's seas and depletion of fish stocks by a large unsustainable fishing fleet including deep trawler fishing</td><td rowspan="2">Promotion of Ireland as a hub for bountiful wildlife, Marine Protected Areas , thriving, resilient, accessible and sustainable coastal communities</td></tr>
<tr><td>Promotion of Ireland for minute amounts of oil and gas extraction</td></tr>
<tr><td>Increasing risks from polluting activities such as unsustainable fish farming, unregulated agri-food waste, deep sea-bed trawling, oil and gas exploration.</td><td>Promotion of Irish food and marine products as sustainable, healthy and high quality supporting high numbers of jobs</td></tr>
<tr><td rowspan="3">Ocean acidification due to climate change, intensified by fossil fuel exploration, shipping and carbon emissions from heavy industry</td><td>Promoting Ireland as a destination for sustainable tourism including wildlife, scenery, high quality food and unique artisanal produce</td></tr>
<tr><td>Promotion of Ireland as a climate-friendly country increasing our green image and using Irish seas as a carbon sink</td></tr>
<tr><td>Promotion of sustainable long term livelihoods in rural coastal areas including island fishing communities, traditional seaweed harvesters, renewable energy and artisan food and beauty products</td></tr>
</table>

	Promote the development of vibrant, accessible and sustainable coastal and island communities.
	Adoption of an ecosystem-based approach (as endorsed by the Parties to the Convention on Biological Diversity) to marine planning

3.2 Principles for Action

High level objectives for Ireland's first National Marine Planning Framework are informed by Ireland's Integrated Marine Plan (Harnessing Our Ocean's Wealth, HOOW) and the Maritime Spatial Planning Directive 2014/89/EU.

HOOW outlined three equal goals:

1. Goal 1 focuses on a *thriving maritime economy*, whereby Ireland harnesses the market opportunities to achieve economic recovery and socially inclusive, sustainable growth.
2. Goal 2 sets out to achieve *healthy ecosystems* that provide monetary and non-monetary goods and services (e.g. food, climate, health and well-being).
3. Goal 3 aims to increase our *engagement with the sea*. Building on our rich maritime heritage, our goal is to strengthen our maritime identity and increase our awareness of the value (market and nonmarket), opportunities and social benefits of engaging with the sea.

Overall, the Green Party believe that our nation's marine policy must base itself on an Ecosystem Approach to marine management. This eco-system based approach must be clearly defined, and the overall NMPF and subsequent strategies should be explicitly aligned with the UN 2030 Agenda for Sustainable Development.

We welcome the commitment in the National Marine Planning Framework to apply an ecosystem approach. However, we draw attention to the fact that there are many definitions of an ecosystem approach and that it is referred to, but not defined, in the MSP or MSFD directives. We strongly recommend agreeing and articulating clearly the definition of the ecosystem approach that will be

adopted for the National Marine Planning Framework. We advocate the definition as endorsed by the Parties to the Convention on Biological Diversity as the most inclusive definition, particularly in light of its recognition of the relationship between cultural and biological diversity.

As outlined in the consultation document, Article 5 of the Maritime Spatial Planning Directive [5](MSP) 2014/89/EU obliges Member States to apply an ecosystem approach in all their operations in marine spatial planning:

"When establishing and implementing maritime spatial planning, Member States shall consider economic, social and environmental aspects to support sustainable development and growth in the maritime sector, applying an ecosystem- based approach, and to promote the coexistence of relevant activities and uses."

"The ecosystems approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way...An ecosystems approach...recognises that humans, with their cultural diversity, are an integral component of many ecosystems." *Fifth Conference of the Parties to the Convention on Biological Diversity, 2000. P103-104.*

This highlights again the key role that fishing communities play in marine protection such as their ability to highlight the risk to marine life from fossil fuel exploration. Integrated Coastal Zone Management measures should be incorporated into the running of any marine strategy or new marine protected areas to include the people that are living near, and making a living from, the sea in the area.

One example of a positive approach is the Scottish Government's Marine Plan, which adopted a vision for the marine environment that provides: "a clean, healthy, safe, productive and biologically diverse marine and coastal environment, which contributes to social, cultural, and economic well-being and which is managed to meet the long-term needs of nature and people".

4.0 The Marine Environment and Climate Change

The IPCC report6 published in October 2018 states that global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate. A 1.5C increase will mean "extreme

5 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0089&from=EN

6 https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf

temperatures in many regions, increases in frequency, intensity, and/or amount of heavy precipitation in several regions and an increase in intensity or frequency of droughts in some regions".

The oceans produce 50-85% of the oxygen we breath and are a sink for carbon as a result, taking up around one third of all CO2 by human activity. The resulting drop in pH can have drastic effects on marine ecosystems.7 Europe is already facing major shellfish losses due to acidification8 and the EPA State of the Environment Report 2016 [9]notes acidification effects are being observed in Ireland's offshore surface waters, 19% of Ireland's commercial species are depleted and ocean acidification is already affecting phytoplankton in Irish oceans.

Climate change will also result in significant **economic costs**. Global warming is expected to "drive the loss of coastal resources, and reduce the productivity of fisheries and aquaculture". These are crucial issues for countries like Ireland with valuable tourism and fishing industries. Extreme weather events such as severe flooding could cost Ireland over €1.15 billion per year by 2050.[10]

5.0 The Marine Environment and Energy

As the implications of climate change become increasingly evident, rapid, deep decarbonisation of our economy is essential to ensure a safe and prosperous Ireland. The burning of fossil fuels such as gas, oil, peat and coal is responsible for more than 75% of developed nations Greenhouse Gas (GHG) emissions11. To combat climate change it is essential to transition to a low-GHG energy mix.

For the Earth to remain a safe operating space for humanity, for both current and future generations, global temperatures must be maintained at less than 1.5°C above pre-industrial levels. To do this 80% of the known fossil fuels need to stay in the ground.[12] The development of new fossil fuel infrastructure is antithetical to maintaining a safe planet. Irish citizens are increasingly calling on the government to take

7 https://www.nationalgeographic.com/environment/oceans/critical-issues-ocean-acidification/

8 http://ec.europa.eu/environment/integration/research/newsalert/pdf/europe_could_suffer_major_shellfish_production_losses_ocean_acidification_482na2_en.pdf

9 http://www.epa.ie/media/Chapter5_Inland_MarineWaters.pdf

10 https://www.dccae.gov.ie/documents/National%20Adaptation%20Framework.pdf

11 https://www.eia.gov/energyexplained/index.php?page=environment_where_ghg_come_from

12 https://www.carbontracker.org/reports/carbon-bubble/

action to combat climate change, as illustrated by the recommendations made by the Citizen's Assembly on climate change in November 2017. The decarbonisation of the energy mix is technically and commercially feasible13 and will greatly enhance energy security in Ireland, where we are historically highly dependent on imported energy.

UN scientists have warned recently that we have 12 years to stop climate change. This will require avoiding locking ourselves into energy infrastructure that will make decarbonisation more difficult over the next decades. Currently the Irish government is supporting Shannon LNG14 and offshore exploration for fossil fuels.15 We call on Government to take energy security seriously, protect our marine and instead invest in indigenous renewable alternatives such as wave, tidal and offshore wind.

5.1 Petroleum

The Irish Government's policy of encouraging oil and gas extraction off the Irish coast is misguided and in direct opposition to other aims in Harnessing Our Ocean Wealth. Just one example is the seismic testing that has been intensively practiced in Irish waters over the past 6 years. To map the seabed for fossil fuel deposits, sonic cannons, also known as seismic airguns, are towed behind boats creating dynamite-like blasts— repeated every ten seconds, 24 hours a day, for weeks and months at a time, at acoustic levels 100,000 times more intense than a jet engine.

This practice is causing considerable damage to the 24 species of whales, dolphins and porpoises in Irish waters. New evidence from the Nature Ecology and Evolution Journal in 201716 shows that a single blast of a seismic airgun kills 100% of zooplankton larvae and 64% of adult krill for at least 0.7 miles (the study was only conducted up to this point). Plankton is the basis of the marine ecosystem in the Atlantic and zooplankton is the key food source for most commercial fish. Many Irish fishing communities have corroborated these findings17 in Irish media, saying that it is directly damaging fish-stocks. Yet the

13 https://www.carbontracker.org/reports/carbon-bubble/

14 https://www.irishexaminer.com/breakingnews/business/1bn-shannon-gas-project-acquired-864419.html

15 https://www.irishexaminer.com/breakingnews/business/state-commits-to-offshore-oil-drilling-882196.html

16 https://www.nature.com/articles/s41559-017-0195

17 https://www.irishtimes.com/news/environment/new-research-finds-seismic-testing-for-oil-and-gas-at-sea-can-destroy-plankton-1.3432997

Petroleum Affairs Division has not required the updating of guidelines[18] to incorporate this new information.

The Irish Whale and Dolphin Group reported 2017 as the worst year on record for beach strandings with a 30% rise in dolphin deaths. Fewer fin and blue whales have also been recorded in the Porcupine Basin – a key mating ground - since seismic testing began there in 2013. Ireland's seas are incredible and have been a whale and dolphin sanctuary since 1974, with UCC reporting that 250,000 bottlenose dolphins come to the Irish Atlantic every year. Yet the Petroleum Affairs Division has not once required the industry to conduct an Environmental Impact Assessment (EIA) to assess the reported damage.[19] Indeed the Division had to be forced by the European Commission to comply with basic requirements of the EIA Directive in 2013.

We question the energy implications of the existing €2.7 million OBSERVE programme and whether it is Government funded research conducted as means of optimising fossil fuel industry operations. It appears the latter is Government policy[20]. On both occasions Government was asked if the results of the ObSERVE programme would result in the exclusion of areas from exploration or from seismic testing and the Minister responded in the negative. With the discovery of endangered shark nurseries and further unique examples of deep-sea coral reefs this year under the INFOMAR programme we are deeply concerned by these Government statements.

We submit that the Government should immediately cease the granting of new exploration or drilling licences or permissions off the Irish coast for the following reasons:

- The industry has no job potential, and threatens existing jobs: The Government's own 2012 *Harnessing Our Ocean Wealth* policy lists offshore oil and gas as having not only the lowest growth potential of any marine industry, but a minus growth of -4.8%. This is why in 2016 the Irish offshore fossil fuel industry provided a mere 265 jobs, while the seafood industry it directly threatens provided 11,000.
- The industry threatens jobs and wildlife for little gain: Out of 160 wells drilled since 1970, only 2 commercial discoveries have been found. This is a record low that has existed in a country with the second most attractive fiscal terms in the world and a governing Petroleum Affairs Division

18 https://www.kildarestreet.com/wrans/?id=2018-06-12a.2822
19 https://www.kildarestreet.com/wrans/?id=2018-06-12a.2809
20 https://www.kildarestreet.com/debates/?id=2017-02-07a.382

that has never once conducted an Environmental Impact Assessment of industry activities offshore.[21] The Irish Offshore Operators Association, Providence Resources and PwC have all admitted there is only a 1 in 30 or 1 in 40 chance of finding anything commercial, compared 1 in 7 in Norway and 1 in 6 for the UK.

- The industry is dangerous and has a poor track record: Gas has been found off Kinsale in 1971 and Corrib in 1996, but they are no example to follow. Not only was there a 25 year gap between discoveries, but both fields resulted in massive reputational damage to the industry and considerable social and political upheaval. Even if only tiny amounts of oil are found, these wells produce toxic chemicals like benzene, arsenic, and radioactive pollutants, and toxic metals like mercury and lead.
- Investment must be in new burgeoning areas that support long term jobs, community resilience, wildlife and benefit for the state, not a flailing industry: Ireland's seas are some of the most inhospitable in Europe with major storms and difficult geology. No present fossil fuel technology can cope with such a testing environment as the Deep Atlantic. The Oireachtas recently passed Deputy Thomas Pringle's Fossil Fuel Divestment Bill to divest the state pension fund from fossil fuels, demonstrating the unattractiveness of these funds.
- Energy Security through fossil fuel exploration is a misnomer as compared to indigenous renewables: Fossil fuel extraction is a privatised industry and any fuel found in Irish seas will go to the highest bidder, not to the Irish people. Furthermore, with the prospect of much of the fuel being immediately shipped overseas with the development of new technologies such as Liquified Natural Gas (LNG), it is likely our resources will boost other the security of supply of other countries, more than our own.
- Tax take is too low to make the industry damage worthwhile: Since 2013, new licences are subject to a 25% tax on profits which can be written off against costs. The take in sub-Saharan Africa ranges from 44% to 85%. However, many oil and gas licences like Newgrange in ecologically sensitive Porcupine Seabight, or the Kish Basin near the Dun Laoghaire Forty, were given out before 2013 and benefit from a historic no-tax regime set up to encourage investment in exploration.

5.2 Renewables

21 https://www.kildarestreet.com/wrans/?id=2018-06-12a.2809

Our central concern in the development of renewables is the promotion of offshore Wind capacity through the updating of legislation around foreshore development. The current Act of 1933 is obviously inadequate to the task and is slowing the development of considerable capacity, at a time when the technology is improving in both efficiency and cost.

We propose to increase government and EU research funding allocated to developing tidal, wave and other ocean energy projects to a useable level, and to begin consideration of their deployment as appropriate. Ireland can be a world leader in this emerging sector and the sector will be an integral part of our energy future. We need to plan for that now.

5.3 Carbon Capture and Storage

We believe that carbon capture and storage is a red herring for the Irish energy system that will allow business-as-usual operations by heavy polluting industries. At the Kinsale gas field, we contend that CCS has not been done before on a gas plant and it's mainly used as a method of enhancing oil and gas recovery. It is also a highly experimental technology that could have serious repercussions for farmlands,22 communities, fishing livelihoods and wildlife in the area.[23] There are no commercial CCS projects anywhere in the world not related to the production of hydrocarbon fuels – fuels that release CO2 when used for their designed purpose. This suggests that CCS is not economic unless used to support hydrocarbon production – those same hydrocarbons that need to be phased out in order to achieve de-carbonisation targets.

The likelihood of CCS projects being successful within the 12 years left to maintain GHG levels below 1.5C is slim.[24] Investment is better being used for proven technologies such as renewables, energy efficiency and marine management.

5.4 Offshore Gas Storage

22 https://www.sciencedirect.com/science/article/abs/pii/S0098847212000469

23 https://www.fastcompany.com/1704105/problem-carbon-capture-co2-doesnt-always-stay-captured

24 http://theconversation.com/its-time-to-accept-carbon-capture-has-failed-heres-what-we-should-do-instead-82929

The Green Party opposes the building of any new offshore gas storage infrastructure such as Liquefied Natural Gas (LNG) terminals on the island of Ireland. There is no need for new gas infrastructure as Ireland's gas network is already "highly reliable"25 and the Scotland – Ireland interconnector project, a 50km parallel connection between Cluden and Brighouse in Scotland, is being built.

The proposed development of a Liquefied Natural Gas (LNG) terminal in Co. Kerry to import gas from the United States is antithetical to Ireland's necessary transition to a low-carbon economy. Shannon LNG, owned by US company New Fortress Energy, consists of an LNG import terminal, 4 tanks of 200,000 cubic metres capacity each, a 26 km pipeline which will cut through the Kerry and Limerick countryside, and a 500MW power plant. This infrastructure will be built onshore on a greenfield site. Shannon LNG will have the capacity to process 3 million tonnes of gas per year, with a regasification capacity of more than 10.3 bcm/y, over twice Ireland's annual gas consumption. The project will cost €500 million to develop, and New Fortress Energy has stated that it expects to "rely on public funding to cover up to half the cost of the Shannon LNG project".

A common argument in favour of Shannon LNG is that the development of new gas infrastructure supports energy security. This argument assumes a reliance on fossil gas for our energy needs until 2050. However, increasing our reliance on one source of energy in this way is counter-productive for energy security, in that an interruption of gas supply could completely shut down our electricity system. Recent research argues that the best way to address both Irish energy security and the pressing need for rapid decarbonisation is to constrain and reduce energy consumption (through efficiency measures and/or absolute reductions in energy services) and to directly exit from the use of all fossil fuels, including gas, as quickly as is safely feasible.

Shannon LNG, if developed, would have a lifespan of 40-50 years. This would commit Ireland to fossil fuel "lock-in", whereby resources which could be invested in sustainable, renewable energy sources are instead invested in unsustainable fossil energy. For example, the public service obligation (PSO) levy allocated to subsidising peat and securing gas supply totalled €169.2 million in 2014. Continued reliance on fossil energy sources will also make Ireland unable to meet its emission reduction targets under the EU Effort Sharing Agreement, and subject to fines of €455m.

25 http://www.ervia.ie/decarbonising-domestic-he/KPMG-Irish-Gas-Pathways-Report.pdf

The importation of Liquefied Natural Gas requires large, disruptive and dangerous infrastructure, with safety risks for local communities, as illustrated by several serious incidents. Fossil fuel infrastructure and the associated pollution affects the tourism industry in the area and the physical and mental health of the community. Total tourism revenue for the Irish economy in 2016 was around €7.8 billion and overall employment in tourism is estimated to be in the region of 220,000. While the Shannon LNG terminal will create 350 jobs during construction, it will only create 50 long-term jobs.[26]

The lower Shannon Estuary is designated as a Special Protection Area under the European Communities (Conservation of Wild Birds) (Amendment) Regulations. The site is home to over twenty species of wetland and waterbirds, and is the only Special Area of Conservation for dolphins in Ireland.

6.0 Fisheries

Despite the social, cultural and economic importance of the inshore fisheries sector to small coastal communities, current government policy development such as the National Marine Planning Framework baseline report frames the inshore sector in solely economic terms. It aims to manage inshore fisheries "in a way that is sustainable both economically and environmentally" (p56), with no reference to socio-cultural considerations, apart from the statement that the industry "has made a significant contribution to Ireland's social and cultural history" (p52). Social and cultural context and considerations are not just historically relevant. They also highly relevant to a sustainable future of both the marine environment and coastal communities. For example the social and cultural context of a local community provides insights into the forward thinking and engaged nature of a community - not just their history - and can and should be harnessed for innovative and imaginative management approaches for a sustainable and resilient future.

The current Common Fisheries Policies quotas for 2018 will result in 46% of fish stocks being overfished (albeit down from 58% in 2014). Quotas are still not fairly distributed. Allocation at the national level should be focused towards those with a sustainable approach to fisheries management. A major challenge facing Irish inshore fisheries is low (or for some species zero) allocations of quota, particularly for non-shellfish species despite the existence of traditional inshore fisheries. Although the national marine planning framework baseline report acknowledges this limited access to quota species, it highlights the maintenance of inshore water quality as the main issue to focus on as regards the inshore fisheries sector. While maintenance of inshore water quality is important, there is no recognition of

26 https://www.irishtimes.com/business/court-challenge-to-500m-gas-facility-1.1215334

Common Fisheries Policy provisions such as Articles 7 and 17 which call on Member States to promote and incentivise low impact fishing methods and to consider environmental, social and economic criteria, for example when allocating quota.

We propose that future policy development focus on sustainable development principles based on consultation in line with an ecosystem-approach. Community, grassroots, member-based organisations such as the Irish Islands Marine Resource Organisation (IIMRO) should be recognised as official stakeholders in the development of inshore fishery policy at a national level, particularly in light of the fact that they are already recognised at an EU level, for example through their affiliation with LIFE (Low Impact Fishers of Europe) and their membership of the European Union North West Waters Advisory Council.

Considering their severely deleterious effects on vulnerable species, we also recommend the ending of such fishing practices as pair trawling, deep sea fishing and bottom dredging.

7.0 Nature Conservation

On the 23rd of May 2018, Green Party Senator Grace O'Sullivan's motion on Marine Protected Areas[27] was passed by Seanad Éireann. This motion called for half of Ireland's maritime area of approx. 490,000 km2 be designated a Marine Protected Area in consultation with, and co-managed by, coastal and fishing communities.

This motion was brought forward because Government has made marine spatial planning a key aspect of Project 2040 without first developing a framework of MPAs.

The Irish Government is 5 years late in implementing a network of MPAs, as required by the Marine Strategy Framework Directive. The EU MSFD requires Member States to put in place measures to achieve Good Environmental Status (GES) by 2020. Member States are required to have completed and communicated to the European Commission, their Initial Assessments, determination of the characteristics of GES and the establishment of associated targets and indicators by 15th July 2012.

- Ireland commenced this process only in February 2012 with the appointment by Department of Environment Community and Local Government of RPS Consultants to report in early 2013.

27 https://www.oireachtas.ie/en/debates/debate/seanad/2018-05-23/14/https:/www.oireachtas.ie/en/debates/debate/seanad/2018-05-23/14/

- The Government's integrated marine plan, *Our Ocean Wealth*, listed implementation of the marine strategy framework directive as Action 9. So far there has been little progress.
- In a speech by Minister Simon Coveney at the Sustainable Water Network's (SWAN) UK & All-Ireland Marine Protected Areas Workshop in April 2017 it was stated that such legislation would be published in a matter of weeks. This has still not yet occurred.

7. 1 Current Marine Protection in Ireland

Ireland currently has just 2.33% of its waters covered by Marine Protected Areas (260 MPAs, and 37 Marine Managed Areas). This is the second lowest in Europe. There are currently only 5 offshore MPAs – all of which protect coral reefs on the seabed. Almost all of Ireland's MPAs are protected under Natura 2000 network which is underpinned by two European Directives: the Birds Directive and the Habitats Directive , and almost all of which are focused on coastal habitats and river estuaries, rather than orientated around the dedicated protection of marine species;

In Ireland, the 1992 EC Habitats Directive (92/43/EC), as transposed by the EC (Natural Habitats) Regulations (S.I. 94 of 1997), is currently the only legislative instrument providing protection to habitats in the marine environment within the Exclusive Economic Zone (EEZ).

Under this legislation, a series of habitats are identified for which Special Areas of Conservation (SACs) must be created and within which these habitats must be maintained at favourable conservation status. These habitats include:

- Estuaries
- Large shallow inlets and bays
- Mudflats and sandflats not covered by sea water at high tide
- Reefs
- Sandbanks that are slightly covered by seawater at all times
- Submerged or partly submerged sea caves

Under Article 12 of the Directive, all cetaceans should receive strict protection within the Exclusive Economic Zone. Under Article 4 of the Directive, Special Areas of Conservation (SACs) must be proposed for the following species:

- Bottlenose Dolphin

- Harbour Porpoise
- Common Seal
- Grey Seal

Under the Wildlife (Amendment) Act 1976-2005, all cetaceans and seals are protected species listed on the 5th Schedule. Under this Act, Natural Heritage Areas (NHAs) may be established to protect habitats or species.

Whilst some terrestrial and coastal NHAs may encompass adjacent marine areas, no NHAs have been established for marine mammals to date. No NHAs for habitats offshore have been established to date.

Under the OSPAR Convention to Protect the Marine Environment of the North East Atlantic, Ireland committed to establishing marine protected areas to protect biodiversity (i.e., OSPAR MPAs). No legislation is currently used in Ireland to legally underpin protected areas established to fulfil commitments under international conventions. Instead, Ireland established a number of its SACs as OSPAR MPAs.

7.2 Level of Protection

An ecologically coherent networks of high-quality marine reserves and protected areas, managed by and with local fishing communities, are the best tool to conserve marine ecosystems;

It is quite clear that the current MPA network is not working.

For example, the Porcupine Bank and Seabight are subject to four offshore Marine Protected areas - the South West Porcupine Bank SAC, the Porcupine Bank Canyon SAC, the Hovland Mound Province SAC and the Northwest Porcupine Bank SAC.

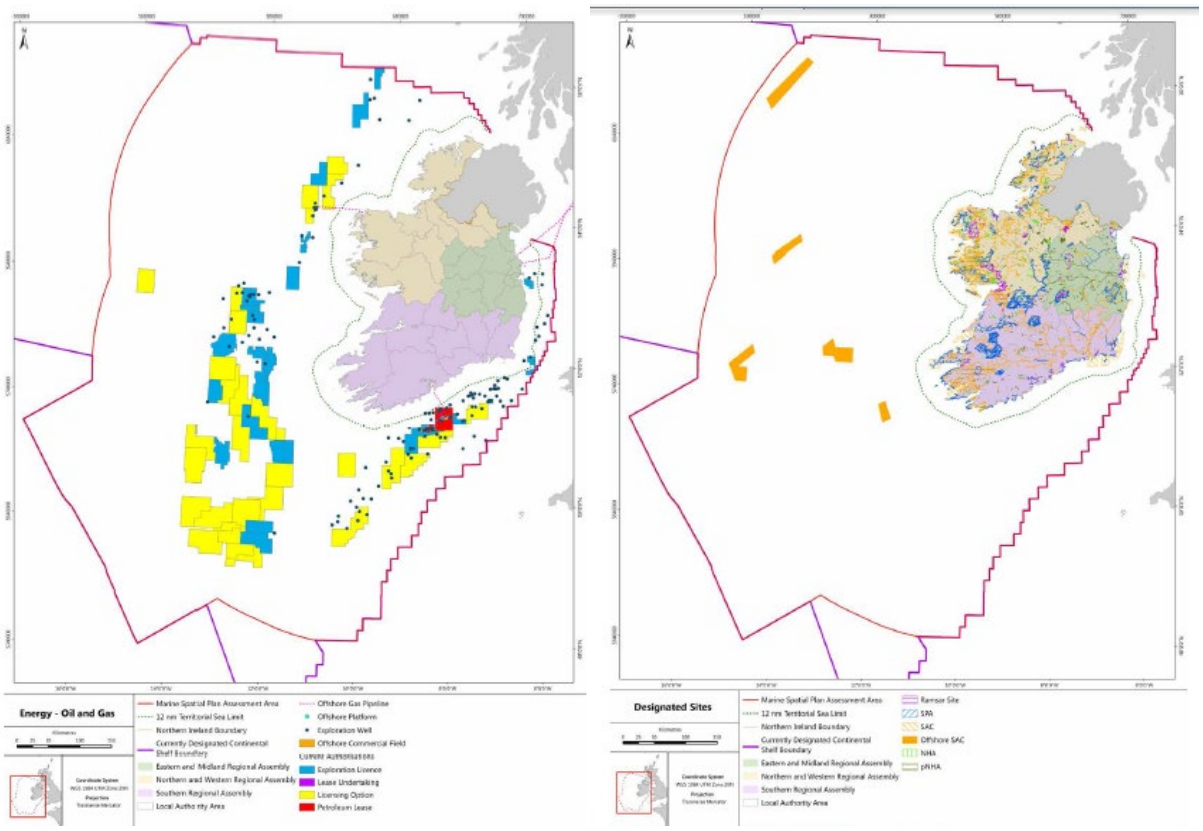

Figure One - Fossil Fuel Licences (Source - Consultation Document p.38) // Figure 2 - Designated Protected Areas (Source - Consultation Document p.75)

However, as can be seen in a comparison between Figures 1 and 2, the Porcupine Seabight is one of the most extensively licensed frontier fossil fuel exploration areas in Europe. Heavy seismic testing has been conducted in this area for the past five years since and including 2013.

These deep coral zones designated far offshore are closed to bottom-trawling by the Northeast Atlantic Fisheries Commission.[28] While coral reefs are protected, many damaging activities such as seismic testing or destructive fishing practices still occur above the sea-floor on which the reefs are based, damaging the Vulnerable Marine Ecosystems that the reef is reliant upon. Coral reefs have declined by 40 percent worldwide, partly as a result of climate-change-driven warming.

28 https://www.irishtimes.com/news/environment/hubs-of-deep-water-life-in-need-of-greater-protection-1.3381058

Any baseline study must include a proper completed list of MPAs before Government and stakeholders can decide what is to be prioritised when it comes to use of that environment. Most other EU countries have completed their legislative MPA processes before engaging in a planning framework for marine activity.

We also note the discovery of endangered shark nurseries and further unique examples of deep-sea coral reefs29 this year under the INFOMAR programme. However these appear not to have been included in the list of protected sites in the Baseline Report Consultation Document.

Marine protected areas in EU waters have seen on average30 a 238% increase in biomass of flora and fauna, 116% increase in density of seaweed and animals, 13% increase in fish size and a 19% increase in species diversity. A well designed network of MPAs can have hugely positive effect for both wildlife and those engaging with the coastal environment.

Ireland has a number of other environmental obligations that must be achieved and incorporated into all marine policy:

- Protect 10% of our marine waters before 2020 and 30% by 2030 under Article 13 of the MSFD, the Aichi biodiversity targets, the UN sustainable development goals and OSPAR Convention
- Achieve good environmental status in our seas under the EU marine strategy framework directive, MSFD, by 2020.

How these targets might be met is as follows:

- An Oceans Act to protect 50% of Ireland's seas and ocean with an ecologically coherent network of diverse and significant MPAs;
- This ecologically coherent networks of high quality MPAs should be managed in collaboration with local stakeholders. The designation of inshore MPAs in particular must be community-led as far as practicable, with a robust public consultation process as required under the Aarhus Convention. The Green Party recommend that Northern Ireland's approach to MPA framework and the consultation process be taken as a leading European example.

29 https://www.irishtimes.com/news/science/video-newly-discovered-rare-deepwater-coral-identified-off-irish-coast-1.3573795

30 https://www.eea.europa.eu/publications/marine-protected-areas-in-europes

- The Act must contain mechanisms to identify and designate high quality MPAs and ensure they are managed with respect for sustainable livelihoods and their ecological coherence, as part of a European network;
- Responsibilities for marine management must be brought under one department, rather than the current situation of divisions between a number of Government Departments, impacting on the effectiveness of species conservation and fisheries management;
- Significant financial support must be given to this department to enact this legislation, and a culture of innovation within the department should be actively supported and encouraged. Support includes expert staff, monitoring, enforcement and management, utilising available EU moneys under the EMFF, LIFE programme and other sources;
- Draw on the expertise of marine environmental academics in Irish universities, both in the natural and social sciences, and in the humanities;
- The legislation for MPAs under the Oceans Act must establish an ongoing, iterative consultation process within the legislation in accordance with the principle of adaptive management (learning by doing) which is enshrined in the Marine Strategy Framework Directive and in the Maritime Spatial Planning Directive. This process should involve all key stakeholders from the fisheries, recreational fisheries, tourism, energy, conservation and other relevant sectors to propose and review protections for such protected areas and input into future designations;
- The legislation must provide for robust scientific information on habitats, species, heritage sites and geological-geomorphological features to assist in the identification of potential MPAs. The same principle should be followed for this Baseline report.
- Government must ensure the Common Fisheries Policy allows for the incorporation of strong Irish MPAs that would prohibit any especially destructive fisheries practices and prioritise an ecosystems-based approach to marine management that distributes the quota amongst Irish and EU vessels in an equitable and ecologically sustainable manner;
- Introduce a moratorium on the granting of any licences for deep sea mining and fossil fuel exploration in protected Irish waters and prohibit seismic testing within any range of protected areas that would have any deleterious effects;
- Annual monitoring of levels of micro-plastics in Irish waters

8.0 Aquaculture

The Green Party believe that environmental sustainability must be a foundation principle in the development of aquaculture in Irish coastal areas. That means assessing the environmental impacts of aquaculture developments in coastal areas, an effective system of monitoring adherence to regulations and a constant awareness of the potential severe impacts that such developments can have on local communities and amenities. We endorse an approach along the lines of the 2014 report from Seas at Risk and other NGOs, Priorities for environmentally responsible aquaculture in the EU, and their subsequent paper on ensuring the sustainability of aquaculture feed ingredients.[31]

9.0 Cultural Heritage and Assets

Current government policy frames cultural heritage and assets in the context of the marine as national monuments and the physical built heritage of maritime towns and villages. Protection is seen as the need to provide archaeological mitigation in terms of excavating and monitoring sites during physical development. The benefits of cultural heritage are also seen largely in terms of tourism opportunities. While these are important aspects of Irish cultural heritage, they are by no means the sum total of it. When we speak of our marine environment in the limiting terms of economics alone, the sociocultural context is lost as a means of fostering a long-term marine stewardship ethos within our coastal communities.

Green Party policy on our Marine Environment seeks to highlight that an ecosystem approach and maintaining Good Environmental Status requires the intangible cultural heritage of fishing communities, particularly island communities, to be articulated and acknowledged. Recital 14 of the MSP Directive provides that "an ecosystem- based approach should be applied in a way that is adapted to the specific ecosystems and other specificities of the different marine regions and that takes into consideration the ongoing work in the Regional Sea Conventions, building on existing knowledge and experience" and the MSFD recognises "Humans are part of the ecosystem and human activities both affect the ecosystem and depend on it".

A healthy ecosystem is important to maintaining heritage. The local history, folklore, myth, place names, navigation lines, wildlife, migration routes, tidal currents, streams, shipwrecks and marine life are all

31 https://seas-at-risk.org/images/pdf/publications/EnsuringSustainableAquacultureFeedIngredients-JointPositionPaper2014.pdf

closely interlinked. These cultural aspects of our islands bring a richness to life there and they depend on healthy ecosystems to keep them going through the generations.

An ecosystem approach is often missing from official and state decision making processes. Government policy development in this area must be viewed as an opportunity to revitalise and help to shape resilient coastal communities, particularly those that have been hit by declining fishing stocks in Irish waters. This process should not be top down and authoritarian. It should be organic and collaborative, underpinned by co-management and building on current coverages of marine protection in terms of designation rather than starting from scratch.

The Green Party recommend the following examples be taken into account and followed by Government in protecting cultural heritage:

- Develop a proper MPA consultation process that integrates local intangible and tangible cultural heritage into the definition of Good Environmental Status (GES): The delay in Ireland designating MPAs is preventing a proper inclusive designation and management process. There are fears that past mistakes in nature conservation that did not listen to community concerns or respect the good work done by communities to protect natural areas.
- The experiment in community-led co-management piloted by Marine Scotland and Scottish Natural Heritage and local island communities for the Sound of Barra mSAC (where local community members were funded by Marine Scotland to lead a co-management process with the support of both local and outside expertise) provides a valuable example of how local knowledge, expertise and cultural heritage can inspire, shape and lead a marine protected area co-management process.

9.1 Special regard for islands:

The updated Common Fisheries Policy recognises the special challenges faced by offshore islands in relation to fisheries and indicates that supports should be put in place in order that they are able to survive and prosper:

"Small offshore islands which are dependent on fishing should, where appropriate, be especially recognised and supported in order to enable them to survive and prosper."

In addition, the Oireachtas Joint Sub-Committee on Fisheries produced a detailed report entitled Promoting Sustainable Rural Coastal and Island Communities,[32] No. JsCF 001 in January 2014. The report lists 29 recommendations across a range of sectors which will assist in the continued survival of coastal communities, which depend on our marine resources, and their stewardship of the marine environment.

Islanders should be formally recognised as the stewards of the marine environment surrounding their islands, be involved in the collection of scientific data and their expertise incorporated into management plans along with scientific advice. Legislation should take cognisance of the strong dependence of island communities on the waters surrounding them when conflicting pressures from different sectors are being considered. Vulnerable island communities should be at the forefront in any decision making processes.

For this reason the Green Party support the following recommendations made by the Joint Oireachtas Sub- Committee on Fisheries Report:

1. The creation of new community managed Marine Protected Area Networks to new areas around the offshore islands in conjunction with island communities and relevant agencies as per recommendations 10 and 14 including heritage licences and exclusive access for local vessels under 10 metres LOA within the 12 mile limit.

9.2 Plastics

Besides global warming of the oceans and seismic testing, micro plastics present a key bottom-up pressure to the marine ecosystem, to an as yet unknown extent. According to UN #CleanSeas campaign to end marine litter, more than 8 million tonnes of plastic leak into the oceans each year. This is equivalent to dumping a truck of plastic into the sea every minute.33 It is now predicted that by 2050, there will be more plastic in the oceans than fish and that 99 per cent of seabirds will have ingested plastic.

32 https://webarchive.oireachtas.ie/parliament/media/draft-3-final-report-on-promoting-sustainable-rural-coastal-and-island-communities.pdf

33 http://web.unep.org/unepmap/un-declares-war-ocean-plastic

Plastic pollution is affecting marine life in some of the most remote parts of the Irish Atlantic Ocean with over 70% deep-water fish collected by NUI Galway scientists[34] having ingested plastic particles. Microplastics have been found everywhere in the aquatic environment, even in the remote Artic waters (Lusher et al., 2015a, b). Microplastics pollution of waterways and drinking water are also a serious issue for wastewater treatment and disposal.

While the EU Commission has started the process to restrict the use of intentionally added microplastics, by requesting the European Chemicals Agency to review the scientific basis for taking regulatory action at EU level (A European Strategy for Plastics in a Circular Economy, 2018), it is still very vague on how to deal with microfibres that pose a particular concern to the aquatic environment. Due to their small size (smaller than 0.5mm) microfibers are often not caught in sewage treatment plants and enter the aquatic systems.

An estimated 80% of marine-based pollution comes from land-based sources (Andrady et al., 2011). To combat plastic, we recommend:

- That plastic pollution be recorded and included as part of the Marine Spatial Plan
- That the significant public opposition to polluting plastics be taken more seriously by Government and included as a policy issue for the MSP
- That the Green Party Waste Reduction Bill 2017 be passed without further delay
- That no new plastic or polymer factories are given planning permission until a proper public debate and consultation is had on the new evidence on the dangers of microplastics - including Daly Products Ltd in Skibbereen.

END

34 https://www.irishtimes.com/news/environment/over-70-of-deep-sea-fish-have-ingested-plastic-study-finds-1.3396891