

**MO134 Introducing FP7 CLEANSEA: Towards a Clean, Litter-Free European Marine Environment through Scientific Evidence, Innovative Tools and Good Governance** H.A. Leslie, Institute for Environmental Studies VU Amsterdam; D. Vethaak, DELTARES; T.S. Galloway, University of Exeter / Biosciences Department; C. Perez, EUCC Mediterranean; R. Brouwer, Institute for Environmental Studies; B. van Bavel, MTM Orebro University; S. Altvater, Ecologic Institute; A. Boon, DELTARES; J. Veiga, EUCC; M.F. Ferreira, University of Brasilia; P. Fernandez, EUCC Mediterranean; H. Nilsson, MTM Orebro University; A. Kalfagianni, N. van der Grijp, Institute for Environmental Studies; M. Cristea, National Institute for Marine Research and Development “Grigore Antipa”; O. Sheremet, E. Papyrakis, Institute for Environmental Studies; E. Anton, G. Tiganov, S. Nicolaev, National Institute for Marine Research and Development “Grigore Antipa”; C. Lewis, University of Exeter; C.R. Tyler, The University of Exeter; M. Depledge, University of Exeter / European Centre for Environment & Human Health; M. Skourtos, A. Kontogianni, University of the Aegean; J. Gerritse, F. Kleissen, G. ElSerafy, DELTARES; J. Robbens, L. Devriese, B. De Witte, K. Bekaert, Institute for Agriculture and Fisheries Research; H. Grahn, P. Geladi, G. Nordstrom, Corpus Data Mining; E. Paphathanassiou, E. Kaberi, Hellenic Centre for Marine Research; Y. Wolthuis, Investments in Sustainable Innovations; B. Veerman, W. Westerman, KIMO Netherlands and Belgium; D. Hadzhiyska, K. Rasheva, B. Rashev, denkstatt Bulgaria; K. Christiansen, L. Christiansen, P. Stephensen, KC Denmark; D. Herzke, N. Warner, Norwegian Institute for Air Research; T. McInnes, Callisto Productions; J. de Boer, VU University / IVM; R. Rashid, denkstatt Bulgaria. Marine litter is widely recognized as a threat to Europe’s marine ecosystems. It is a major societal challenge because it impacts the vast natural marine capital that supports economies, societies and individual well being. Marine litter, of which plastic is a main component, is explicitly identified as a descriptor for determining Good Environmental Status (GES) under the Marine Strategy Framework Directive (MSFD). Europe aims to achieve GES by 2020 and CLEANSEA – the first European framework program research project dedicated to the marine litter issue – is providing key scientific knowledge and tools for marine litter monitoring and action plans. The CLEANSEA project will i) provide comprehensive characterization and analysis of the marine litter problem (biological, chemical, social, economic, legislative and policy-oriented) in the EU’s four main marine regions, ii) propose innovative monitoring tools and standard protocols to facilitate monitoring marine litter in a harmonized way, and iii) present cost-effective management measures and policy options to meet MSFD and other international objectives regarding marine litter. CLEANSEA aims to break down interdisciplinary barriers by synthesizing data and knowledge generated across its 5 RTD work packages, and uses an integrated framework to construct a Road Map for European marine litter reduction. Advanced techniques in the fields of (eco)toxicology, analytical chemistry, satellite imaging, oceanographic modeling and materials biodegradation testing will be used to assess the distribution, fate and impacts of marine litter. Economic, institutional and policy analysis research methods, tools and participatory approaches will be applied to inform trade-offs in policy and decision-making, identify economic, social and governance barriers to GES, and recommend effective policy options and management measures to remove these barriers and incentivize sustainable use of marine resources. CLEANSEA contributes to an adaptive ecosystem approach to the management of human activities in EU marine regions. Project outcomes will benefit not only the MSFD but also various EU directives and strategies including the Europe 2020 Strategy. Measures, strategies and policies that promote upstream sustainable production and use of plastics or recycling of waste that will be highlighted in the CLEANSEA Road Map can also contribute to the EU’s policies and initiatives for a Resource Efficient Europe.