# ARC MARINE LTD MANUFACTURING UPSCALE OF NEW MIXTURE

CIRCULAR ECONOMY & ENVIRONMENTAL GROWTH

# INTRODUCTION

ARC Marine is an eco-engineering company specialising in rebuilding rocky reef habitats worldwide. Their product 'reef cubes' is suitable for many sub-sea applications including: Scour prevention of sub-sea assets within ore, oil and gas industries, aquaculture, coastal erosion and eco-moorings. With support from Tevi, Arc Marine sought to adopt a circular business model creating reefs from waste and recycled materials such as aggregate and sand waste from the clay mining industry; or crushed up concrete waste from the building industry. This transition would allow Arc Marine to discontinue using Portland cement in their reefs, adopting a fully recycled replacement.

In order to speed up the transition to a circular business model, Tevi identified new mixing infrastructure required for progressive recycled products. The Tevi team then supported Arc Marine through the funding process to purchase a 'Pan Mixer'. The mixer will be a valuable asset to the company allowing them to test and produce rare and experimental low CO2 concrete mixes. A jet wash was identified as essential for maintaining the equipment and was included in the funding application.



## GRANT AWARDED

£9,927.36

#### **Used to purchase**

Pan Mixer (sourced from Agritrend) and Jet Washer

## **IMPACT SUMMARY**

Through this project Tevi have supported ARC Marine to transition to a recycled and low CO2 concrete mixture that will be used for marine habitat regeneration, benefiting subsea ecosystems. In the long term these marine habitats will support environmental growth, helping to restore previously lost biodiversity. Using fit for purpose machinery will also result in an increase in productivity with less waste going to landfill & incineration and will enable Arc Marine to process applications for larger marine construction projects. There is an expected longer term benefit to recreational water users including diving & fishing as well as benefits to commercial fishing for lobster and crab, among other species.











# "The support from

**ASSISTANCE** 

**BUSINESS** 

"The support from Tevi helped us identify changes to our manufacturing process that had the most positive impact on the environment.

The support with funding made the whole process hassle free".

James Doddrell (Director) Arc Marine



