

KALY/SCFF - Seaweed Farming

Background

Kaly intend to develop the seaweed industry in Scotland in conjunction with Marine users and local Communities to a level which is environmentally beneficial, socially acceptable, and economically sustainable. To reach this objective will involve an incremental approach to new seaweed sites which demonstrates best practice to all those who have an interest in the future management of our marine environment.

Kaly have secured a Marine Scotland license at Loch Bay (Loch Dunvegan) on northwest Skye to create a prototype research, development and training farm, where all aspects related to scaling the cultivation of kelp will be developed, tested and practiced. Our objective is to ensure that future potential sites can learn from the knowledge gained at the Loch Bay site and in particular the approach taken during its pre application consultation with statutory consultees, fishers and the local community.

As part of Kaly's approach to cooperative working initial discussions have taken place with the Scottish Creel Fishers Federation (SCFF) to explore how both organisations can work together effectively and successfully towards meeting the objectives of Kaly and those of SCFF and its members.

Three areas of mutual interest have been identified to use as a basis for further discussion between Kaly and SCFF and with a wider circle of key stakeholders in order to advance and record a wholistic best practice approach to kelp farming in Scotland.

- I. Seaweed Farm Code Protocol
- II. Community Benefit Approach
- III. Marine Co-Management

1. Seaweed Farm Code Protocol

1.1. Introduction

Kaly and SCFF wish to establish a best practice protocol for the cultivation of native kelps (saccharina and alaria) around the Lochs and Seas of Skye and Northwest Scotland. This best practice protocol would be developed and applied as part of Kaly's proposals to create an initial cluster of seaweed farms over the next 5 years.

The purpose of a protocol is to record a best practice approach to seaweed farming which both parties will commit to in order that the opportunities and benefits arising from seaweed cultivation are captured by fishers and local communities.

The protocol will ensure that before any license application is made by Kaly on a marine site there will have been joint consultations with the hope that a consensus can be reached by all stakeholders, and in particular local creel fishers.

1.2. Protocol Heads of Terms

- 1.2.1. Kaly recognise the importance of working with local inshore creel fishers who are sometimes dependent on access to areas that potentially overlap with prospective kelp farming sites. Fishers knowledge and marine expertise could be instrumental in identifying suitable kelp farming sites, and understanding potential conflicts that might arise in any given site location in the lochs and coastline of Scotland.
- 1.2.2. Kaly believe local fishers are well placed to assist with the identification of potential sites within Kaly's screening exercise and would welcome a joint approach to site identification and assessment. There is a potential opportunity once sites are selected for some fishers to become farming partners.
- 1.2.3. Kaly commits to working in an open and transparent manner with both SCFF and its members throughout the site assessment stage and the marine licensing process.
- 1.2.4. Potential sites require to meet a three stage screening assessment test prior to any license application being taken forward:
 - a) High level consultation with statutory marine custodians including the CES, MSD, NatureScot, Lighthouse Board, and non-statutory organisations including, the Inshore Fisheries Group, Royal Yachting Association, and Local Community Groups.
 - b) Kaly internal design layouts and environmental assessments including habitat assessment, visual impact assessment, and marine data/environmental assessment.
 - c) Seaweed trials of short grow lines to assess composition, quality and yield expectations will be undertaken by Kaly in conjunction with Hortimare who will be partnering Kaly for all seaweed analysis and production programme.
- 1.2.5. Kaly will work with SCFF and local fishers in an open and transparent manner to assess sites sequentially within a defined catchment area using the above tests in order to determine whether any of the selected sites meet the criteria, and can therefore be progressed to a pre-application Marine Scotland license.
- 1.2.6. Kaly will adopt a flexible approach to each farm design and will work with SCFF members and others to establish the most appropriate design layout to suit individual site characteristics. While there needs to be a critical size of farm to ensure economic viability, options in design layout and phasing exist so that impacts on fishing activities can be reduced to a minimum, or indeed enhanced through the creation of fish nursery zones.

- 1.2.7. Kaly will always prioritise the opportunity to manage seaweed farms in favour of the creel fishers which operate in the vicinity of each farm site.
- 1.2.8. We would wish all to share in the benefits that may derive from the presence of a Kaly sea farm should all wish to do so. There is a potential opportunity to progress co management of sites and there is also potential to derive community benefits from our activities. We envisage a collegiate approach through work share, division of farm sites or farm allocation where practicable.

2. Community Benefit Approach

2.1. Introduction

Kaly have made a commitment to generating tangible benefits to both the marine environment and local communities where seaweed farms are located. (Kaly vision statement "Grow seaweed, involve local communities, improve our marine environment." - www.kaly.eco)

Our proposals for our prototype farm at Loch Bay set the standard for community engagement at all stages of the licensing process, and in particular during the pre-application stage, where the local community on Waternish have been kept completely informed of our intentions and objectives.

Tangible benefits at Loch Bay have included funding the Broadband installation and two year contract with BT for Waternish Community Hall; Employing local wherever possible for a variety of marine related surveys; storage and procurement of repurposed materials; and in a bio-stimulant 'community trial' using locally bought seaweed.

This month (February'24) will see Kaly's seaweed trial being installed at Loch Bay which will be undertaken by local crofters and creel fishers using repurposed materials for all of the farm infrastructure. We will commence a phased training programme by Hortimare into different seeding mediums and techniques at the trial farm which will be undertaken by local crofters.

Community benefits to date have fallen into two distinct areas - wider benefits which help everyone and would not have happened without the Loch Bay project being initiated by Kaly, and a programme of training on seaweed science, farm design/deployment, and marine conservation and sustainability.

In addition members of the Kaly team have made a number site visits to kelp farms throughout the world, attended and participated in several seaweed conferences, and attended the Scottish Association for Marine Science (SAMS Academy) course on seaweed farming.

Kaly in conjunction with SAMS and the James Hutton Institute have secured FIRNS grant funding to investigate how a legal and institutional funding structure can be brought forward by the Scottish Government and Crown Estate Scotland for the restoration of native oyster beds throughout Scotland. The study involves participants from a number of local communities who are trialling native oysters around Scotland and is due to report its initial findings this Spring.

From the above there are a number of strands which can be used as a basis for establishing a 'Community Charter' which sets down the commitments Kaly will make to local communities associated with new seaweed farm projects. Our intention is to discuss these with SCFF and other stakeholders so that there can be consistency in approach and application across all communities.

2.2. 'Community Charter' Topics

- 2.2.1. Farm site selection process and local community involvement.
- 2.2.2. Pre application information to be comprehensive see Loch Bay web site.
- 2.2.3. Pre application community engagement to be open and transparent.
- 2.2.4. Design and Management protocols by Kaly and SCFF member/s
- 2.2.5. Identify local employment opportunities to support marine license application.
- 2.2.6. Identify training opportunities within the entire seaweed value chain all disciplines including marine engineering, biology, and science.
- 2.2.7. Marine education programme for all schools, communities and visitors.
- 2.2.8. Kaly to support local community marine conservation initiatives e.g. data collection, seagrass planting, coastal protection, oyster bed restoration, ocean litter clear-up, and community habitat monitoring platform to grant applications/private capital into Nature projects/citizen science projects.
- 2.2.9. Local community involvement in marine conservation-management strategies.
- 2.2.10. Capital projects related to the marine environment direct and indirect community engagement/involvement.

Kaly's intention will be to lead a dialogue on the above with SCFF members who wish to become involved as farming partners and local community representatives at an early stage in any seaweed farm proposal.

3. Marine Co-Management

3.1. Introduction

Responsibility for the health of our seas and oceans rests with us all. We are all custodians of our sea lochs and need to come together at National through to Local level to have most impact. Kaly and SCFF can act as a catalyst to a dialogue involving all marine stakeholders and interests.

Seaweed farming in Scotland is at a very early stage. Kaly see an opportunity to 'set the bar' for the seaweed industry in Scotland and define how it should engage with other stakeholders at both a local and a National level. Our prototype farm at Loch Bay and involvement with the local fishing community have influenced our approach to the following -

3.1.1. Kaly have produced a DRAFT Farming Partnership Heads of Terms (Appendix A) which we will advance with SCFF to create a clear statement for all creel fishing members to use as a basis for taking on the operational responsibility of a farm. Kaly and SCFF will regularly review the Heads of Terms and make any adjustments to these to reflect matters arising as new farms come into operation. Kaly will trial the Partnership Terms and Conditions at the Loch Bay farm this year and record all management time

- associated with the various key tasks. All aspects of the trial will be shared with SCFF to inform and to assist in making practical adjustments to the Partnership Terms.
- 3.1.2. Kaly intend to gradually create a cluster of farms surrounding Skye and the Northwest of Scotland. While farm sizes will vary depending on location our intention is to build the equivalent of 50 grids (each measuring 100m x 200m) over the next 5 years to generate sufficient biomass to justify the setup costs for a modular bio-refinery and processing plant.
- 3.1.3. To ensure individual farmers benefit from the scaling process a DRAFT Scaling Matrix (Appendix B) has been produced which provides a proportional increase to the management fee for each farm as grid numbers overall come into operation. Kaly will regularly review the matrix with SCFF to ensure transparency on added value in future years of operation and adjust as necessary to ensure each SCIFF members interests are recorded.

Kaly would welcome the opportunity to extend current discussions with SCFF to include the Inshore Fisheries Group (IFG) Scottish Fisheries Federation (SFF) and all other organisations who have an interest in the future management of Scotland's marine environment.

Funding community projects and marine conservation initiatives such as oyster beds and lobster hatcheries involves capital investment and operational financial support and planning. Kaly have made a commitment to share a proportion of revenue earned from seaweed farming as the scale of the business expands through a 'Marine Fund' (Appendix C).

Kaly's objective would be to have the Marine Fund operated and administered independently by representatives from all key stakeholders including SCFF and SFF.

June 2024

APPENDIX A

Term Sheet Draft



Kaly Group Limited ("Kaly")	Kaly Group Limited ("Kaly")		
[Farmer Partner X] ("Farming Partner")			
Kaly wish to enter into a Service Agreement with [Farming Partner/s X] to manage the cultivation of kelp farms at sites for which Kaly will procure Marine Scotland Licenses (MSL). Lease Option Agreements (LOA) have been secured from The Crown Estate Scotland (CES) for a cluster of five kelp farms in northwest Skye. Kaly intend to cultivate and harvest kelp from farms for primary processing at a central Hub location. Farming Partner wishes to take operational responsibility for the cultivation of one or more of the kelp farms.			
Kaly	Farming Partner		
Seabed lease (CES)			
Marine license (MSL)			
Training Programme	Training Programme		
Farm Management Manual	Farm Management Compliance		
Farm Design/Infrastructure /Deployment /Replacement /Insurance	Assisting Infrastructure Deployment / Maintenance of Farm Infrastructure / Renewal of Infrastructure (including provision of boat)		
Seeded lines Supply	Assisting deployment during Seeding period and Monitoring/Data collection during growing period (including provision of boat)		
Harvesting support and logistics oversight Onward processing of kelp	Leading the harvesting and landing of kelp (including provision of boat)		
on with processing or neip	provided or boaty		
Farming Partner receives an annual fee paid monthly in arrears for services relating to infrastructure deployment, line seeding, maintenance and harvesting of the seaweed farm. 1. Payments to support labour and boat (insurance/fuel/maintenance) 2. Payments based on number of farm grids managed and overall scaling of business plan - see attached grid matrix schedule			
	[Farmer Partner X] ("Farming Partner X] Wish to enter into a Service Agr to manage the cultivation of kelp far procure Marine Scotland Licenses (M (LOA) have been secured from The cluster of five kelp farms in northwe harvest kelp from farms for primary Farming Partner wishes to take oper cultivation of one or more of the kel Kaly Seabed lease (CES) Marine license (MSL) Training Programme Farm Management Manual Farm Design/Infrastructure /Deployment /Replacement /Insurance Seeded lines Supply Harvesting support and logistics oversight Onward processing of kelp Farming Partner receives an annual factories relating to infrastructure depand harvesting of the seaweed farm. 1. Payments to support late (insurance/fuel/mainter) 2. Payments based on numoverall scaling of business.		

Performance Fee	Farming Partner may receive a one-off payment at the end of the growing season on the basis of yield/wet tonnage harvested; quality of biomass; contract compliance from buyers; farm management contract and conditions compliance; and prevailing market price. 1. Payment level determined at start of each growing season, based on prevailing market rates and buyers' contracts entered into by Kaly		
Contract Duration	Three year rolling contract following first year probationary period. 1. Voluntary surrender by Farming Partner with one season's notice 2. Step-in rights for Kaly in case of pre-defined performance deficits in farm management contract conditions		
Demand reduction	Demand for kelp may vary from time to time. Kaly reserves the right to not grow kelp at certain farms for one or more seasons. Farms may revert to creel fishing should no growing occur. Kaly will endeavour to share available work across its operational farms and Farming Partners.		
Training	The Farming Partner undertakes to follow before the start of the first season, an introductory seaweed farming course at the SAMS Academy (or other Training course by agreement), costs to be met equally between Kaly and Farming Partner. Additional training courses will be provided from time to time by Kaly which Farming Partners are expected to attend. In addition, an on-line Farmers Learning and Operational platform will be developed by Kaly for joint participation.		
Employment	All Farming Partners are to be registered self-employed or other similar (Third party Company/Partnership/Registered Charitable Trust) and to carry own operatives and boat insurance to the satisfaction of Kaly. Farming Partner warrants to Kaly that they have no pre-existing conflicts of interest, employment agreements or other commitments that would prevent or inhibit their ability to carry out the Commercial Contributions to their best efforts, nor will they enter into any for the duration of the contract.		
Insurances	Kaly will enter into operational insurances for the benefit of Kaly and Farming Partners.		
Performance Standards and Methods	Kaly sets out, in cooperation with its Farming Partners operational methods, performance benchmarks and an Impact Assessment, including a Net Zero plan to reduce and/or minimise emissions. The aim is to create an environment of continuous learning and improvement. In case of disagreement,		
Biomass	Kaly is the sole owner of the biomass harvested from each farm with absolute discretion how to use the biomass. No Farming Partner shall enter into discussion with purchasers of biomass without the prior express consent of Kaly.		

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APPENDIX B

Farm Management Services Chart

Total Grids	Base Farm Management	Additional Farm Management	Total Annual Farm Management Fee		
Rolled-out	Fee Fee per Grid	4 Grid	8 Grid	12 Grid	
32	10,000	5,000	30,000	50,000	70,000
36	11,000	5,250	32,000	53,000	74,000
40	12,000	5,500	34,000	56,000	78,000
44	13,000	5,750	36,000	59,000	82,000
48	14,000	6,000	38,000	62,000	86,000

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APPENDIX C

Marine Fund Contribution Chart

Total Grids Rolled-out	Annual Marine Fund Contribution (£m)
32	0.24
36	0.27
40	0.30
44	0.33
48	0.36