



Approved for external release.

Welcome to the new series "Smarter choices + Better outcomes" dedicated to exploring the science behind the choices being made across Coatings & Performance Monomers that are impacting how we innovate for a better, more sustainable future.

What can you expect to see here? Well, in each story, we will bring you one global challenge in sustainable development and a solution in our portfolio designed to help address it.

Get ready because we're just getting started.

The Paper Cup Challenge

The challenge



Globally
600 Billion
disposable cups
consumed per year⁽¹⁾

120 billion are consumed in the US alone, made from paper, foam and plastic

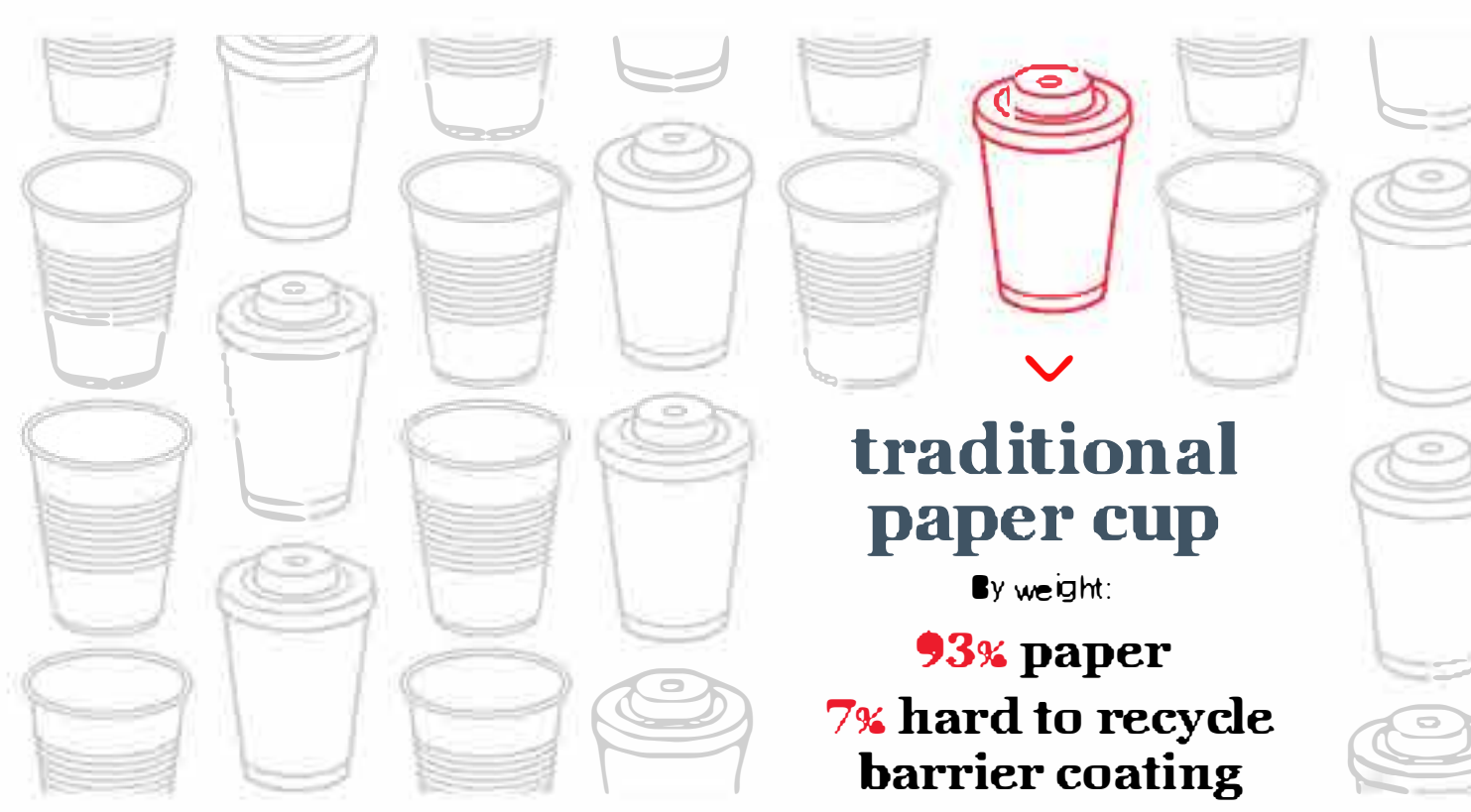
54 billion paper cups in the US

Impact annually in the US:



Why do > 90% of single use cups end up in landfills?

For a paper cup to retain your hot or cold beverage without leaking, it needs to have a barrier coating. The relatively thick barrier coating in traditional paper cups lead to lower fiber recovery rates. This makes it less attractive for paper producers to increase recycling.



The smarter choice



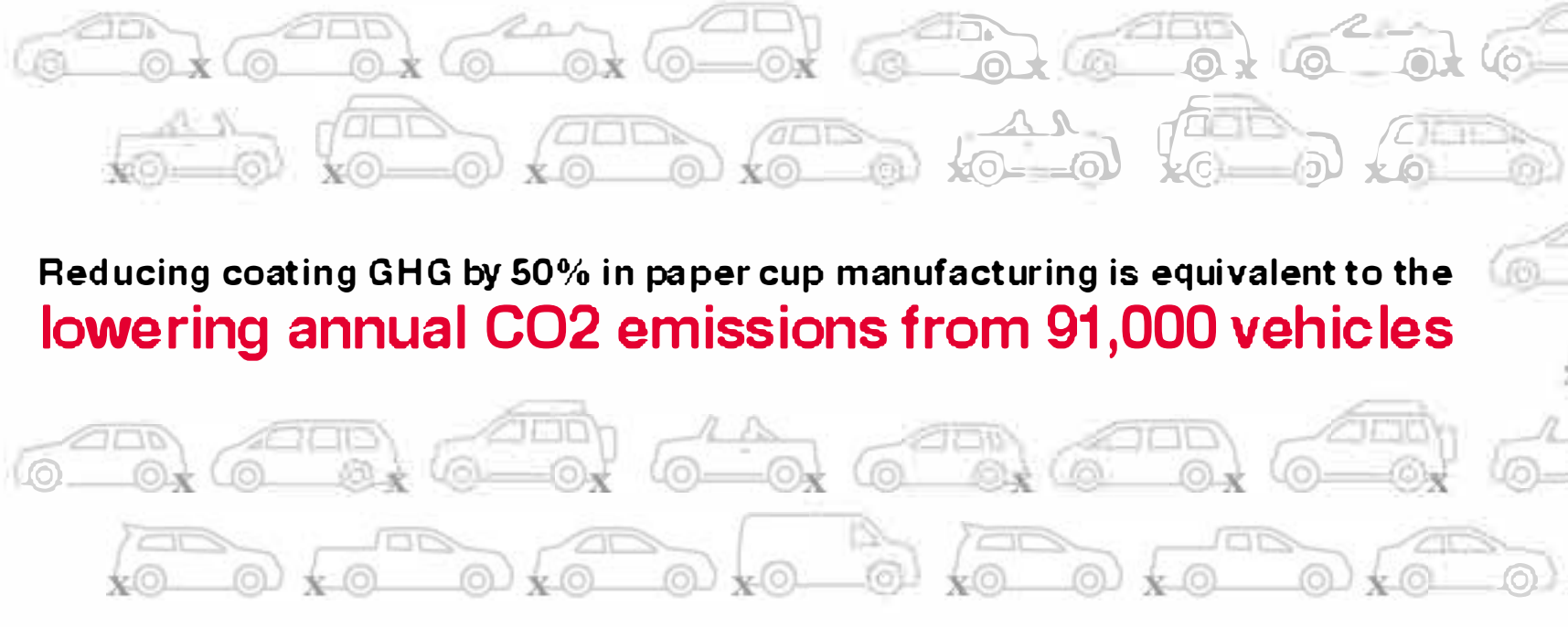
RHO BARR™ 320 Polyolefin Dispersion

65-70% thinner water-based barrier coating developed by Dow's R&D team.

99%
fiber recovery

up to **15%**
lower product weight

If all of the paper cups consumed in the US were made with RHO BARR 320, GHG emissions from the barrier coating would be reduced by 50%⁽²⁾



But that's not all!

Water resource depletion

Our thinner coating solution also reduces water usage by more than 18% compared with traditional coating barriers. This reduction is equivalent to the annual potable water needs of about 917,000 people⁽²⁾.

is this a **better outcome** for everyone?



What can you do?

- 1. Become a responsible consumer**
by learning more about the total environmental impact of the products you consume.
- 2. Remember**
to dispose of your paper cups properly in appropriate recycling bins.
- 3. Make sure**
you check your local recycling regulations and follow them.
- 4. Become an ambassador**
share this information as much as you can and help us spread the message.

Learn more

Do you want to learn more about our solutions for paper coating?

Watch this video!



RHO BARR™ 320 Polyolefin Dispersion
A more sustainable, high performance coating

RHO BARR™ 320 Polyolefin Dispersion was awarded the R&D 100 Award and the Edison Award in 2020 for its breakthrough innovation and sustainability profile.



check it out

⁽¹⁾ City of Berkeley, CA, GreenBiz.com, Reseneia
⁽²⁾ Results from an externally validated comparative Lifecycle Assessment (LCA) for RHO BARR™ 320 Polyolefin Dispersion versus a traditional extrusion coating

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