# Geovation launches environmental challenge to tackle coastal pollution

Geovation, Ordnance Survey's open innovation network hub, has launched a challenge with the UK Hydrographic Office (UKHO) to find a sustainable solution to tackle diffuse coastal pollution, with a prize of up to £5,000 for the winners.

As an island nation, Great Britain has a coastline of almost 20,000 miles (including the islands). The vast majority of the population also live within 100 miles of the coastline, so diffuse coastal pollution is likely to affect us all in some way.

Our coastlines are not just at risk from extreme storms, coastal erosion and sea level rise caused by climate change, but also from a multitude of diffuse pollution sources that can affect the water quality and pollute our coastal areas, which has a negative impact on the surrounding ecosystem.

Sources of diffuse pollution are often minor in isolation, but collectively can be very damaging to the environment due to the release of potential pollutants. Often driven by rainfall and how we manage land, diffuse coastal pollution can occur as a direct result of agricultural, urban and marine pollution sources.

Diffuse coastal pollution can be caused by agricultural run-off when pesticides and chemicals are lost from farming land into rivers, streams and ponds, as with urban areas due to poorly plumbed drainage systems, untreated wastewater, septic tanks, and flooding from sewers. All of these can accumulate on the coastline and in estuaries that affect the wildlife and local residents in those areas.

The challenge will aim to address the important issue of diffuse pollution on our coastlines and look at sustainable solutions to improve water quality, but also improve efficiencies, profitability and sustainability from agriculture to the water and sewage infrastructure, as well as improving beach cleanliness and wildlife conservation as a direct result of pollution from humans and animals.

Geovation works with innovators and start-ups by providing them with access to accurate and real-time data and the expertise to address the key global, regional and local issues that affect people and the planet. For this challenge, successful applicants will have access to data from Ordnance Survey including terrain, buildings, water networks, addressing and the OS Data Hub, the most comprehensive and accurate view of GB's landscape. This will be complimented by data from the UK Hydrographic Office, the Met Office and the British Geological Survey to identify and find viable solutions to protect our 20,000 miles of coastline in GB.

To date, Geovation has supported over 130 start-ups, who have gone on to

raise more than £116m in funding and create over 1700 jobs. Geovation has supported numerous sustainably focused start-ups including Refill, an organisation that helps people find places to eat, drink and shop with less waste, and Paua, who aim to simplify electric vehicle charging and enable more people to drive EVs.

Carly Morris, Head of Geovation, said: “The coastal challenge is a great way to inspire and drive collaboration using geospatial, maritime and meteorological data so that innovators, with the support from our Geovation community, can devise sustainable solutions in order to tackle critical environmental issues.

“The environmental impact of diffuse pollution is ever more apparent in the UK and we hope that through the challenge we can get closer to finding sustainable solutions that can deliver change and make a positive impact on the future of our coasts.”

Mark Casey, Head of Research, Design and Innovation at the UK Hydrographic Office, said: “We’re proud to launch this challenge with our partners at Geovation. Diffuse coastal pollution is a hugely challenging issue for marine ecosystems, so it’s vital that we find sustainable and long-term solutions. Collaboration and partnerships are some of the best ways to generate real change and to find inventive and novel solutions to challenges in the marine environment, and that’s why we are pleased to support participants with our world-leading marine data sets and expertise.”

To find out more information visit:
https://geovation.uk/diffuse-coastal-pollution-challenge/