STREAM Press Release NEWS

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Monitoring climate change in our local coastal communities

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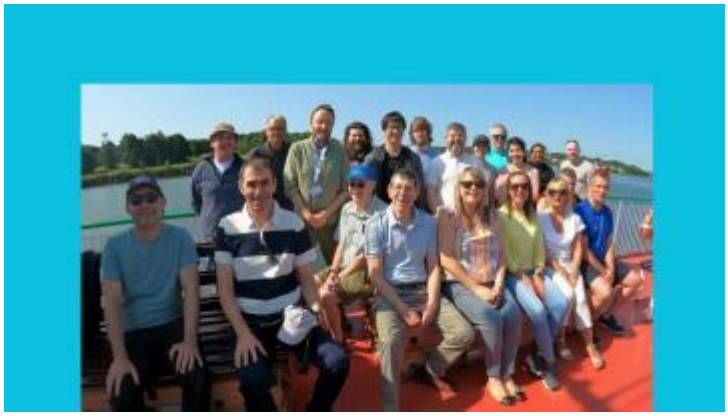
Monitoring climate change in our local coastal communities - News - Waterford Chamber of Commerce



The STREAM project has deployed sensors and weather stations in Waterford, Dunmore East, Dungarvan, Tramore, and Faha to understand water quality and assess environmental change

A conference focused on climate change monitoring for local coastal communities was recently held by the STREAM project (Sensor Technologies for Remote Aquatic Environmental Monitoring) in Waterford.

STREAM is part funded by the European Regional Development Fund (ERDF) through the Ireland Wales Cooperation Programme with €4.3 million over five years. STREAM aims to assess the impacts of climate change to establish localised management plans and ensure a sustainable future for coastal regions.

Real-time data

A key aspect of STREAM's achievements lies in testing prototype water quality sensors developed by South East Technological University (SETU), Munster Technological University (MTU), and Swansea University (SU). Some of these novel sensors include cutting-edge 2D printed sensors from the Welsh Centre for Printing and Coating (WCPC). SETU has designed an innovative, cost-effective instrument to detect nutrients in water bodies, which is crucial in assessing ecological health, such as constructing portable systems with optical UV spectrometers to transfer real-time water quality data to a terminal for quick analysis and action. Additionally, ongoing efforts by SETU and MTU involve developing methodologies for the detection of marine bio-toxins that can impact the sales of shellfish.

Marinestream.eu

STREAM has deployed commercial sensors and weather stations at strategic locations like Waterford, Dunmore East, Dungarvan, Tramore, and Faha. Wexford County Council has actively supported the project by helping with the establishment of sensors around the coast. STREAM has also developed an online portal (marinestream.eu) that enables public access to collected data, promoting engagement with coastal communities, researchers, and governmental bodies. This interdisciplinary research and information-sharing aim to strengthen adaptation and mitigation capabilities in Ireland and Wales while increasing knowledge of climate change.

Reducing our carbon footprint

The project led by Dr Joe O'Mahony from the South East Technological University (SETU) brings together a diverse and complementary group of experts comprising physicists, electronic engineers, programmers, chemists, biologists, finance officers, and administrative personnel from SETU, MTU, Swansea University, the Welsh Centre for Printing and Coating (WCPC), and the Centre for Sustainable Aquatic Research (CSAR).

There is significant concern about global heating, its unpredictability, and unfavourable impacts. According to Dr Ronan Browne, STREAM project manager and researcher, at the same time, "this needs to be carefully measured and assessed for proper planning and adaption strategies to be put in place; we need to all take collective responsibility, action and reduce our carbon footprint and avoid adding additional pollutants into our waters."

Helping coastal communities adapt to climate change

STREAM's dedicated team is committed to safeguarding the environment and helping coastal communities around the Irish Sea to adapt to climate change through cutting-edge technology and interdisciplinary collaboration.