



## From rivers to retailers: using cross-sector stakeholder engagement to broaden dissemination and guide future research

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Concern for the fate and impacts of plastic waste has motivated cross-sector engagement with the environment and society's impact on it. Though efforts to minimise plastic pollution should not be discouraged, it is important that such efforts do not exacerbate the environmental impacts associated with plastic alternatives; acknowledge that plastic *per se* is not the root of the plastic pollution problem; and recognise that environmentally conscious consumption is a privilege not currently afforded to all. Cross-sector communication and cooperation can maximise the impact of plastic pollution research and are vital tools in ensuring research can inform positive change. Here we report on the use of stakeholder engagement spanning UK industry, government, not-for-profit organisations and academia to share knowledge, motivations and priorities, in order to broaden research impact beyond academia.

Informed by our own work, microplastic researchers at the University of Nottingham hosted a cross-sector workshop to recognise evidence requirements, focus key questions, highlight misunderstandings and ultimately identify knowledge gaps across multiple sectors. This engagement identified key areas for improvement from the scientific community in order to better inform and engage decision makers. These included: a need for greater clarity from the scientific community as to the extent of the plastic pollution problem; communication of the implications of methodological inconsistencies in the science that informs industry; and the importance of placing the impacts of plastic pollution within the context of broader environmental quality for non-scientific stakeholders.

This workshop and engagement led to outputs that included: the writing of a policy brief; the writing of an opinion article on the topic of plastic pollution with authors from not-for profits, the wastewater industry and government organisations; and the public dissemination of these activities through press releases, articles for *The Conversation*, and their reproductions in UK news media. These outputs are designed to guide and inform individuals, industry, decision makers, and future research.

Concern for the problems posed by plastic pollution presents a generational opportunity for science to inform industries, governments and consumers, and entuse their environmental action beyond plastic pollution. Our work highlights the value of considering, and where feasible engaging with, these stakeholders with environmental research from conception to dissemination.