

Clustering from the Norwegian Perspective

The clustering activities triangulate cluster development policies within the quadruple helix model of innovation and organisational network analysis. It explores relational structures facilitating regional cluster development for marine plastic waste recycling and upcycling by promoting well-functioning value chains, regional innovation processes, and other structures. The Norwegian West Coast region has strong traditions of technology-driven innovation and entrepreneurship in maritime businesses.

BCE takes the starting point of a generic circular value chain for fishing net recycling with a well-functioning forward stream of fishing rope and rope-installation manufacturing and operations systems, and a rather immature reverse stream for recycling-upcycling. Disposal of marine debris is both authorized (e.g. entering the reverse stream through recovery facilities) and non-authorized, with a large share of marine plastics waste entering the ocean. The network is extended to include stakeholders from governmental bodies, academia, civil society, and hybrid institutions connecting different actors in the quadruple helix model and acting as a catalyst between actors.

Clustering from the Irish Perspective

In Ireland the network for marine plastic recycling, including fishing gear, is significantly less developed. Where Norway has several companies and programmes collecting, processing, and reusing such materials, Ireland continues to face challenges in terms of the geographically dispersed nature of its ports, permissions issues in terms of waste handling, and lack of infrastructure necessary to tackle this form of plastic.

As part of the project, workshops were held bringing together stakeholders from across the value chain including fishers, recyclers, net producers, and SMEs seeking to create new products from waste gear. The BCE team also had substantial engagement with Bord Iascagh Mhara (BIM), the Irish agency responsible for promoting sustainability in Ireland's fisheries. This was coupled with a growing focus within Ireland on the circular economy, including new legislation introduced in 2021.

As a result of these engagements, BCE has engaged with a number of Irish companies who are exploring solutions to waste gear combining both recycling and blockchain technology. These companies will be featured as part of a report which will issue before the end of the BCE project in March 2022.

INDUSTRY - Norwegian recycler supply chain

