SCOTTISH ENVIRONMENT BUSINESS AWARDS VIBES 2020

Good practice case study:
Seawater Solutions

Seawater Solutions

Glasgow based Limited Company Seawater Solutions hold unique expertise in the area of commercialising wetland restoration and aquaculture farming for financial and environmental gain. As an SME, they advise companies and individuals around the world on the benefits of, and requirements for, creating their own wetland restoration or aquaculture projects. This has led to over 20 wetland agriculture initiatives worldwide in partnership with the United Nations, USAID, UKAID, the World Food Programme and the European Space Programme.

Since 2017, Seawater Solutions has been using two of the world's most abundant resources, degraded land and seawater, to create profitable artificial wetlands, growing the high-value samphire and other "superfood" vegetables for climate resilience and food security; all without using freshwater. It is the first company to have developed automated, 100% renewable-powered, adaptable seawater farming systems, that can grow food on either saline or non-saline land. The company sells high value "superfoods" to high-end restaurants, seafood distributors and specialised vegetable retailers.

Website: www.seawatersolutions.org
Twitter: @seawaterfarming
Instagram: Seawatersolutions
Facebook: https://www.facebook.com/SeawaterSolutions
LinkedIn: https://www.linkedin.com/company/seawater-solutions-ltd/

Highlights

Rethinking farming – helping communities turn underutilised land into wetland ecosystems for food production and climate resilience.

Successfully launched the UK's first seawater farm.

Developed leading green-tech in Scotland, which is now implemented worldwide, from Bangladesh to Ghana, Namibia to Vietnam.

Achieving positive social change.

Pivoted business to Climate Kitchen during the COVID-19 pandemic to deliver their high value and sustainable produce direct to customers.

Their intervention helps coastal communities turn their degraded coastal farmland into saltmarsh ecosystems using saline water. This can protect coastlines from flooding and soil erosion, store carbon, create habitats where wildlife can thrive, and improve air, soil and water quality. The seawater farms created stimulate long-term job creation in saline farming and aquaculture maintenance and operations. On-going training is provided to ensure that the sites are well managed and secure throughout the project.

At the heart of Seawater Solutions is a drive to boost the economy (through carbon trading), reduce costs (through mitigation), create jobs (on the sites, as well as feeding local supply chains), and improve the wellbeing of all living species that depend on green space (through ecosystem restoration). Their projects also improve living standards through beneficial exercise and stress reduction through provision of outdoor work and attractive open space for social interaction.

The agricultural development towards seawater farming and halophyte (salt tolerant) crop cultivation is still in its infancy. The company estimates that there are over 7000 coastal farmers in the UK alone that demonstrate suitable characteristics to apply their systems to these farms (distance to sea, elevation, etc.).

2020 was to be a highly significant year for Seawater Solutions, focusing on extending their customer base around Scotland and beyond, as well as raising the profile of the crop and business. Nevertheless, in response to COVID-19 and the subsequent fall in demand for sea vegetables from food retailers and high-end restaurants, they developed their own recipe veg box, called “Climate Kitchen”, to deliver produce directly to customers’ doors. Climate Kitchen featured sustainable and high-value crops, from samphire to edible flowers and potatoes, grown with seawater in partnership with Glasgow-based growers and retailers.

Going forward, their mission is to share knowledge and expertise so that communities around the world can benefit from regenerative farming approaches, to help clean the planet and provide economic and personal resilience.