

Joint ICES/ PICES Working Group on Ocean Negative Carbon Emission (WGONCE)

2020/WK/EPDSG07 A Joint ICES/PICES Working Group on Ocean Negative Carbon Emission (WGONCE), chaired by Louis Legendre*, France (ICES), Carol Robinson*, UK (ICES) and Nianzhi Jiao*, China (PICES), Douglas Wallace, Canada* (PICES) will be established and will work on ToRs and generate deliverables as listed in the Table below.

YEAR	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2021	24 September	Online meeting	Interim e-evaluation by October	
Year 2022	October	TBD	Interim e-evaluation by December	
Year 2023	October	TBD	Final report by DATE December to SCICOM	

ToR descriptors

ToR	Description	Background	SCIENCE PLAN CODES	Duration	Expected Deliverables
a	To identify current knowledge gaps in negative carbon emission in the inshore and offshore oceans, and propose new research directions linking scientific research and its applications to the enhancement of negative carbon emissions.	The 2018 IPCC assessment has stressed the importance of negative emissions in order to limit the global warming to 1.5°C.	1.3, 1.9	3 years	Production of a review paper
b	To produce a plan to support the development of additional long-term time series stations for the observation of carbon sequestration in representative coastal and offshore waters	Long-term time series observation in representative coastal and offshore waters is necessary for our understanding of carbon sequestration in the ocean.	3.1, 3.2, 3.3	3 years	Compilation on a data management plan

c	To propose integrated experimental studies for process and mechanism of carbon sequestration under paleo-, current and future oceanic conditions	Marine carbon sequestration varied in paleo-, current and future conditions.	1.3, 7.6	3 years	This information will form the basis of research papers
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Summary of the Work Plan

Year 1	Meetings to address Ocean Negative Carbon Emission knowledge gaps and plan the long term time series stations.
Year 2	Propose, develop and start with a direct methodology to support integrated experimental studies
Year 3	Meetings to review the progress and write review/research papers

Supporting information

Priority	The ICES Science Plan prioritises work on biogeochemical cycles and monitoring and climate change is a core strategic and cross-cutting issue for ICES as co-ordinated by the Strategic Initiative on Climate Change Impacts on Marine Ecosystems (SICCME). There are growing societal and policy needs for information on Negative Carbon Emission and the work of this group will help to address this evidence need. Current activities of this Group will lead ICES into issues related to the global climate change, especially with regard to the role of ocean in the global carbon sequestration. Consequently, these activities are considered to have a very high priority.
Resource requirements	The research programmes which provide the main input to this group are already underway, and resources are already committed. The additional resource required to undertake additional activities in the framework of this group is negligible.
Participants	The Group is expected to be attended by some 20–25 members and guests.
Secretariat facilities	Standard support
Financial	None
Linkages to ACOM and groups under ACOM	-
Linkages to other committees or groups	Ecosystem Observation Steering Group, Data and Information Group
Linkages to other organizations	UNEP, UNESCO, IMBeR