



# LITTERBASE



Online-portal for marine litter and microplastics and their effects on marine life

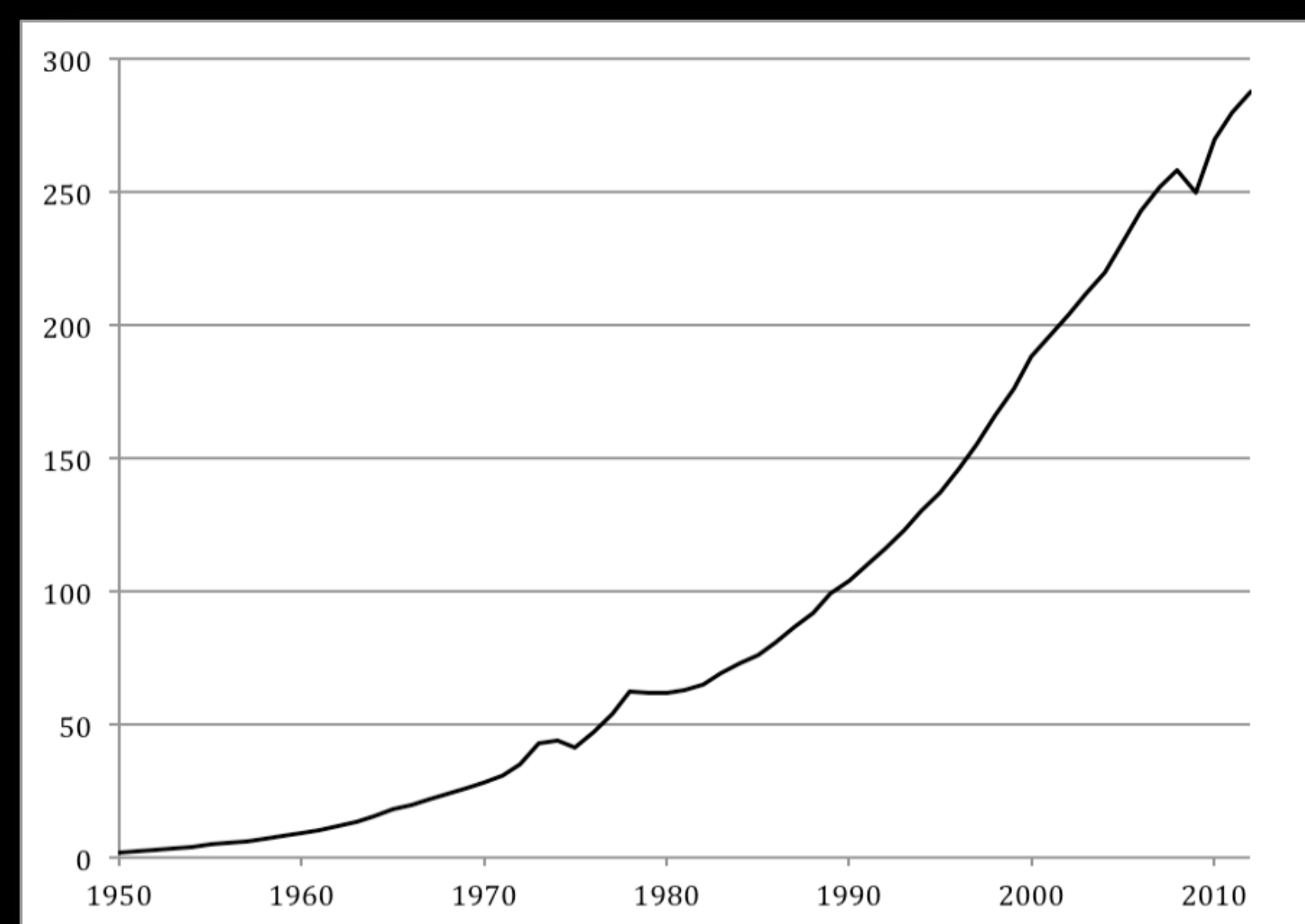


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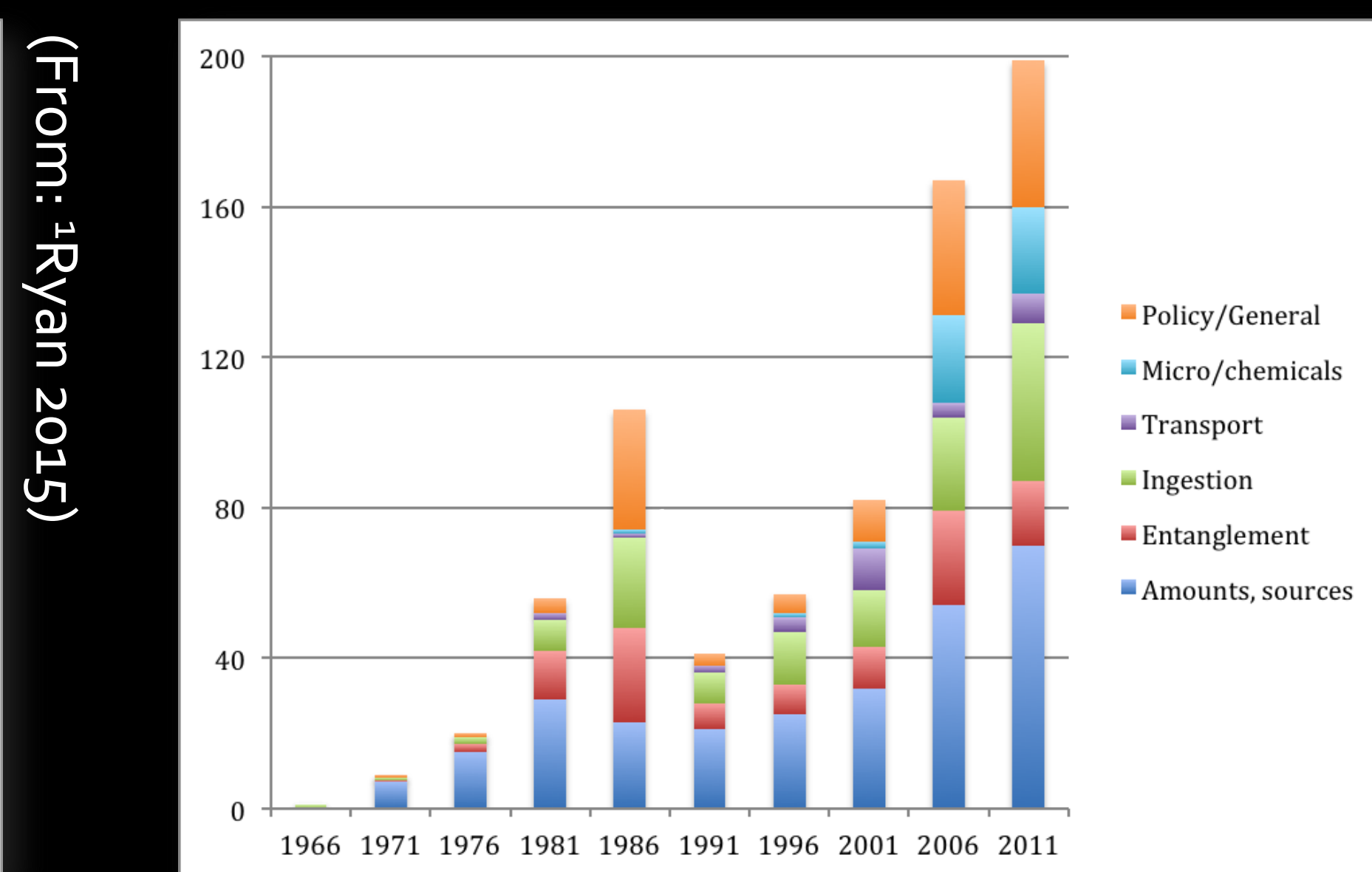
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## Background

The rapid progress in marine litter and microplastic research scattered all over the world has made this topic increasingly intangible to laymen, who cannot extract urgently required information. Moreover, many questions remain unanswered: for example, it is still unclear how much litter and microplastic are in the oceans and how this affects marine life.



Global plastic production since 1950 (million tonnes)



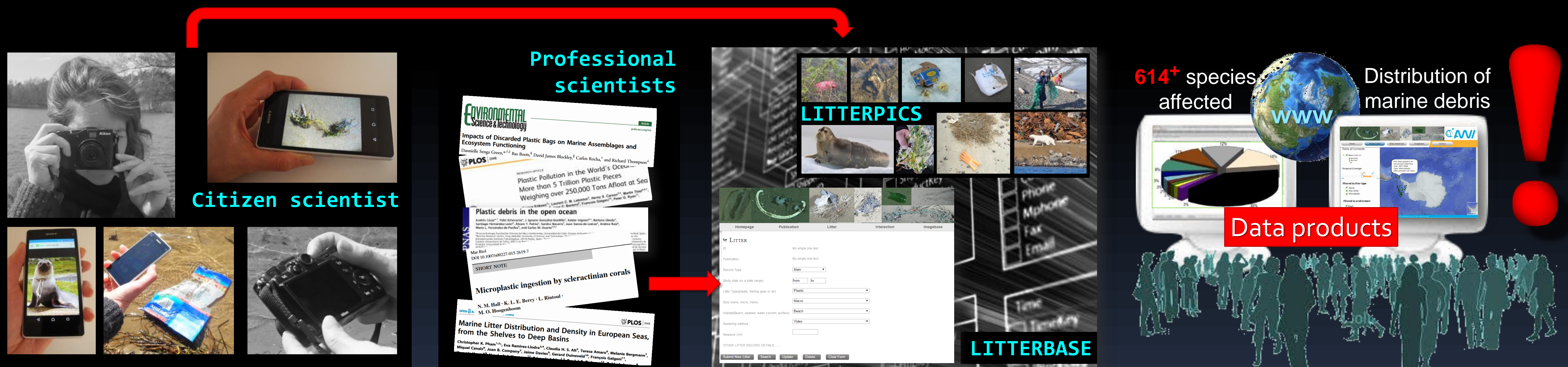
(From: Ryan 2015)

Number of scientific publications on marine litter and microplastics (last bar comprises 3 instead of 5 years)



## LITTERBASE informs

LITTERBASE will provide easily digestible and continuously updated information products and statistics on marine litter to stakeholders as of early 2017. Published records of marine litter and microplastics and their biological effects will be compiled in a data base. In addition, citizen scientists can upload photos of marine litter and its encounters with biota to LITTERPICS, a subpart of LITTERBASE. All entries can be viewed in a user-friendly interactive online-portal as distribution maps and other information graphics.



## LITTERBASE enables global meta-analyses

The database allows us to conduct scientific meta-analyses for global assessments of the distribution of marine litter and microplastic in the ocean and to address currently burning questions:

- „Where is all the Plastic?“ Well-founded global estimates of plastic debris entering the ocean are currently 10-1000 times higher than results from meta-analyses of empirical studies. This suggests the presence of neglected sinks (e.g. deep sea, sea ice, biota).
- What are the global distribution patterns of marine debris in the oceans?
- What is the composition of marine debris in the ocean?
- How many species are affected and which organisms are particularly vulnerable to the effects of marine debris?

## LITTERBASE wants support:

- Input of authors of new studies (e.g. pdfs), so LITTERBASE remains as complete and up to date as possible
- Photos of marine litter or encounters with marine life from citizens to increase our knowledge and engage stakeholders