



Marine Renewables Industry Association

10 November 2017

Submission to Public Consultation on the Design of a new Renewable Electricity Support Scheme in Ireland

Foreword

Meeting the European Union's and Ireland's (corresponding) decarbonisation objectives by 2050, will require virtually full decarbonisation of electricity generation and the matching electrification of the heating and transport sectors. These two sectors alone account for around a third of CO₂ emissions. MRIA expect significant growth in energy storage as well as demand side management solutions and other smart grid developments to facilitate the very high renewable penetrations that will be required (refer to *ESB Networks Innovation Strategy*: 330,000 homes with e-heat, 1300MW energy storage and 2500 MW customer flexibility by 2030). Achieving these targets is vital: the authoritative *Climate Science Special Report* just published in the US by leading academics and federal agencies is just the latest compendium of stark, objective evidence of the potentially devastating climate change underway¹. It is noteworthy too that the Citizens Assembly recently voted that climate change should be at the heart of Government policy in Ireland².

In order to fully decarbonise the energy system by 2050, it is clear that onshore renewables such as wind and solar PV alone will not suffice as these markets will saturate in time and present challenges to the operation of the grid due to their intermittency and lack of output diversity across the projects. The next step may be to harness the offshore wind resources in the Irish Sea utilizing fixed offshore wind technology and, where appropriate, floating offshore wind turbines: suitable locations are near the demand centres; the fixed offshore wind technology is already mature and is commercially available to do this. This technology will also support more renewables overall on the system due to providing some diversity compared to land-based wind.

¹<https://science2017.globalchange.gov/>

² <https://www.citizensassembly.ie>

The final step on the journey will be to secure additional renewable energy sources off the West and South West coasts, providing further renewable energy, higher load factors and more diversity in the renewables mix. Options at the moment include nascent technologies such as wave, some tidal, floating offshore wind and hybrids of these. It is likely that a mix of these innovative, emerging technologies will be required. The ultimate mix will depend on the relevant commercial and technology developments, grid availability, system technology and diversity requirements, local consenting factors and the extent to which they are supported through their early development stages. There is also the added attraction of both potential electricity export and capitalising on Ireland's 'early mover' advantage in the innovative technologies with all of the positive implications this may have for supply chain income and job creation, particularly along the West coast of Ireland.

MRIA's submission below to the Consultation focuses on how the RESS can facilitate and accelerate the 'final journey' outlined above which has such significant energy and socio-economic implications. Irish marine renewables are a unique opportunity both to reduce significantly our national carbon footprint and also supply the technology and services to reduce global emissions.

5.1 RESS Detailed Design

Preface

ECONOMIC POTENTIAL

The Marine Renewable Industries Association (MRIA) represents wave, tidal and floating offshore wind and hybrid device (floating wind + wave) interests on the island of Ireland i.e. the new marine renewable technologies also known as Marine Renewables Emerging Technologies (MRET).

As has been pointed out in respect of ocean energy (wave + tidal) alone:

'Ocean energy is abundant, geographically diverse and renewable. Under favourable regulatory and economic conditions, ocean energy could meet 10% of the European Union's (EU) power demand by 2050.....Ocean energy can be an EU industrial success story. With favourable support over the coming decade, Europe will obtain leadership in a global market, worth a potential €653bn between 2010 and 2050 and an annual market of up to €53bn, significantly benefiting the European economy. The successful development of a competitive European ocean energy industry would also place the European industry in a prime position to seize export opportunities in the global market...Today, 45% of wave energy companies and 50% of tidal energy companies are from the EU.... The global market

*for ocean energy could see 337GW of installed capacity by 2050, a third of this would be in Europe*³

The opportunity in marine energy -resource rich Ireland has several possible dimensions – the ENTERPRISE and the ELECTRICITY MARKETS. There may also be scope for LOCAL ELECTRICITY SUPPLY. The ENTERPRISE element ranges from research and development and device manufacture to operations and maintenance, finance and legal support. All of the stakeholders in marine renewables accept that the enormous scale of the Irish wave and offshore wind resource (together with a limited resource in tidal in the Republic, although not in Northern Ireland where substantial tidal projects are in train) represents a potentially huge opportunity for ELECTRICITY ‘EXPORT’ via grid interconnectors. This is based on the likely emergence of an EU energy market and a European grid; potential demand for Irish electricity in England in particular; the development of wave, tidal, floating offshore wind and hybrid technology and other factors

Opportunities for MRET – once they reach maturity - to meet LOCAL MARKET OPPORTUNITIES in Ireland must not be ruled out. A lot of technical issues could be resolved over the next ten years: the intermittency of renewables will be addressed by new electricity storage solutions, particularly in the field of batteries; there may be technical breakthroughs which make, for example, wave competitive with traditional energy feedstocks; etc. One emerging element that may have a positive impact are ‘hybrids’: devices that combine (floating) offshore wind and wave energy devices

RES-E AND MARINE RENEWABLES EMERGING TECHNOLOGIES

This public Consultation on support for RES-E in Ireland is fundamentally about support for relatively mature technologies such as terrestrial wind, fixed offshore wind (to some degree) and solar pv, all of which work reliably and whose capital and operating costs are sharply declining. Their journey down the ‘learning curve’ has already had a major impact and enables the Consultation to point out that ‘... a range of *commercial* technologies have been assessed’⁴. This trend is well illustrated by the recent UK Contract for Differences (in Irish terms, RESS) auction which delivered dramatically lower prices (on average, 47% lower in offshore wind) compared to the last auction in 2015.

The MRIA believes that it is important to promote marine renewable energy activity now, not only through supporting the emerging technologies but also by immediately supporting a RESS auction for fixed offshore wind (a category which lies beyond the scope of the MRIA) in order to mobilise a supply chain which can extend to all forms of marine renewables in

³ *Ocean Energy Strategic Roadmap Building Ocean Energy for Europe*. Prepared for the European Commission, 2016. Available at <https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1036>

⁴ *Public Consultation on the Design of a new Renewable Electricity Support Scheme in Ireland* p4, Department of Communications, Climate Action and Environment, September 2017

due course. It would also build international credibility about the seriousness of Ireland's marine renewable ambitions which would benefit the innovative technologies following on behind. A further step that might be considered would be to set indicative 'MW installed' targets for each category (e.g. MRET, fixed offshore wind) out to 2030.

For years to come, the emerging marine technologies will march to a different drumbeat to their mature cousins. MRET is at an early phase although promising progress is being made in all areas. It is being pursued in a strategic manner by Irish policy-makers in light of the following factors:

- the economic potential of our great natural resources of offshore wind and waves (*the resultant electricity can potentially contribute to national needs and be exported*);
- we have a significant investment and even a competitive edge in R&D and other facilities (*we need to spur the development of devices to exploit the resource and also to create a strong Irish position on the value chain which would have a large impact on jobs and income creation*);
- a national ambition to capitalise on our early-mover position (*create a global supply base in Ireland in wave, tidal and other early technologies*).

In short, Ireland's support for MRET reflects a long-term and complex development goal which will not be realised to any significant degree until the mid-2020s at the earliest. At its most basic, Ireland's immediate need in MRET is to 'get metal wet' i.e. to get prototype devices deployed and tested and RESS should be geared to this end with regard to MRET.

The consequence of the arguments set out above is that the mainstream RESS approach (e.g. competitive auctions for RESS involving a Floating feed In Premium - FIP) emerging in the Consultation paper should not be applied to MRET. It could in fact damage the progress made under the *Offshore Renewable Energy Development Plan (OREDPP)* where part of the attraction of Ireland to the Irish and global MRET community is the provision of an Initial Market Support Tariff (IMST) for wave and tidal.

The Association notes the progressive tone of the Consultation in this general regard "..... it is recommended that a separate, budget-controlled 'nascent/emerging technology auction' is created....." which seemingly is aimed at solar pv and fixed offshore wind which, however, are neither nascent nor emerging! The MRIA believes that the better approach in this sphere is to encourage the development of the real emerging technologies (defined as wave, tidal, floating wind and hybrids of these) by means of a fixed FIT for demonstration units. It is also noteworthy that the Consultation draws attention to the fact that EU State Aids rules specifically require RES-E support levels to be set at auctions and to provide support in the form of a FIP '.....except for small scale or demonstration projects'. Thus,

there is no obstacle in principle to providing RESS to MRET in the form of a fixed FIT as advocated by MRIA in our response to Q4b below.

It is sobering to look at the current position in the UK where the recent Contracts for Differences auction resulted in no support for tidal projects and provided no support for new renewables in any form in Northern Ireland. It is a policy approach focused on providing (immediately) low-cost renewable energy and one which is devoid of any wider policy ambitions, although some alleviation of the situation may occur at the next auction scheduled for 2019⁵.

The likely consequence of applying the UK approach in Ireland – which thankfully is unlikely to be advocated by DCCAE - would be to terminate our ambitions of developing a global hub for emerging technologies with all that would imply for jobs and income creation. Exploitation of Ireland's resource would most likely take place when the technology has reached maturity.....but all of the design, manufacturing and support jobs and income would be created in other countries. It would, in fact, represent a historical 'achievement': a country which, by policy choice, handed over the jobs and income associated with a major natural resource to other countries. The economic potential of the low-carbon economy must not be underestimated. Already, to take one modest example, in the small Northern Irish economy over 5000 jobs and an annual turnover of more than €1bn is attributable to the green economy⁶. The RESS process will have a major influence on the Republic's capacity to create opportunities and wealth from MRET.

The MRIA is advocating the continued special treatment of wave and tidal (and extending this principle to floating wind and hybrids too) because of the job and income creation potential involved. Interpreted in this way, the RESS exercise could serve to mark out Ireland as being 'open for business' in marine renewables to the global energy community and to do so when the current de facto leader, Scotland, may be locked out of the world market by a potentially calamitous policy approach which prioritises the political imperative of lowest possible cost electricity immediately (and that is before the impact of Brexit is factored in). The impact of this on UK marine renewables represents a major opportunity for Ireland.

Overall, the short-term and miniscule savings that would arise by abandoning the current tariff supports (the IMST) for marine renewables (and the argument still stands if they are extended, as argued in this submission, to include floating wind and to hybrids) must be balanced against the extraordinary opportunity for Ireland that would be foregone.

⁵ The recently published *The Clean Growth Strategy – Leading the way to a low carbon future* (Department of Business, Energy and Industrial Strategy London October 2017) did not, however, provide significant succour in this regard for MRET

⁶ Op cit p26

Q1A. THE EMERGING POLICY INCLUDES A MEASURE WHEREBY ALL CAPACITY UNDER THE NEW RESS (WITH THE EXCEPTION OF SMALL SCALE DEVELOPMENTS) SHOULD BE ALLOCATED THROUGH A COMPETITIVE BIDDING PROCESS VIA AUCTIONS. DO THE RESPONDENTS AGREE WITH THE COMPETITIVE AUCTION BASED APPROACH? IF NOT, WHAT ALTERNATIVE MODEL WOULD YOU PROPOSE AND WHY?

The MRIA does not agree with this approach in regard to MRET. The Consultation makes several references to emerging technologies and the text implies a view that they should be supported outside of the mainstream competitive auction approach advocated for mature technologies such as terrestrial wind.

The Marine Renewables Emerging Technologies are just that: emerging technologies, currently with different approaches to similar problems, particularly in the wave field; tough engineering challenges to be met; and all of them face difficulty in raising finance for devices which are on a journey through different TRL levels. The sector requires a tailor-made support regime. Wave and the other emerging technologies are at the pre-commercial stage...as they mature, they can 'mainstream' over to the regime which may apply to today's mature renewables sectors.

Q1B. DO RESPONDENTS AGREE WITH THE USE OF UNIFORM-PRICE COST OF SUPPORT FOR RES-E PROJECTS IN THE MAIN RESS CAPACITY AUCTIONS, AS A MECHANISM TO KEEP COSTS TO THE CONSUMER TO A MINIMUM?

Yes, the arguments set out in the Consultation on this topic are persuasive in regard to mature renewables categories. But, as argued elsewhere in this submission, a totally different approach should apply to MRET where the circumstances dictate that a fixed REFIT approach is needed.

Q2. THE ANALYSIS SUGGESTS THAT A FLOATING FEED IN PREMIUM (FIP) IS THE PRIMARY SUPPORT MECHANISM FOR THE MAIN RESS AS EVIDENCE SUGGESTS THIS IS THE MOST COST-EFFECTIVE APPROACH. DO YOU AGREE WITH THIS PROPOSAL VERSUS THE OTHER MECHANISMS IDENTIFIED?

The provision of an Initial Market Support Tariff (IMST) in the OREDP was intended '...to unlock the economic growth and job creation opportunities offered by ocean energy development'⁷ and this approach is vital to Ireland's stated ambition to become a force in marine renewables. Accordingly, the FIP suggested is not suitable to MRET.

The IMST takes the form of a fixed FIT which was set at the time at €260/MW hr, up to 30MW. It was confined to wave and tidal energy in the OREDP. It is the view now of MRIA that this approach should be extended to the other experimental technologies, floating wind and hybrids, because:

- Floating wind and hybrids are still at the experimental stage – there are serious engineering challenges to be overcome and the technologies involved are still emerging and should be supported by a FIT on that basis.

⁷ *Offshore Renewable Energy Development Plan* February 2014, p21 Department of Communications, Energy and Natural Resources

- They are suited to Ireland's R&D facilities and skills and to exploit our offshore natural resource
- Both areas are consistent with the long-term goal of building a global hub in Ireland for the currently emerging marine renewables technologies

The IMST is vital if Ireland is to develop a wave/tidal/floating wind/hybrids industry (focused on the enterprise element) and this will involve both local device developers and early stage companies from abroad attracted here by the Tariff, the offshore resource and the R&D/test facilities.

The considerations that should be taken into account in designing a support tariff regime for MRET should include:

- a) If the tariff is too low, it simply will not attract any development.
- b) Revenue support cannot be a *cliff edge* (i.e. a Feed-In Tariff - FIT - for the first X MW and then..... nothing). There needs to be a long-term view that the revenue support is to develop an industry, not one particular project or technology approach.
- c) In any case, a *runway* approach is required which will allow a significant support for the first phases, moderate support for the second to third phases and then a longer-term view to provide baseline support for a time period whilst the industry gets down the cost curve towards being competitive to other forms of energy generation.

The original allocation of 30MW x €260MWh was deemed sufficient by industry at the time to get wave and tidal started but that view has since been revised on reflection and it is now considered unattractive for early projects. The level of FIT should be the subject of a short, focused consultation with MRET interests prior to each competition. Moreover, it is recommended that 'coverage' be extended out to 70 MW with 40 MW ringfenced for wave and tidal and the balance assigned to other emerging marine renewables technologies, floating wind and floating wind/wave 'hybrids'. See Q4b for more detail.

Q3. WHAT ARE THE RESPONDENTS' VIEWS ON A PROPOSED PRICE CAP (MAXIMUM €/MWH) WITHIN THE UNIFORM PRICE PROPOSAL? WHAT ALTERNATIVES WOULD YOU PROPOSE AND WHY?

The emerging technologies need a fixed FIT, rather than a FIP, to provide certainty. The challenge is to provide support for early, currently uncompetitive technologies and 'mainstreaming' them too early will severely curtail them as may well happen with wave and tidal in the UK where the ambition today is focused on least-cost renewables now and the development agenda – jobs and income creation – seems to have evaporated.

Q4A. IN ORDER TO KEEP COSTS TO A MINIMUM, A PRINCIPAL CATEGORY, ENCOMPASSING ALL VIABLE TECHNOLOGY OPTIONS LEADING TO THE MOST COST-EFFECTIVE PROJECTS IS PROVIDED FOR. THE OUTCOME OF THIS INITIAL AUCTION WILL INFORM THE DESIGN OF FUTURE AUCTIONS. DO YOU AGREE WITH THIS APPROACH? WHAT ALTERNATIVES WOULD YOU PROPOSE TO THIS APPROACH AND WHY?

The emerging technologies – wave, tidal, floating wind and hybrid – are not commercial (although tidal in particular is making good progress) at present and investment and opportunity are required to make them so. They are at a prototype and experimental stage and, as is normal with all new technologies at this stage, they do not work reliably and are uneconomic insofar as prototypes exist. Therefore, they lie outside the Principal Category as suggested in the question and require a different approach. See also Q2 and Q4b

Q4B. WOULD YOU SUPPORT SEPARATE TECHNOLOGY SPECIFIC AUCTIONS, AT A GREATER COST TO THE PSO, AND IF SO WHAT PERCENTAGE OF THE OVERALL SCHEME CAPACITY (MWH) WOULD YOU ALLOCATE TO THIS CATEGORY?

The MRIA recommends that there should be a separate regime for MRET and suggests that the allocation of the IMST-supported 30MW assigned to wave and tidal in the OREDP (to 2020) should be extended to 70MW as follows:

- The scheme should be open to 2025 (reflects e.g. the time needed to secure finance, consenting, changing state of the technologies etc). This will support the small number of demonstration projects expected to materialise over that timeframe. Current indications are that the earliest demonstration projects for wave will not be operational before 2020. We would expect to see a small number of demonstration wave projects (4-5MW) in operation over an initial 5-8 years period from 2020 before larger (e.g. 20 -30 MW) projects emerge in the late 2020's to early 2030's. There will also be a series of small-scale tidal projects in the next few years as well as demonstration projects in floating wind although 'hybrids' are unlikely to emerge until the mid-2020s at earliest
- 40MW ring-fenced for wave and tidal...but see below
- 30MW ring-fenced for floating wind and hybrid...but see below
- The Scheme to be reviewed as part of the OREDP renewal process scheduled for 2020 and regularly thereafter. The admirable flexibility shown by DCCAE in developing MRET policy should continue to be employed here so that, for example, the possibility to extend the scheme out to 100MW or to reassign support between the technology types should be open to consideration as the innovative marine renewables technology sector evolves
- Projects seeking support should participate in a series of competitions – note: not auctions
- The choice of projects to support in each competition should be made by reference to technical, developmental criteria (e.g. likelihood of success in terms of reliability, output, LCOE) rather than by reference to the FIP approach – e.g. a focus on price alone could exclude a worthwhile technology approach

- To give certainty to promoters, the support should take the form of a series of fixed FITs.
- The level of FIT should be the subject of a short, focused consultation with MRET interests prior to each competition
- The selection of projects by reference to an auction-clearing FIP would aim the RESS at the wrong target in the case of MRET i.e. it would support technologies that can immediately meet or beat the auction clearing price rather than address development goals which are the very point of supporting MRET in a tailored way.

Q5. SEPARATE TO THE PRINCIPAL CATEGORY RESS, A DEDICATED COMMUNITY CATEGORY VOLUME OF RENEWABLE CAPACITY (MWH) ALLOCATED FOR COMMUNITY-LED PROJECTS IS ENVISAGED IN THE PREFERRED APPROACH. THE INITIAL PROPOSAL IS THAT BETWEEN 10-20% OF THE TOTAL CAPACITY (OF NEW MWH) OF EACH AUCTION IS RING-FENCED FOR COMMUNITY-LED PROJECTS. DO YOU AGREE WITH THIS PROPOSAL? WHAT CHANGES WOULD YOU PROPOSE TO THIS PROPOSAL INCLUDING REFERENCE TO THE VIABLE LEVEL OF AMBITION FOR COMMUNITY-LED PROJECTS?

Community-led projects have no realistic place in MRET and should be excluded from the special supports for MRET although, admittedly, it is hard to envisage circumstances in which communities would seek to participate in the first instance. The issue of applying community requirements, which may be imposed on other mature renewables, to MRET can be revisited in the early 2020s when the likely course of MRET should be clearer.

More generally, an allocation of 10-20% of the RESS might frustrate other policy objectives such as the achievement of EU and national targets for electricity generation based on renewables. The 'tying up' of a substantial amount of RESS for community-led projects which may or may not materialise (raising finance will be a major challenge even with State incentives) could delay overall development and create undesirable complexity. It may be wiser to set a lower target (5%?) at the outset and then be prepared to raise it (at one of the frequent reviews by policy makers which are referred to in the Consultation) in light of progress.

It might in the first instance limit and support the community dimension to RESS to projects which directly benefit the community (e.g. provision of a solar pv solution to the local community/GAA hall; small wind turbines =< 1MW). In this way, experience and, indeed, good will could be built up without adding complication to already challenging large-scale commercial projects in the locality

Q6. DO YOU AGREE WITH THE PROPOSAL TO FURTHER DEVELOPMENT OPPORTUNITIES FOR MICRO-GENERATION, OUTSIDE OF THE MAIN RESS? RESPONDENTS ARE ASKED FOR THEIR VIEWS ON HOW TO SUPPORT MICRO-GENERATION?

Marine renewables are the obvious way forward for island communities, many of which today depend on diesel generators for electricity which are typically associated with high

operating costs. Moreover, small scale devices supporting island communities are an early demonstration-opportunity for marine renewables and should be supported as part of the tapestry of supports for the sector. Success in this area in Ireland would help Irish companies to open up export markets, notably in island-rich South-East Asia.

For these reasons, MRIA recommends that a separate support tariff regime should be developed in consultation with relevant interests to promote the use of marine renewables by Ireland's offshore island communities

Q7. DO YOU AGREE WITH CAPPING THE AMOUNT OF SUPPORT RECEIVED BY EACH RES-E PROJECT THAT CLEARS IN A RES-E AUCTION? WHAT CHANGES WOULD YOU MAKE TO THE PROPOSAL TO SET THIS CAP BY THE LEVEL OF SUPPORT (€/MWH) DETERMINED IN THE AUCTION AND THE CLEARED VOLUME OF THE PROJECT(MWH)?

In the early stages, it is best not to impose any cap on support for individual MRET projects under a special FIT regime that might deter potential participants but this policy should be reviewed again in 2020 when the OREDP is due for renewal.

Q8 DO RESPONDENTS AGREE WITH THE PROPOSAL TO HOLD PERIODIC AUCTIONS E.G. EVERY TWO YEARS, OVER THE COURSE OF THE LIFETIME OF THE SCHEME, TO TAKE ADVANTAGE TO FALLING COSTS AND REDUCE THE IMPACT ON THE ELECTRICITY CONSUMER? WHAT CHANGES IF ANY WOULD YOU MAKE TO THIS PROPOSAL?

This is desirable for MRET but for different reasons to those stated in the Question. Periodic auctions would introduce a degree of flexibility into the system and could allow, for example, MRET categories that reach maturity to 'mainstream' by joining the Principal Category's auction streams.

One outcome of this Consultation process should allow for an outline solution to the key 'runway' problem outlined in our response to Q2 i.e. there is a need to indicate to investors, even at this stage, the State's willingness to consider a further scheme in the 2020s to follow on from the IMST for MRET. The exact scale, tariff level etc of this scheme could be determined once the IMST is close to full allocation and initial lessons have been learned. Subsequent to this, the 'next steps' will be more obvious and help to bring emerging technologies to maturity and to make them attractive to commercial financing methods.

Q9. DO YOU AGREE THAT PLANNING APPROVAL, GRID CONNECTION, BID BONDS/PENALTIES AND COMMUNITY PARTICIPATION CRITERIA SHOULD BE MET BEFORE PROJECTS CAN APPLY FOR SUPPORT UNDER THE NEW RESS? WHAT OTHER PRE-QUALIFICATION CRITERIA WOULD YOU LIKE TO SEE INTRODUCED?

The 'big bang' approach advocated is desirable in theory but is likely to present difficulty in practice! It would be impossible to line everything up, notably finance (including the community investment element), without any idea as to what the RESS is likely to be. It would be seen internationally as a further obstacle to development in a country which already enjoys some notoriety because of the delays in introducing a modern consenting regime offshore.

The process should have three core stages regardless of technology: first, applications by Fit Persons (firms with good track records, financial capability to undertake projects etc); second, compete for RESS and the separate special regime for MRET; third, complete the project (grid connection, community investment etc) within a set period. For this system to work, however, it is vital to impose timelines for decision-taking on all other actors e.g. the consenting authority, An Bord Pleanála, Eirgrid etc.

A recent change in the EU environmental regulatory framework (see EIA Directive 2011/92/EU as amended by Directive 2014/52/EU) and how it was transposed into Scottish law in May 2017 is worth noting. In simple terms, the new Regulations⁸ contain provisions regulating the assessment of environmental impacts of a project in the course of multi-stage consenting process⁹.

The administrative attractions of the approach suggested in the Consultation are obvious but will not work in practice. The process of moving a multimillion, perhaps in time multibillion, Euro project from outline concept to a working offshore renewable energy array will be complicated for all parties and will require commitment (e.g. timing guidelines or even deadlines), flexibility and communication on the part of both the State and developers. It will not lend itself to a solution whereby the developers (who will be expending significant funding on the 'application' process itself) must produce a neatly wrapped solution – despite, for example, having no control over the time taken in dealing with their case by key players in the process such as consenting authorities – and the State (which has no costs of note and will receive substantial consenting fees and leasing payments) has a straightforward and modest 'yes' or 'no' task at the end of the line.

Once the 'tapestry' – RESS, special arrangements for MRET, consenting etc – needed for offshore renewables are in sight, it is suggested that DCCAE meet the key interests involved to map out a process and timing guidelines to bring offshore resource exploitation into production quickly and with due regard for environmental and other requirements. This could be translated into a guidance manual which would do much to boost the Irish position as a 'good place to do business' with the global energy community.

⁸ *The Environmental Impact Assessment (Miscellaneous Amendments) (Scotland) Regulations 2017*
http://www.legislation.gov.uk/ssi/2017/168/pdfs/ssi_20170168_en.pdf

⁹A multi-stage consent process arises where a consent procedure comprises more than one stage, one stage involving a principal decision and one or more other stages involving an implementing decision(s) within the parameters set by the principal decision. While the effects which a project may have on the environment must be identified and assessed at the time of the procedure relating to the principal decision if those effects are not identified or identifiable at the time of the principal decision, assessment must be undertaken at the subsequent stage

Q10. DCCAE WELCOME THE RESPONDENTS' VIEWS ON THE PSO LEVY SUPPORTING A BASELINE 40% RES-E. DO YOU THINK THE PSO SHOULD SUPPORT HIGHER LEVELS OF AMBITION?

MRIA agrees in principle with 'higher levels of ambition'. Higher baseline RES-E should certainly be considered in light of Ireland's enormous resource, export potential etc and all relevant factors e.g. grid availability should be taken into account

Q11. (RE PROPOSAL CONCERNING CHP PLANTS) DO RESPONDENTS AGREE WITH THIS APPROACH? WHAT ARE RESPONDENTS' VIEWS ON AN ALTERNATIVE APPROACH WHEREBY RENEWABLE ENERGY PLANTS RECEIVE SUPPORT FROM THE RESS OR THE PROPOSED RHI BUT NOT BOTH, AND THAT THE PROJECT PROMOTER SHOULD DECIDE WHICH SUPPORT SCHEME BEST SUITS THE PROPOSED DEVELOPMENT.

No comment

5.2 Community Policy Detailed Design

Preface

The Consultation suggests that all projects supported under RESS must offer an opportunity for the local community (e.g. within a catchment area of 5km) to invest with a proposed target level of 20% (of *equity* or *net revenues* or a *loan note*) of a project. The effort by developers will be monitored by *Trusted Advisors* while *Trusted Intermediaries* will facilitate the process e.g. by acting as a broker of the dialogues between communities and developers. In addition, there will be a Community Benefit level of €2/MWh without any upper limit suggested or indication that the profitability (or otherwise) of a project will be taken into account.

The MRIA appreciates the factors that led to this set of suggestions. The controversies which have surrounded a number of terrestrial wind projects, overhead transmission cables etc all point to the need to engage with communities in a new way and to give them a sense of possession of projects which, for example, may alter their skyline and take up space in their terrestrial areas. The Citizen's Assembly unanimously endorsed the principle of local community participation in renewables projects recently¹⁰.

The ideas set out in the Consultation are de facto focused on terrestrial projects (notably wind) and draw in particular off Danish practice – regulations in Denmark ascribe responsibility to developers to offer local communities ownership of at least 20% of both onshore and nearshore wind developments. Denmark, because of its geographical position, has no real wave or tidal presence.

The Consultation does not, however, take into account the special conditions applying in Ireland e.g. sparse population on the Western seaboard nor do they take into account the special circumstances of MRET – e.g. marine devices may have little or no adverse impact e.g. visually on coastal communities.

¹⁰ <https://www.citizensassembly.ie>

It is also inherently difficult to define a 'community' in a marine context which strictly has no residents, but rather may have residents which overlook a marine area or visit it seasonally. Sea space is also different to land in that the sea is a multi-use environment based on the exercise of common rights of access rather than private property rights. This makes implementation of the community investment notion possibly unworkable for marine renewable energy projects as it confers, for example, private property rights (terrestrial communities must be allowed to invest in marine renewables) in a public good (the sea) environment.

Further points in support of exemption of MRET from community investment requirements are:

- Wave and tidal devices may have little, or indeed no, visual or other form of negative community impact while floating wind and hybrid devices could, for instance, be located so far from shore that they will not make any material impact on shore communities- by definition, the latter involve deep waters which generally are located well offshore
- There is also a question of equity which in turn may even lead to legal challenges: the approach suggested does not apply to the offshore oil and gas industry or to aquaculture both of which arguably potentially have a far greater impact on communities; nor does it apply to the fishing industry
- Given the huge uncertainty surrounding marine renewables in Irish waters, particularly in light of the slow progress of the Maritime Area and Foreshore (Amendment) Bill, the addition of a community investment requirement could deter investors

The MRIA believes that MRET should be exempt from the requirement for community investment in projects:

- MRET projects will be small, typically <10MW, in the early years and extremely difficult to fund in any event
- Many will be located at State test sites and be of limited duration and will not provide a satisfactory return on capital even with the benefit of IMST
- Given their risk profile, they would be unattractive investments and could lead to reputational risk for the entire renewables industry if a number of MRET schemes collapsed and local investors lost their money.
- The community investment requirement would be extremely onerous in terms of cost and time for MRET developers (many of whom are, and will be, of modest means) and would most likely drive at least some of them to locate elsewhere

- The State has high ambitions for MRET and is seeking to develop a global supply position for Ireland. The introduction of a community investment requirement at this stage would add an unjustified layer of complexity to a sector already burdened with engineering and funding challenges typical of an innovative set of technologies and could drive developers to what would be perceived as more welcoming regimes in e.g. France.

On a more general level, and given that some form of community investment requirement may ultimately apply to the Marine Renewables Emerging Technologies when they reach technical and commercial maturity, the MRIA offers the following observations:

- A detailed template for the *selection* and *operation* of both Trusted Advisors (although we do not see a role for the Advisors – see below) and Trusted Intermediaries must be developed in advance of implementation of the community schemes and in conjunction with the affected marine renewables representative groups
- Strong consideration should be given to *requiring* communities to retain Trusted Intermediaries in the form of professional firms (e.g. accountants and solicitors) and to confining negotiations on investment issues to developers and Trusted Intermediaries. In these circumstances, it is difficult to see what value would be added by Trusted Advisors. A requirement for direct negotiations with communities on *investment opportunities* will be a deterrent to many developers. Some form of (capped) financial support from State funds to enable communities to pay Trusted Intermediaries should be considered.
- The process should be time limited i.e. communities via their Trusted Intermediaries would be allowed a fixed period to negotiate their investment, raise funds and lodge them. Major, multimillion (perhaps multibillion) projects will go elsewhere if developers are held up by interminable investment negotiations with communities.
- Given the scale of projects in marine renewables, 20% is an unrealistic amount to allocate to the community dimension e.g. it is likely to be impossible for locals to raise the finance involved. A maximum amount in the 5-7.5% range (or its equivalent in the form of preference shares -see later) would be more realistic

The suggested approach in the Consultation document poses serious governance issues:

- However, ‘community’ is defined ultimately, all investors will need to be Fit Persons (either individual Persons or corporate Persons) and Persons with criminal records, in bankruptcy etc must be excluded
- Stringent safeguards must be provided for against individuals or firms moving their ‘residence’ to a community in order to benefit from what could be a discounted

(because of the impact of the grants etc mooted in the Consultation) investment in a major project which would also give them a potential untaxed gain.

- Moreover, to avoid delays and wrangling, which could deter commercial investors, the template against which Trusted Intermediaries on behalf of communities would operate should involve standard mandatory elements to do with disposal of shares, participation in further funding rounds etc
- The Association believes that there is considerable scope for serious difficulty and disruption if the governance issues – both from the point of view of communities and of developers – are not tackled at an early stage and with great sensitivity.
- A failure by DCCAE to tease out all of the implications of the proposed approach in conjunction with both community and industry representatives could lead to reputational damage for all concerned

Finally, the €2/MWh suggestion for Community Benefit (CB) is not acceptable at this stage in the MRET sector's development for the reasons cited above and should, in any event, be subject to careful further review:

- Are the proceeds to be confined to the community located e.g. within 5km of a site or, for instance, be applied to a wider area?
- What other actors e.g. fishing interests will be joined into the definition of 'community'?
- It is arguably a form of taxation and involves no representation for the 'taxpayer' (developers)
- It may not meet the CB need, particularly if the CB applies to an area beyond 5km such as a County or if the definition of community is widened and may lead to pressure for ad hoc CB confined to those most proximate to an MRET development
- CB should be left to the discretion of developers and emerge as necessary in discussion with communities.

Q12A. WHAT SHOULD THE MINIMUM SIZE OF PROJECT BE, BELOW WHICH A COMMUNITY INVESTMENT OFFER DOES NOT NEED TO BE MADE (E.G. 100kW, 500Kw, 1MW)?

MRIA believes that the community investment requirement should not apply at all to MRET for the reasons set out earlier. Moreover, a community investment offer requirement will impose costs on developers and those costs are not necessarily scaled i.e. the costs – accounting, legal etc – associated with community investment in a 100MW tidal project (say, €250m in capital costs alone when the technology reaches maturity) would be the same as those that would be incurred by a struggling SME trying to get a 5MW project underway at a test site.

MRIA recommends that:

- Demonstration/prototype/pilot marine renewable technology projects (ranging from individual devices to arrays) should be exempt from community investment offer requirements and the matter can be reviewed again when the next *Offshore Renewable Energy Development Plan* is being formulated in c2020
- In any event, projects under 25MW should be exempt ad infinitum

Q12B. WHAT MINIMUM SHARE SHOULD BE OFFERED TO THE COMMUNITY FOR INVESTMENT (E.G. 20%) AND SHOULD THERE BE A MAXIMUM AMOUNT ANY ONE INDIVIDUAL CAN PURCHASE?

As argued earlier, 20% is unrealistic when looked at in absolute terms and clearly arises from the very different circumstances of Denmark. For example, it implies a €50m community investment in the tidal example quoted at Q12a!

The Association is concerned about the scope for manipulation and financial engineering by unscrupulous individuals and groups. For example, an individual could change his/her residence to the community involved in the hypothetical example quoted earlier and purchase a substantial shareholding in the €250m project at a substantial and untaxed discount (because of the various incentives that may be on offer to 'community' investors). Moreover, the developers will wish to have some discretion over who can invest in their projects.

MRIA favours community investment (if ultimately deemed necessary for wider policy purposes) via the preference share route – see below -but recommends the following in the event that direct ordinary share participation is decided upon:

- The maximum participation (equity shareholding) on offer to communities should amount to no more than 5-7.5% and preferably less
- No individual may hold more than a 1% shareholding in the overall project
- All investors must be certified by Trusted Intermediaries as being Fit Persons (see earlier) in accordance with criteria laid down by the Department of Communications, Climate Action and Environment (DCCA) and must hold shares in their own right (i.e. not on behalf of other parties who may be seeking a tax free discounted participation in a project via a local resident acting as a front person)
- The shareholder agreement etc should be standardised by DCCA following consultation with industry interests

The financial format which community participation should take is of crucial importance.

The (Ordinary shareholding) *equity investment* option is complex for both the developers and for communities. The *net revenues* option is undesirable as it is open to manipulation against the interests of communities and is also undesirable as communities would

potentially gain without any risk to their own capital. The *loan note* suggested is unclear. Would the community lend money to the project? At what interest rate? Against what collateral?

Preference shares are shares in a company's stock with dividends that are paid out to shareholders before Ordinary share dividends are issued. If the company enters bankruptcy, the Preference shareholders are entitled to be paid from net company assets before Ordinary shareholders. Preference shares typically have a fixed dividend unlike Ordinary shares and can be redeemed out of company profits. Preferred shareholders do not have voting rights.

MRIA recommends that consideration be given to making the community investment requirement take the form of preferred shareholdings which would provide the *community* with:

- An income flow once profitability is achieved
- A possible capital gain, particularly if a redemption 'at a premium' scheme is 'baked - in' from the outset
- Some security in the event of liquidation

From the *developer's* point of view, the preference shareholding route for communities is attractive because of its transparency and the fact that the communities are kept out of commercial matters (because of no voting rights etc) and complications such as board representation are avoided. From the policymaker's standpoint, a preference share approach lends itself more readily to a standard approach, a boilerplate agreement, for use by Trusted Intermediaries in discussions with developers.

Q12C. WHAT IS THE APPROPRIATE DISTANCE FROM THE PROJECT FOR THE INITIAL OFFER (E.G. 5KM)? VIEWS ARE WELCOME ON SUBSEQUENT OFFERS TO DED THEN NEIGHBOURING DEDS ETC.

The Association believes that that this proposition is ill-founded as it implies turning a public space into a de facto private space and may well give rise in due course to legal challenges. However, in the event that policy-makers pursue this approach, then the appropriate distance from the project should be no more than 5km.

The installation and operation of MRET projects are and will always be driven by commercial pressures such as time and money. The idea of subsequent offer rounds (i.e. 2nd or even 3rd rounds to meet mandatory community investment rules) to communities beyond those resident within 5km of the project is unacceptable on cost, time and logical grounds – to take one example: a project is located within 5km of a town at the end of a peninsula; further offers to more communities are required because the community investment requirement is not met in full by the initial community; these communities are out of sight etc of the project; there is no logical reason why they should be offered an opportunity to

acquire, probably with taxpayer support, a shareholding in the project which has no impact or involvement with them whatsoever. A fundamental underlying point here is that the approach being suggested would turn open-access space, a public good into private property – it's not solely about impact on skylines etc.

If the definition of 'community' is extended beyond those living within 5km of a project, then the situation could become almost unmanageable e.g. the local fishing fleet is unwilling/unable to undertake an investment; an offer round is then extended to the next fishing fleet which may be located relatively far away and is not involved or impacted in any way by the proposed MRET development.

Q 12D. WHAT ARE THE RESPONDENT'S VIEWS ON WHETHER ADDITIONAL FINANCIAL SUPPORTS ARE NECESSARY IN ORDER TO ENABLE MANDATORY INVESTMENT OPPORTUNITIES FOR CITIZENS AND COMMUNITIES?

The MRIA is opposed to this on two grounds. First, it is unlikely that any feasible State aid scheme could make a material difference to a community's ability to invest in a mature scale project e.g. in the wave sphere. Referring to the realistic example quoted in our answer to Q12a, the State's willingness to make a significant contribution by way of loans/grants/tax rebates towards the local community's €50m investment opportunity must be open to doubt!

Second, there is ultimately a fairly fixed 'pool' of money available to support MRET and a diversion of some or even most of it to support community investment may well play a key role in determining whether Ireland can or cannot exploit its unique MRET opportunity. The support for MRET takes several forms – PSO (*the REFIT*); grants (*under the SEAI Prototype Development Fund and other schemes under consideration by DCCA*); basic and applied research (*SFI support for MaREI*) etc. There will come a point where a balance will be reached: policy makers will determine that, in the round, the funding for MRET is appropriate to the opportunity for job creation etc. The introduction of State aid to communities in support of their investment in MRET will inevitably draw off this 'pool' (not deepen it) and may have the effect of actually thwarting the emergence of the very technologies which the communities seek to invest in!

Q12E. OTHER COMMENTS ON THE MANDATORY INVESTMENT OFFER REQUIREMENT ARE WELCOME

Please see the Preface to this section.

Q13A. DO YOU AGREE WITH THE EMERGING PROPOSAL THAT A FLOATING FIP IS MADE AVAILABLE FOR SMALLER COMMUNITY PROJECTS?

Yes, provided that they lie outside of the MRET categories.

Q13B. WHAT SHOULD THE MINIMUM SIZE PROJECT BE BELOW WHICH THE FIP WILL NOT BE AVAILABLE?

All community or developer driven projects which can supply electricity to the Grid should be in receipt of FIP. Please note, however, the MRIA argument earlier that MRET should benefit from a fixed REFIT.

Q14A. DO YOU AGREE WITH THE EMERGING PROPOSAL TO SUPPORT COMMUNITY-LED PROJECTS WITH GRANTS AND SOFT LOANS THROUGH VARIOUS STAGES OF A PROJECT'S DEVELOPMENT?

No, for the reasons set out in our response to Q12d

Q14B. WHAT SIZE OF LOANS FOR DEVELOPMENT AND CONSTRUCTION WOULD YOU CONSIDER TO BE APPROPRIATE TO SUPPORT? ANY OTHER COMMENTS ON THE PROPOSED USE OF GRANTS AND SOFT LOANS?

MRIA are opposed to any support for community investment in developer-led projects and is concerned about any form of State aid to even community-led projects for the reasons set out in our response to Q12d.

Q15. IN RESPECT OF GRID ACCESS, DCC AND SEAI ARE KEEN TO RECEIVE FEEDBACK ON THE POLICY PROPOSAL TO FACILITATE GRID ACCESS FOR COMMUNITY-LED RENEWABLE ELECTRICITY PROJECTS

There is already a policy whereby 'experimental' projects of 5MW and less get priority grid access and consideration should be given to extending this to community-led renewable electricity projects and to MRET generally without any capacity limitation.

Q16. DCCAE AND SEAI WELCOME FEEDBACK ON THE ROLE OF THE TRUSTED INTERMEDIARY

MRIA believes that the Trusted Intermediary role is a vital one but that the terms of reference should be extended in three ways:

- Trusted Intermediaries should be professional firms and must be Fit Persons
- Selected by DCCAE/SEAI via a public competition to form a panel
- Selected from the panel by communities to negotiate on their behalf

Q17. DCCAE AND SEAI WELCOME FEEDBACK ON THE PROPOSED FRAMEWORK FOR TRUSTED ADVISORS

Again, as per Trusted Intermediaries (see response to Q16), MRIA believes that:

- Trusted Advisors should be professional firms and must be Fit Persons
- Selected by DCCAE/SEAI via a public competition and a panel formed
- Selected by communities from the panel

However, in line with arguments made earlier, MRIA believes that the Trusted Advisor positions should not be created. It adds complication and may lead to unnecessary conflict. The community interest will be well protected if the format of community investment is

determined from the outset by DCCAE and all parties are required to work to a standard template established after consultation with industry representatives.

Q18A. DO YOU AGREE WITH THE PROPOSAL THAT COMMUNITY BENEFIT PAYMENT BE BASED ON BEST PRACTICE PRINCIPLES?

Of course, community benefit should be based on best practice principles which, however, must be defined in a manner mutually acceptable to both communities and developers. Please note that the MRIA is opposed to mandatory Community Benefit (CB) – see our responses to later questions.

Q18B. DO YOU AGREE WITH THE €2/MWH LEVEL OF COMMUNITY BENEFIT? DO YOU HAVE ANY OTHER COMMENTS ON THE PROPOSED COMMUNITY BENEFIT GOOD PRACTICE PRINCIPLES?

No, MRIA is opposed to what would be de facto a Community Benefit tax which may in practice be only the start of Community Benefit demands. Community Benefit is and should be at the discretion of the developer. It is also worth noting that this tax does not apply to other sea-users e.g. fishing industry, aquaculture and oil and gas. Moreover, it is very likely that MRET and other renewables will be subject to separate demands for ‘compensation’ from the fishing community.

There appears to be little clarity to what constitutes investment, compensation, benefit payment and corporate social responsibility internationally.... So, for Ireland to jump into this area (seemingly) without deep consideration and experimentation could be risky. There are very few institutions globally that enforce statutory regulations on community benefits from offshore developments, despite the evidence that adjustments in governmental policy can reduce potential opposition¹¹.

Benefit payments have evolved as a method of easing public concerns and compensating for a loss of a communal good, although official guidelines in Scotland, for example, maintain that payments continue to be voluntary and not be an ‘inducement’ to aid the planning process.

Before going further with this proposal, DCCAE should look very carefully at the practice in other relevant jurisdictions (e.g. France, Scotland, Portugal) in regard to CB for MRET. Ireland is in direct competition with e.g. France for leadership in MRET and it should not

¹¹ A recent example of ‘trying things out’ is the decision by Crown Estate Scotland to launch a new scheme that will enable local authorities, development trusts and other bodies to apply to manage assets in their local area. The business, which manages land and property including seabed, foreshore, rural estates and more, has appointed Ms Sarah Brown to help develop new ways of giving local communities more control over decisions regarding Crown Estate Scotland assets. The aim is to trial different models and assess which ones work best in delivering financial, social and environmental benefits. She will lead on establishing a set of criteria so that organisations can apply to manage assets locally and will also ensure there is a robust process in place to gauge the success of projects that go ahead. A key part of her role will be consulting with coastal and rural community representatives and other organisations and individuals who may be impacted.

<http://www.crownestatescotland.com/media-and-notices/news-media-releases-opinion/crown-estate-scotland-commits-to-pilot-local-management>

impose unilaterally a disadvantage on itself in the light of competition for projects and investment¹².

Q19. WHAT ARE YOUR VIEWS ON THE DEFINITION OF ‘COMMUNITY RENEWABLE ELECTRICITY PROJECTS’, ‘COMMUNITY-LED COMMUNITY PROJECTS’ AND ‘DEVELOPER-LED COMMUNITY PROJECTS’?

The key issue here is the definition of ‘community’. The whole approach to communities in the Consultation will be very difficult to apply in a marine context. However, given that it goes ahead, it should be confined to persons on the electoral roll within 5km of a site on a given date e.g. the date of application by a developer for consenting (e.g. for a permit to DCCAE) and who can prove that they are, and have been for some time, full time residents at the address provided. Ideally, although this runs against the apparent trend in the Consultation, the community should form a company with the following characteristics:

- One share per adult member of the Community
- Standard format determined as a national template by DCCAE/SEAI

We are opposed to the complexity, scope for adverse ‘financial engineering’ and for conflict that would arise from any extension (e.g. to the fishing community who may however have separate claims for compensation for displacement from traditional fishing grounds by MRET) of the definition of ‘community’ beyond that set out immediately above.

Q20. WHAT ARE YOUR VIEWS ON PROPOSING ADDITIONAL FINANCIAL MEASURES TO ENABLE CITIZENS IN PROJECTS (E.G. TAX INCENTIVES, GREEN BONDS ETC).

The MRIA is opposed to any such measures for the reasons set out in our response to Q12d.

¹² MRIA is aware that the *Bureau of Ocean Energy Management* in Massachusetts USA introduced a “legally binding contract” for community benefits payments within a leasing notice for their offshore wind sites. However, this is one of the first (the first on the East coast?) US offshore projects, is untested and was conceived in totally different circumstances to Ireland i.e. the site is close to wealthy Martha’s Vineyard/Nantucket where the desire for any ‘compensating’ onshore value chain activities is low.