

"Gheorghe Asachi" Technical University of Iasi, Romania



## A TOOLKIT TO MONITOR MARINE LITTER AND PLASTIC POLLUTION ON COASTAL TOURISM SITES

Domenico Vito<sup>1\*</sup>, Gabriela Fernandez<sup>1</sup>, Carol Maione<sup>1,2</sup>

 <sup>1</sup>Metabolism of Cities Living Lab, Center for Human Dynamics in the Mobile Age, Department of Geography, San Diego State University, 5500 Campanile Drive, San Diego, 92182 California, USA
<sup>2</sup>Department of Management, Economics, and Industrial Engineering, Politecnico di Milano, Via Lambruschini, 4/B, Milan 20156, Italy

## **Abstract**

Mismanaged waste at sea poses a great challenge to local marine systems. Plastic waste is considered the most abundant litter type in coastal tourism areas; yet, observational data fail to capture the full extent of plastic pollution on tourism beaches and its main drivers. This study aims to advance knowledge of marine litter and plastic pollution (ML&PP) sources, pathways, and drivers on tourism coastal sites. The research involves a 7-step toolkit to comprehensively assess marine pollution, by also engaging citizens in data collection. The toolkit provides a set of guidelines to identify, map, and quantify ML&PP, thereby supplementing to the current paucity of synoptic global analyses on marine pollution.

Key words: citizen science, coastal tourism sites, marine litter, plastic pollution, toolkit

Received: April, 2022; Revised final: October, 2022; Accepted: October, 2022; Published in final edited form: October, 2022

<sup>\*</sup> Author to whom all correspondence should be addressed: domenico.vito@polimi.it