

Review on

Patrick ten Brink, Jean-Pierre Schweitzer, Emma Watkins, Charlotte Janssens, Michiel De Smet, Heather Leslie, and François Galgani (2018).

Circular economy measures to keep plastics and their value in the economy, avoid waste and reduce marine litter.

Economics Discussion Papers, No 2018-3, Kiel Institute for the World Economy.

The paper deals with the important topic of how the transition to a circular economy can reduce marine litter. Without going into details of specific measures it rather provides a general overview/review on which channels are appropriate for G20 countries to take action. Hence, given the purpose of the “Global Solutions Papers” the authors make a valuable contribution by identifying and communicating policy pathways to reduce marine litter. A clear strength of the paper is that it addresses not only standard economic measures like Pigouvian taxes and subsidies (only marginally touched) to deal with negative externalities like marine litter, but also reviews consumption-based and upstream measures to enable a transition.

Nevertheless, I see the following weaknesses:

- Some central concepts need a clearer definition including the terms “circular economy” and “waste hierarchy” (see page 3): What exactly defines a circular economy compared to a linear economy? What is a waste hierarchy and how can the concept help to implement the circular economy?
- Monetary estimates like the “the impact of plastic pollution on the oceans” (page 3) require some more explanation on how they are actually calculated. Otherwise these estimates are not too informative.
- The analysis is not critical enough with respect to measures towards implementing a circular economy: What are potential negative effects of recycling including for example higher energy usage? Is 100% recycling always optimal or is there something like an optimal degree of recycling?
- I think a central point with respect to addressing the G20 countries is to align the proposed and important measures to reduce marine litter with other goals in the economy. However, there is only one paragraph in the paper that deals with the United Nations Sustainable Development Goals (SDGs) and it only includes examples on overlaps between the target 14.1 on marine litter and other SDGs. What about potential trade-offs between target 14.1 and other SDGs?