

# British engineer lining path to recycled paper coffee cups

July 4 2014, by Nancy Owano



British entrepreneur and engineer Martin Myerscough has a plan to save the vast numbers of coffee cups that do not get recycled. You may be among the many who, when passing the coffee cups you see in the trashbins, see the waste—cups fashioned from trees that get used for 30 minutes and then tossed— but you figure, as many people do, that the cups will get recycled. Myerscough knows better and wants to do something about it. In the UK 2.5 billion coffee cups are used every year and most do not get recycled. They get sent off to landfills or

incinerated. But why?

Existing cups are made from flat cardboard which has a thin film of plastic glued to it. The cardboard is then formed into the cup. The film is bonded very strongly to the [paper](#). The film provides the waterproof layer to the cup. Without this layer the cup would leak and the cup would go soft. The Green Your Cup site said specialist recycling plants would need to heat the cups to very [high temperatures](#) to separate the bonded paper and plastic layers. (The Guardian [notes](#) that under EU health and [safety regulations](#), coffee cups cannot be made from 100% paper or cardboard alone. A thin layer of plastic is bonded on to the cup to keep the drink warm and stop the paper from getting soggy.)

The proposed remedy by Green Your Cup is to form the cup first and then apply the coffee proof liner to the inside afterwards. The cups would consist of cardboard without any chemicals in it. The paper, folded into a cup shape, would be glued together and then a thin plastic liner would be welded into a cup shape. Noteworthy is that the liner, lightly glued, could separate in one piece when at the recycling mills. As the lining of Green Your Cup would come out easily, what remains would be just cardboard. The cups could be accepted by regular paper mills including [cardboard](#) and newspaper recycling plants.

Myerscough is quoted in The Guardian: "In these times of limited resources and diminishing landfill space, a single-use cup that can't be recycled is an indulgence we just cannot afford. I hope Green Your Cup will make a difference to how people think about the wastefulness of some of our everyday habits." Where does he go from here? The Guardian said that the company is in talks with coffee shop chains and supermarkets in the hope that the product can be rolled out nationally. The Green Your Cup page asks those who like the idea to share the video, tweet followers and get the word out. The site also invites

companies interested in using the cups to email the site or fill in an online contact form. "We need partners to join us and then we can put this cup on the market in 2015," said the site.

**More information:** [www.greenyourcup.com/](http://www.greenyourcup.com/)

© 2014 Tech Xplore

Citation: British engineer lining path to recycled paper coffee cups (2014, July 4) retrieved 24 April 2024 from <https://techxplore.com/news/2014-07-british-lining-path-recycled-paper.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.