

ICES-PICES Workshop on Political, Economic, Social, Technological, Legal and Environmental scenarios used in climate projection modelling (WKPESTLE)

2017/2/EPDSG06 An **ICES-PICES Workshop on Political, Economic, Social, Technological, Legal and Environmental scenarios used in climate projection modelling (WKPESTLE)**, chaired by John Pinnegar*, UK; Jörn Schmidt*, Germany; Alan Haynie*, USA; and Tyler Eddy*, Canada, will meet in Washington D.C., USA, on 9 June 2018 (directly proceeding the 4th International Symposium on the Effects of Climate Change on the World's Oceans) to:

- a) Compile and compare future scenarios currently used by different research groups projecting the socio-ecological consequences of climate change on fisheries and aquaculture;
- b) Discuss the rationale and data sources employed to establish elements of "PESTLE" scenarios for bio-economic projection;
- c) Where possible, agree on a common set of scenarios and outputs to facilitate region-region and region-global comparison of social-ecological impacts of climate change on fisheries and/or aquaculture.

WKPESTLE will report by 31 July 2018 (via EPGSG) for the attention of ACOM and SCICOM.

Supporting Information

Priority	This workshop is a joint activity of the ICES-PICES Strategic Initiative on Climate Change Impacts on Marine Ecosystems (SICCME) and the ICES Strategic Initiative on the Human Dimension (SIHD). It will contribute towards the ICES thematic areas: Understanding Ecosystem Processes and Dynamics (EPDSG), Ecosystem Pressures and Impacts (EPISG) and Integrated Ecosystem Assessments (IEASG). Our focus will be on comparing, contrasting and, where possible, aligning future scenarios used in social-ecological projecting modelling of climate impacts on fisheries and aquaculture. This comparison is timely as separate groups are moving forward with projection modelling and SICCME and SIHD can help align activities to more easily compare model results across regions / spatial scales. Consequently, the activities of WKPESTLE are considered to have a very high priority to ICES.
Scientific justification	<p>For the past 15 years, the Intergovernmental Panel on Climate Change (IPCC) has utilized scenarios of future greenhouse gas emissions. Specifically, the IPCC published a Special Report on Emissions Scenarios (SRES) in 2000. These SRES scenarios were used in the Third Assessment Report (TAR - 2001) and formed the basis of the Regional Concentration Pathways (RCPs) used in the Fourth Assessment Report (AR4 - 2007). The IPCC is now using Shared Socio-economic Pathways (SSPs) for their next assessment report (AR6) scheduled for 2021.</p> <p>Short-, medium- and long-term developments in governance, social, technological and economic drivers may be just as important to the future development of fisheries and aquaculture as climate-driven changes in habitats and species distributions from greenhouse gas emissions. Separate modelling groups are building plausible future trajectories of change in some or all of the elements of the "PESTLE" approach (Political, Economic, Social, Technological, Legal and Environmental) needed to project bioeconomic consequences of climate change on fisheries and/or aquaculture. This workshop is a forum for discussion and comparison of future scenarios developed by different groups. Aligning PESTLE scenarios among modelling groups will facilitate region-to-region or region-to-global comparisons of model results.</p>
Resource requirements:	The workshop is planned to take place directly after the 4 th International Symposium on the Effects of Climate Change on the World's Oceans in Washington, D.C., USA and some logistical support from conference organizers will be needed.
Participants:	Researchers involved in previous or ongoing projecting modelling of climate impacts on

	coupled human-ecological systems in ICES and PICES nations including representatives from international (FAO, UNEP-WCMC) policy groups charged with fisheries and aquaculture advice and management.
Secretariat facilities:	There are no special requests of the secretariat.
Financial:	No funding is requested from ICES. Funds dedicated to SICCME will be used for meeting room rental (if necessary).
Linkages to advisory committees:	ACOM
Linkages to other committees or groups:	This workshop contributes to the Ecosystem Processes and Dynamics Steering Group (EPDSG) , the Ecosystem Pressures and Impacts Steering Group (EPISG) and the Integrated Ecosystem Assessment Steering Group (IEASG).
Linkages to other organizations:	PICES , FAO, UNEP-WCMC, WTO, NOAA, IMBER, ESSAS
Publication of proceedings	A workshop report will be generated and it is envisioned that this will form a submission to a high-profile, peer-reviewed journal (e.g. Marine Policy, Nature Climate Change).