

APPENDIX A – CONSIDERATIONS ON SCOTLAND’S NATIONAL MARINE PLAN, INCLUDING AQUACULTURE POLICIES AND SCOTLAND’S SEAWEED CULTIVATION STATEMENT

MOIDART CAPITAL – LOCH MOIDART SEAWEED FARM

Scotland’s National Marine Plan – Responses to General Planning Policies

GEN 1 – General Planning Principle

The growing seaweed farming industry in Scotland provides an exciting opportunity for a new, sustainable food production system that requires no chemicals or supplementary nutrients. Moidart Capital has developed a practical, non-invasive grid structure that will integrate well with the local marine environment. This method of farming on small grids will provide a sustainable alternative to the harvesting of wild seaweed populations, which are an integral part of coastal ecosystems.

Achieving a sustainable economy:

GEN 2 – Economic Benefit

Seaweed farming is an embryonic industry on the West Coast of Scotland, and development will allow it to provide further contribution to the economy, both locally and nationally. The Moidart area is heavily reliant on seasonal income during holiday periods, particularly in the summer months. Encouraging an uptake in small-scale seaweed farming will provide alternative employment outside of these peak periods for individuals and communities looking for a secondary income stream.

GEN 3 – Social Benefit

Seaweed has been used as a valuable resource for centuries on the West Coast of Scotland. By rejuvenating the industry in this area, we hope to encourage a sense of natural and historical well-being in both resident and visitors. Moidart Capital is keen to allow visitors to its seaweed farm site, and in the future hope to provide educational tours regarding the history and future of seaweed farming as a Scottish industry.

GEN 4 – Co-Existence

Having spoken to local stakeholders, Moidart Capital does not find reason to believe that this project impinges on other marine developments or activities in this area. Due to the small size of the farm and its location, there will be little to no conflict with other marine vessels in this area. Moidart Capital is also exploring the potential for Integrated Multi-trophic Aquaculture Systems (IMTAS) between the seaweed farming sector and other aquaculture sectors, especially fish and shellfish farms.

Ensuring a strong, healthy and just society:

GEN 5 – Climate Change

Apart from vessel and vehicle use during short seeding and harvesting periods each year (<5 days annually), there will be no carbon or greenhouse gas emissions from the seaweed farm. Kelp sequesters carbon at an astonishing rate, absorbing up to 20 times more carbon than terrestrial plants of the same volume, and there is increasing shift in interest towards blue-carbon credits over land-based credits.

GEN 6 – Historic Environment

The farm site does not sit within any historic MPAs. There will be no disturbance of historical or heritage assets, and all activities will be carried out in a way that respects the marine historical environment.

GEN 7 – Landscape/Seascape

Due to its small scale (<1000m²), the farm will be very low profile, with the majority of the structure sitting approximately two meters below the surface and barely visible to the naked eye. The only visible aspects will be marker buoys designating the outer limits of the structure, which are required to comply with marine safety regulations. The site does not sit within designated scenic areas and is tucked discreetly into the North Channel of Loch Moidart.

GEN 8 – Coastal Process and Flooding

There are no negative impacts of seaweed farming on coastal process and flooding. There is some evidence that seaweed farms can provide protection against coastal erosion.

Living within environmental limits:

GEN 9 – Natural Heritage

The intended site is located close to, but not within, the Loch Moidart and Shiel Woods SAC. Moidart Capital will consult closely with NatureScot regarding this proximity. Qualifying marine interests for which the area is designated an SAC include intertidal mudflats and sandflats and the presence of otter (*Lutra lutra*). The risk to marine mammals [such as grey seal (*Halichoerus grypus*), harbour seal (*Phoca vitulina*), harbour porpoise (*Phocoena phocoena*)] of entanglement in small to medium-sized seaweed farms is minimal. To mitigate this risk, Moidart Capital will ensure that growing and mooring lines within the farm structure are fully tensioned at all times, that there are no loose lines at any time, and that the site is regularly monitored. They will engage closely with resources provided by the Scottish Entanglement Alliance (SEA) and ensure that all site workers receive adequate instruction in entanglement risk and resolution.

GEN 10 – Invasive Non-Native Species

A strict biosecurity plan will be followed by employees and marine vessels working on the farm site. Fertile material for seeding will be collected from native seaweed populations found on rocky foreshores and harbours within a 5-mile radius of the site. Spores will be collected from different plants to ensure genetic diversity. Seed culture will be developed at an approved hatchery unit and transported to the farm site. Following harvest, the seaweed crop will be processed in a facility close to the site at Glenborrodale on the Ardnamurchan Peninsula.

GEN 11 – Marine Litter

There will be very little to no marine litter generated by the farm site, although the site will be regularly monitored to ensure that this remains the case. Moidart Capital has a zero-waste policy for any biomass that is grown, all of which will be removed from the site and the end of each growing season.

GEN 12 – Water Quality and Resource

Seaweed grows without the need for chemical fertilizer or artificial nutrients. Seaweed does not require fresh water or produce water waste during cultivation. It may be beneficial to surrounding seawater, absorbing waste products from terrestrial agricultural activities and nearby aquaculture sites. Seaweed is known to absorb waste from both terrestrial activity and other forms of aquaculture, which may be beneficial for the surrounding water quality.

GEN 13 – Noise

We foresee no noise pollution from the farm site.

GEN 14 – Air Quality

We foresee no negative impact on air quality from the farm site.

Promoting good governance:

GEN 15 and GEN 16 – Planning Alignments A and B

Terrestrial elements of the project will be undertaken using existing infrastructure at nearby Kinlochmoidart, which requires no further planning. Vessels will access the farm using an existing private slipway at nearby Kinlochmoidart. Moidart Capital will work positively alongside other planning, regulation and management that affects the use of the marine area.

GEN 17 – Fairness

We agree wholeheartedly with the spirit of fairness, and the importance of developing a sustainable industry that will prove beneficial socially and economically for generations to come.

GEN 18 – Engagement

We will engage with local stakeholders and members of the community throughout the project, as well as the relevant statutory authorities and marine bodies.

Using sound science responsibly:

GEN 19 – Sound Evidence

Seaweed farming is an emergent industry in Scotland and as such there is much to learn. Moidart Capital have sought scientific and socio-economic advice from individuals and marine bodies (including SAMS). Site selection has been based on scientific evidence and survey data, including the use of Marine Scotland's National Marine Planning Interactive portal (nMPI). Moidart Capital are partnering with seaweed farming company, GreenSea Solutions, which has two seasons of experience farming kelp in this area and will act in an advisory capacity throughout the project. We will continue to seek advice regarding all aspects of the project.

GEN 20 – Adaptive Management

With strong and decisive management practices, we will closely monitor new development in the aquaculture industry and use this knowledge to inform decision making throughout the project.

GEN 21 – Cumulative Impacts

We foresee no negative cumulative impacts of the seaweed farm on the surrounding ecosystem. Seaweed farms have been shown to absorb waste from nearby aquaculture sites and land run-off, improving local marine environments.

Aquaculture Policies:

Section 7 of Scotland's National Marine Plan outlines 7 objectives and 14 policies in relation to aquaculture. These policies have been given due consideration, where relevant to algal farming practices:

Aquaculture 1, 2 and 5 – Marine planning and farm impact

Due consideration has been given in selecting a suitable site for the intended seaweed farm project. Site selection has been carried out using chart and survey data, including Marine Scotland's nMPI and MarineTraffic, and by consultation with statutory authorities including Crown Estate Scotland (CES), the Northern Lighthouse Board (NLB) and NatureScot. Thorough visual reconnaissance of the site has also been conducted, as well as consultation with local stakeholders. The visual impact of the site will be minimal due to its size, and any impact will be mitigated using guidelines from NatureScot. There are no perceived impacts of seaweed farming on noise or air pollution, or water quality.

Aquaculture 3, 4, 6, 7, 8

Not relevant to seaweed farming

Aquaculture 9 – Emergency response plans

An emergency response plan will be put in place and shared with all farm workers.

Aquaculture 10 – Pre-application consultation

The intended farm site does not exceed 1000m², and as such is below the limit requiring a Pre-Application Consultation (PAC) to take place.

Aquaculture 11 – Equipment

All materials and equipment used on the farm site will be pre-approved as fit to withstand damage from adverse weather conditions. The farm site will be regularly monitored and maintained, particularly following periods of adverse weather. All equipment used and activities on site will be actioned with the reduction of greenhouse gases in mind. Carbon emissions from the site will be minimal.

Aquaculture 12 – Sea lice

Not relevant to seaweed farming

Aquaculture 13 – Diversification

A diversity of seaweed species, with spores collected from a range of plants, will be grown at the seaweed farming site. There is also potential for IMTA in future, although permission will be sought to amend the marine license if these plans take place.

Aquaculture 14 – Community benefits

The development of the Scottish seaweed farming industry will allow it to provide further contribution to the economy, both locally and nationally. The Moidart area is heavily reliant on seasonal income during holiday periods, particularly in the summer months. Encouraging an uptake in small-scale seaweed farming will provide alternative employment outside of these peak periods for individuals and communities looking for a secondary income stream.

Scotland's Seaweed Cultivation Statement - Considerations

The policies cover commercial seaweed cultivation either grown on its own or as part of an Integrated Multi Trophic Aquaculture (IMTA) system, and will directly inform consenting decisions, and should be considered by developers in advance of submitting applications.

Policy 1

Moidart Capital will ensure that mitigation measures are in place to prevent adverse environmental impacts. Due to the size of their farm (<1000m²), there is expected to be very little impact on the surrounding environment, with a minimal risk of entanglement or harmful benthic shading. The SEA Environmental Report has also indicated that there is likely to be limited environmental impact from small-medium sized sites. A comprehensive review of mitigation measures is presented in the accompanying method statement.

Policy 2

Measures will be taken to minimise the risk from non-native species. Two species native to this area will be cultivated on the farm site; *Alaria esculenta* (winged kelp) and *Saccharina latissima* (sugar kelp). Fertile sorus tissue will be collected from within 5 miles of the farm site. A selection of plants will be used to ensure genetic diversity is maintained.

Policy 3

The farm site is located in the clean waters of Loch Moidart, away from any sewage outfalls and other potential sources of pollution.

Policy 4

All materials and equipment used on the farm site will be pre-approved as fit to withstand damage from adverse weather conditions. The farm site will be regularly monitored and maintained, particularly following periods of adverse weather.

Policy 5

The farm site is located in the North Channel of Loch Moidart, a location which experiences virtually no marine traffic. Local stakeholders and marine bodies have been consulted with and will continue to be throughout the project.

Policy 6

The intended seaweed farm is very small (<1000m²) and all measures will be taken to ensure that there is no negative impact on local marine environment or other users of this stretch of coastline.

Policy 7

Moidart Capital is interested in exploring the potential for IMTA within their seaweed farming sites.