

The session S.9 Environmental integration of marine renewable energies

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Limited available nearshore space, difficulties of planning multiple activities, such as fishing, energy production, environmental preservation and tourism, make necessary a spatial and time planning that considers synergies of different user groups — a multi-use or co-activity.

Sharing a space or a platform for multiple activities requires the knowledge of the impact of environment on the structures and of the structure on environment. This session proposes, by gathering biologists and engineers, to share this knowledge by considering only offshore renewable energies and focusing mainly on the underwater components for which data are difficult to collect. Other objectives are to analyze lacks and requirements for future research and identify potential collaboration and scientific bridges. This session includes various topics such as:

- Environmental impact of antifouling or corrosion protection
- Structural or electrical impact of biofouling
- Protocols and methods for assessing impacts
- Technologies and methods for a better environmental integration such as artificial reefs
- Impact of a better environmental integration on social perception
- Real measurements on sites
- Co-usages and their planning
- Scales effect: from the offshore structure (biofouling, reef effect) to the global eco-system.
- Controversies over the effect of artificial reefs (stepping stone, dissemination of invasives or non-indigenous species, pathogens, etc.).