Irish Macro-Algal Cultivation Strategy to 2030

BIM
Ireland's Seafood Development Agency

INTERVIEWEE FEEDBACK ON DRAFT STRATEGY

Rialtas na hÉireann
Government of Ireland

Có-mhaoinithe ag an Aontas Eorpach

Co-funded by the European Union

Funding:
This study is part of the Seaweed Development Programme funded through the Knowledge Gateway Scheme which is established under Union Priority 2 of Ireland's Operational Programme under the EMFF and is co-funded by the Irish Government and the EU.

Commissioned By:
Seafood Technical Services Bord Iascaigh Mhara (BIM)

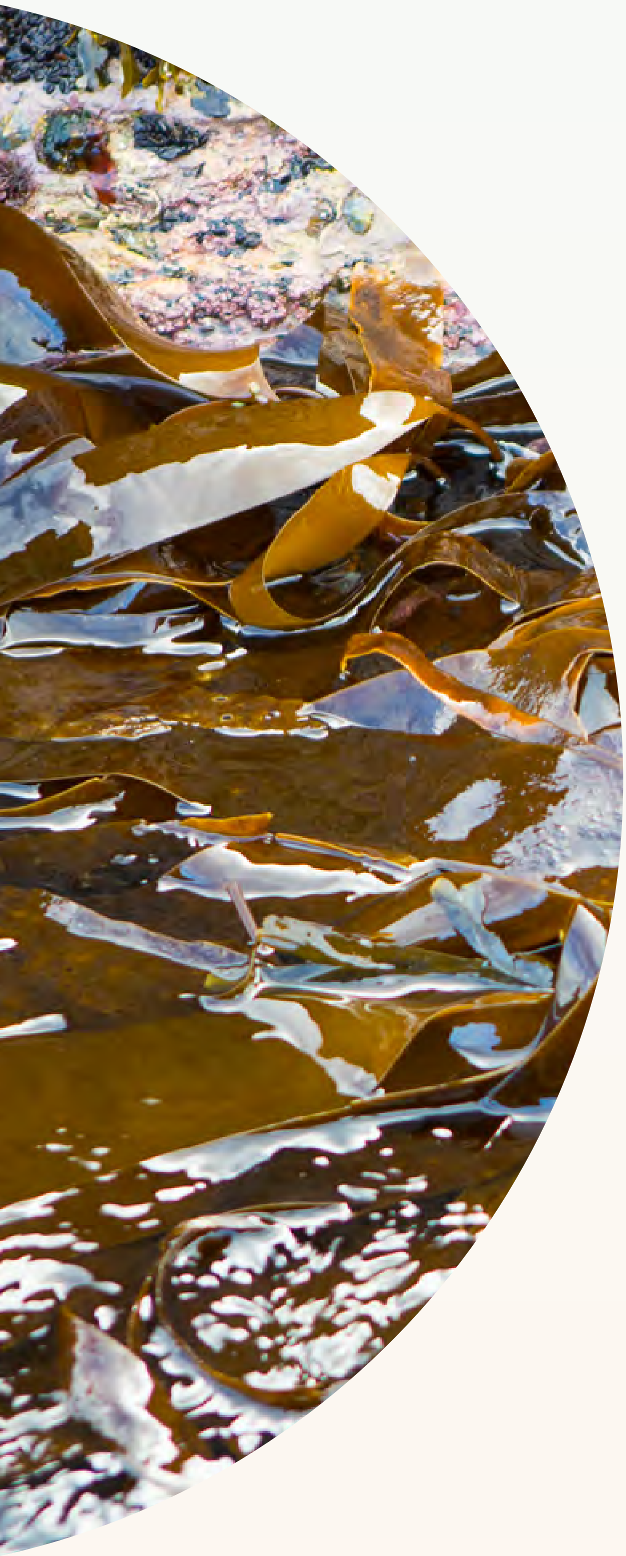
Researched & Written By:
Steelesrock Strategy Consulting

Enquiries:
info@bim.ie

BIM Ireland's Seafood Development Agency

Steelestock Strategy Consulting

Contents



Introduction

Steelesrock Strategy Consulting, working on behalf of BIM carried out a strategic review of the Irish Seaweed Aquaculture Sector between October and December 2021. The review included a literature review, benchmarking against a number of other European countries and regions, and consultations with over 40 interviewees involved in the Irish seaweed aquaculture industry. Based on this review, Steelesrock prepared a draft strategy for the sector in early 2022.

Following review and approval of the draft strategy by BIM, each of those interviewed as part of the strategy review was invited to comment by way of an on-line survey using the SurveyMonkey platform. The questions were designed mainly to inform future implementation of the strategy.

This report summarises the responses received, and considers whether the draft strategy should be updated in light of comments received.

The questions asked were:

1. The strategy includes 12 thematic areas with associated actions. Please rank the thematic areas in order of importance, with one being the most important.

2. The strategy envisages the sector growing to produce ca. 1,000 tonnes (wet biomass) per annum by 2032, with a focus on basic supply and minimal processing in this time. Do you believe this timescale is a) too short; b) about the right length or c) too long?

3. What approach should be adopted concerning the management of the implementation of the strategy?

4. What kinds of support will the cultivation sector need, and from whom/where should the support be provided (e.g. state agencies, government departments, other sectors etc.)?

5. What metrics or indicators should be used to measure the success of the strategy?

These are discussed below. Numeric data associated with questions 1 and 2 are presented in the appendix.

Distribution and response rate

The survey was sent to 41 people on the 11th of March 2021, and people were invited to respond by the 23rd of March. The Survey actually closed on Saturday the 26th of March.

Those surveyed were invited to provide their names, but this was not mandatory. Where a person provided their name, they were also asked if they wanted their comments to be associated with their name. Eleven people responded in total, with 7 giving their name. Of these, just two indicated they were willing to have their name linked to their comment. Given the low rate of those indicating their agreement to provide their names, the full results are being provided in the Appendix on an anonymised basis.

Of the seven responses where names were provided; three are growers; three are from, or are associated, with state agencies; and one is a seaweed processor.

Two of the respondents provided very similar answers (in some cases identical). This may mean that the same person responded twice, or that two people discussed the strategy and their responses.

Commentary on the responses

Q1. The strategy includes 12 thematic areas with associated actions. Please rank the thematic areas in order of importance, with one being the most important.

The strategy document contains 84 suggested actions allocated to 12 thematic area. Respondents were asked to rank the importance of the 12 thematic area. A simple analysis of the top ranked themes (as shown in the Appendix) reveals little; using the weighted average provided by Survey Monkey shows *Establish a community* as the most prioritised theme with a score of 10, followed jointly by *Build and share know-how*, *Invest in Capacity*, *Understand the Market*, and *Research* with scores of 8 each.

Prepare for the future is clearly the lowest ranked theme with a score of 2.

Given the broadly even distribution of the themes based on a weighted average, it does not seem like changes to the themes are warranted.

No changes are proposed to the report as a result of this question.

Individual Comments:

There were no individual comments associated with this question.

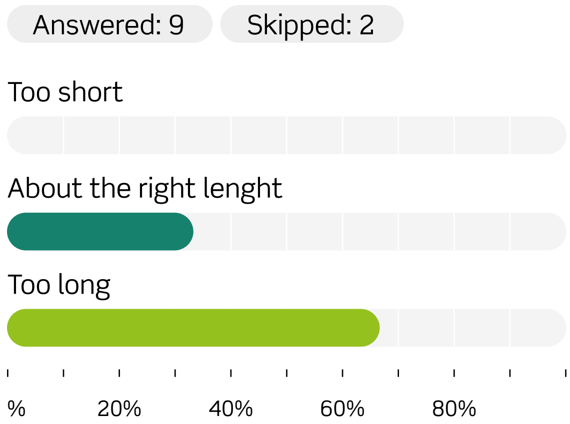
Q2. The strategy envisages the sector growing to produce ca. 1,000 tonnes (wet biomass) per annum by 2032, with a focus on basic supply and minimal processing in this time. Do you believe this timescale is a) too short; b) about the right length or c) too long?

Growing the sector to 1,000 tonnes by 2032 is clearly regarded by a substantial number of respondents as an insufficient target. However because of the low numbers responding (9), it is difficult to assess how representative the 6 people who said it is too long truly are. The target is based on the estimated actual area currently under cultivation, with annual growth of 30% year on year.

As report authors we regard the 30% growth rate as ambitious. The comments provided with the question reveal some respondents have a belief that increased production can be achieved by simply "switching on" capacity or that it is solely a function of licencing. Some other comments indicate that individual growers have plans for significant levels of production this year and in the coming years. Based on what was revealed in the strategic review interviews, we believe these claims to be overly optimistic. It should be noted that respondents only had access to the strategy, and not the strategic review that informed its development.

Other answers, although a minority, give a contradictory view that 10 years is ambitious.

As a result of this question, we have altered the text slightly to make clearer how the end date of 2032 was arrived at. Reducing the timescale would risk BIM potentially committing to a target which then cannot be delivered on.



Individual Comments:

- *"Based on the historic profile, 30% growth rate is ambitious but not unachievable, provided the sector gets the support it needs".*
- *"If the license process was shorter we could reach that target in no time".*
- *"This could be done in 2 years and would kick start the cultivation sector. This is such an important growth industry for Ireland and for creating jobs. Why 10 years? One farm could produce thousands of tonnes per year. What is taking so long???"*
- *"This timeline is way too long, the markets are already crying out for product, we need to match supply with demand, force licencee's to start producing or risk losing their licence, invest in additional cultivation resources, seek advice and help from Asian growers already established and learn for best practise rather than wasting time trying to go it alone".*
- *"Delay resulting from absence of a commercial hatchery and lack of confidence in rigid licencing procedures. 10 years might be optimistic without imagination and leadership."*

- *"Other agencies such as those issuing the licenses are probably in a better position to comment on this".*
- *"Those agencies issuing licences are probably better able to give a steer".*
- *"Next year we're already planning 300-400. This year about 100 tonnes".*
- *"To make the best of the opportunity we need to reach 1000 tons in 5 years".*

Q3. What approach should be adopted concerning the management of the implementation of the strategy?

This was a qualitative question with respondents providing individual comments. These reveal a demand for coordination and leadership. The creation of an implementation group is frequently mentioned, as is the idea of an individual being tasked with leadership. Some respondents indicated that this should be industry led.

There is no specific action in the strategy dealing with the question of implementation. We regarded this as an implementation issue that need to be considered and dealt with BIM on receipt of the report. However, Action 1.1. (under the *Establish a community theme*) suggests:

> *Establishing a trade organisation to facilitate information sharing, branding and to lobby for support to develop the industry. There may be existing organisations that can take on this role.*

An issue to be considered is how such national leadership would interact with the regional leadership that is likely required.

We believe these are issues best considered by BIM in advance of launching the report, with the course of action to be adopted being presented as "in response to the report". It is worth mentioning a Seaweed Industry Organisation (the ISIO) was established in 1994 with support from several state agencies and ceased operating following encountering funding difficulties.

No changes are proposed to the report as a result of this question.

Individual Comments:

- *"Many of the actions in the strategy are interlinked and a holistic approach will be required to tackling them. For effective management of the implementation, relevant stakeholders should be identified and agree to be responsible for each action with an indicative timeframe for implementation. Perhaps an independent subgroup could be put in place to oversee implementation. A review of the strategy and status of implementation should be undertaken mid way through the time period, with a view to tracking and evaluating progress and making any necessary adjustments to the strategy".*
- *"Sort out licensing time, a dedicated hatchery and dedicated processing facility for the different region"s.*
- *"Someone needs to take leadership and drive the sector. Then the whole licensing issue needs to be developed and streamlined. Once these are in place, companies will invest and grow capacity".*
- *"There should be a collaborative body made up of key stakeholders from industry established to drive progress, if it is left within government or other governmental agencies it will take too long to develop. What government could do is establish a joint venture between Wind farms and seaweed cultivation, insisting that any applications for wind farms include the provision and study of suporting seaweed culivation and growing alongside them, similar with aquaculture (fish farms)".*

- *"Implication (sic) group with expertise and representing producers, BIM ,and state supporting bodies".*
- *"I guess ensure buy-in from all relevant agencies as well as stakeholders, so that there is a unified approach".*
- *"Establish a working group to address and tackle all obstacles currently preventing a nationwide implementation of macro algae cultivation. Industry should lead a stakeholder committee to oversee the implementation of the strategy The management of the implementation of the strategy should be overseen by an industry lead, stakeholders committee".*

Q4. What kinds of support will the cultivation sector need, and from whom/where should the support be provided (e.g. state agencies, government departments, other sectors etc.)?

This was a qualitative question with respondents providing individual comments.

The responses to this question somewhat reinforce the previous question – there is an appetite for coordination and support across state agencies. The issue of hatcheries is raised by three of the respondents – with the interesting idea of a state agency running a hatchery. While this may not be something BIM or other agencies wish to take on, it does raise the idea of an agency making the application for a hatchery.

Nevertheless, we believe all the issues raised in these comments are adequately covered in the document itself.

No changes are proposed to the report as a result of this question.

Individual Comments:

- *"A dedicated seaweed hatchery (hatcheries?) is needed for the cultivation sector. Funding via enterprise supports/VC etc could be used to develop this. There is much expertise in the country in this area, getting licences (foreshore application and aquaculture licence) may lengthen the timeframe for this to happen in. Need buy in from all relevant agencies and departments on the strategy. RDI should be supported through existing national and international funding mechanisms (state agencies, depts, Horizon Europe, Interreg, CBE JU, Sustainable Blue Economy Partnership). Strategic national funding on RDI specific to the industry develop via EMFAF through BIM".*
- *"A dedicated hatchery - state agency".*
- *"Good regulatory guidance and framework. Identification of specific areas around Ireland ideal for this new industry. Ireland could almost pre-license areas and then seek proposals from the private sector to develop seaweed farms. Responsive government to quickly process license applications and government support in R&D and business innovation and growth".*
- *"Firstly, we need the know-how, which already exists out there (Asia) to fast track industrial style growing and cultivation, we need a joined-up approach from different government departments again to speed up progress. Collaboration between industry and other stakeholders is key".*
- *"Support should come from state/ semi-state for an agreed integrated plan".*
- *"Ensure market conditions are correct and that adequate research is conducted that market needs match what is being/going to be produced; certain financial supports and relevant networking fora put in place and liaising where relevant with the wider seafood community".*

- *"Accelerated license application process for hatchery as well as sites. Currently hatcheries or establishing a hatchery is a huge issue. Minimum of 28-month process".*
- *"Grants, Human Resources to provide support to the industry BIM".*
- *"State agencies and the Department".*

Q5. What metrics or indicators should be used to measure the success of the strategy?

This was a qualitative question with respondents providing individual comments.

A variety of indicators were suggested – but the principal metric offered is annual tonnage. Various other metric based on that core metric are suggested.

The other metrics such as presence of a community, pace of development, number of production sites and employment numbers would also be useful measures in the future.

Some suggestions such a price should be treated with some caution as they will be significantly impacted by externalities to the industry in Ireland.

No changes are proposed to the report as a result of this question.

Individual Comments:

- *"Presence of a community/network Development of seaweed hatchery(ies) Growth rate per annum of production #products/companies/cultivators*
- *"Tonnage produced and price.*
- *"The speed in developing a regulatory framework for growth. The speed in approving licensing application- weeks/ months instead of years. The amount of seaweed grown and harvested. Contribution this has on GDP and job growth".*
- *"Pace of development, Volume of seaweed produced, number of production sites, employment, market value, growth in the sector".*
- *"Targets set by agreement. Subsequent performance".*
- *"I guess ultimately its sales (be it domestic or export) -be it either ingredient or end product".*
- *"Total tonnage, amount of viable companies, turnover, impact".*
- *"The annual value of the sector divided by the tonnage produced, should increase year on year".*
- *"The annual value of the industry divided by the tonnage produced should increase year on year".*

Q5. Finally, do you have any specific comments or observations you wish to make on the strategy?

This was a qualitative question with respondents providing individual comments.

Despite this question being an invitation to comment on the strategy document itself, none of the respondents made specific comments. Most of the comments were exhortations to actually implement the strategy and move the development of the industry forward.

No changes are proposed to the report as a result of this question.

Individual Comments:

- *"I think it is important to ensure coherence between this and other relevant strategies/roadmaps/plans that have been or will be developed that may impact on the seaweed sector e.g. Project Marine Ireland, Bioeconomy Action Plan, Circular Economy Strategy, Food Vision 2030, Climate Action Plan, MSP etc".*
- *"This is not rocket science and there are plenty of examples of how this can be done. GreenWave in the US is expanding kelp farming on both the east and west coasts and is a good model for Integrated multi tropic aquaculture. This is not that complicated, does not require too much investment and can be easily done. The problem is with the lack of government leadership and regulatory framework. There are so many economic and environmental benefits to this sector I wonder why this is taking so long. We could be growing 100,000s of tonnes with so many benefits to the environment, the agricultural sector (feeding livestock to reduce methane emissions and as an organic fertilizer/biostimulant) and sequestering carbon. We need to treat this with some urgency because business as usual will not get us where we need to go in the next decade".*
- *"Please move it forward, there is massive potential to develop a stand alone industry which could breath new life into dying rural communities. A sustainable and green industry where Ireland is strategically located to maximise potential".*
- *"Unable to read it as it refuses to open. Please send by email"[1].*
- *"Strategy is fine but needs government buy in else going no where".*
- *"No".*
- *"No".*

[1] This respondent was in touch with us by telephone and was sent the document directly. The responses they provided were without sight of the strategy. They subsequently did not edit their responses.

Conclusion

This survey was designed to provide respondents an opportunity to provide input on how the strategy should be implemented, and to identify any aspects of the strategy they were not in agreement with.

Very little comment was made on the strategy itself. The most significant piece of feedback in this regard was the view that a timeline extending to 2032 is too long. However this time horizon was chosen to fit with the 10 year strategy, and on the basis of growth toward a 1,000 tonne output being achieved as a result of a 30% annual growth. This is an ambitious goal in its own right.

Most other comments were in relation to implementation. On this, consideration should be given to:

- Establishment of an oversight group. This may form part of or be in parallel to the establishment of a trade organisation recommended in the strategy.
- Definition of the relationship between regional and national activities. This is particularly relevant to discussions around a hatchery or hatcheries.
- Use of easily understood metrics, in particular annual production as a measure of the strategy implementation.

Appendix
Numerical Survey Data

Q1. The strategy includes 12 thematic areas with associated actions. Please rank the thematic areas in order of importance, with one being the most important.

	1	2	3	4	5	6	7	8	9	10	11	12	Total	Score
Establish a community	50% 5	0% 0	20% 2	10% 1	10% 1	0% 0	0% 0	10% 1	0% 0	0% 0	0% 0	0% 0	10	10.20
Build and share know-how	0% 0	20% 2	10% 1	30% 3	10% 1	10% 1	10% 1	0% 0	10% 1	0% 0	0% 0	0% 0	10	8.40
Invest in capacity	20% 2	10% 1	0% 0	0% 0	40% 4	10% 1	10% 1	0% 0	0% 0	10% 1	0% 0	0% 0	10	8.30
Collaborate with the wider seafood sector	0% 0	0% 0	30% 3	0% 0	10% 1	10% 1	10% 1	20% 2	10% 1	0% 0	10% 1	0% 0	10	6.70
Understand the market	0% 0	30% 3	10% 1	20% 2	0% 0	0% 0	30% 3	0% 0	0% 0	10% 1	0% 0	0% 0	10	8.20
Establish the brand	0% 0	10% 1	20% 2	0% 0	0% 0	0% 0	20% 2	20% 2	0% 0	30% 3	0% 0	0% 0	10	6.20
Bring products to markets	0% 0	10% 1	0% 0	10% 1	0% 0	10% 1	10% 1	10% 1	40% 4	0% 0	0% 0	0% 0	10	5.50
Build awareness	0% 0	0% 0	0% 0	0% 0	20% 2	0% 0	10% 1	30% 3	10% 1	20% 2	0% 0	10% 1	10	4.80

	1	2	3	4	5	6	7	8	9	10	11	12	Total	Score
Research	20% 2	10% 1	0% 0	10% 1	10% 1	30% 3	0% 0	10% 1	10% 1	0% 0	0% 0	0% 0	10	8.20
Protect and monitor	0% 0	0% 0	0% 0	10% 1	0% 0	0% 0	0% 0	0% 0	10% 1	10% 1	50% 5	20% 2	10	2.80
License wisely	10% 1	10% 1	10% 1	10% 1	0% 0	30% 3	0% 0	0% 0	0% 0	20% 2	10% 1	0% 0	10	7.10
Prepare for the future	0% 0	0% 0	0% 0	0% 0	0% 0	0% 0	0% 0	0% 0	10% 1	0% 0	30% 3	60% 6	10	1.60

Q2. The strategy envisages the sector growing to produce ca. 1,000 tonnes (wet biomass) per annum by 2032, with a focus on basic supply and minimal processing in this time. Do you believe this timescale is a) too short; b) about the right length or c) too long?

Answer Choices	Responses	
Too short	0.00%	0
About the right length	33.33%	3
Too long	66.67%	6
TOTAL		9

BIM Ireland's Seafood Development Agency

E info@bim.ie
W www.bim.ie
T 01 2144100
@bordiascmhara