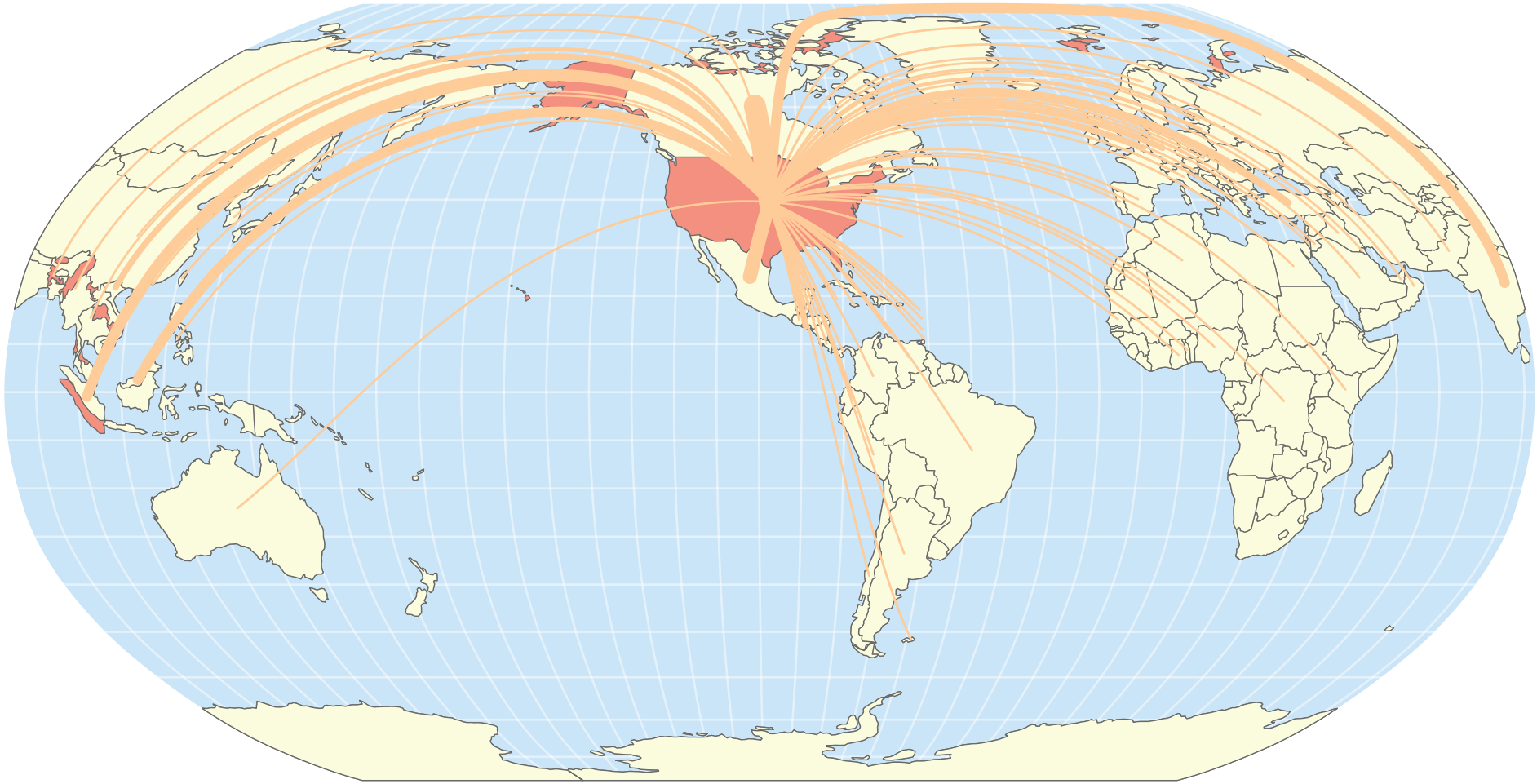
PLASTIC OBSCURA

America's Global Distribution of Plastic Waste



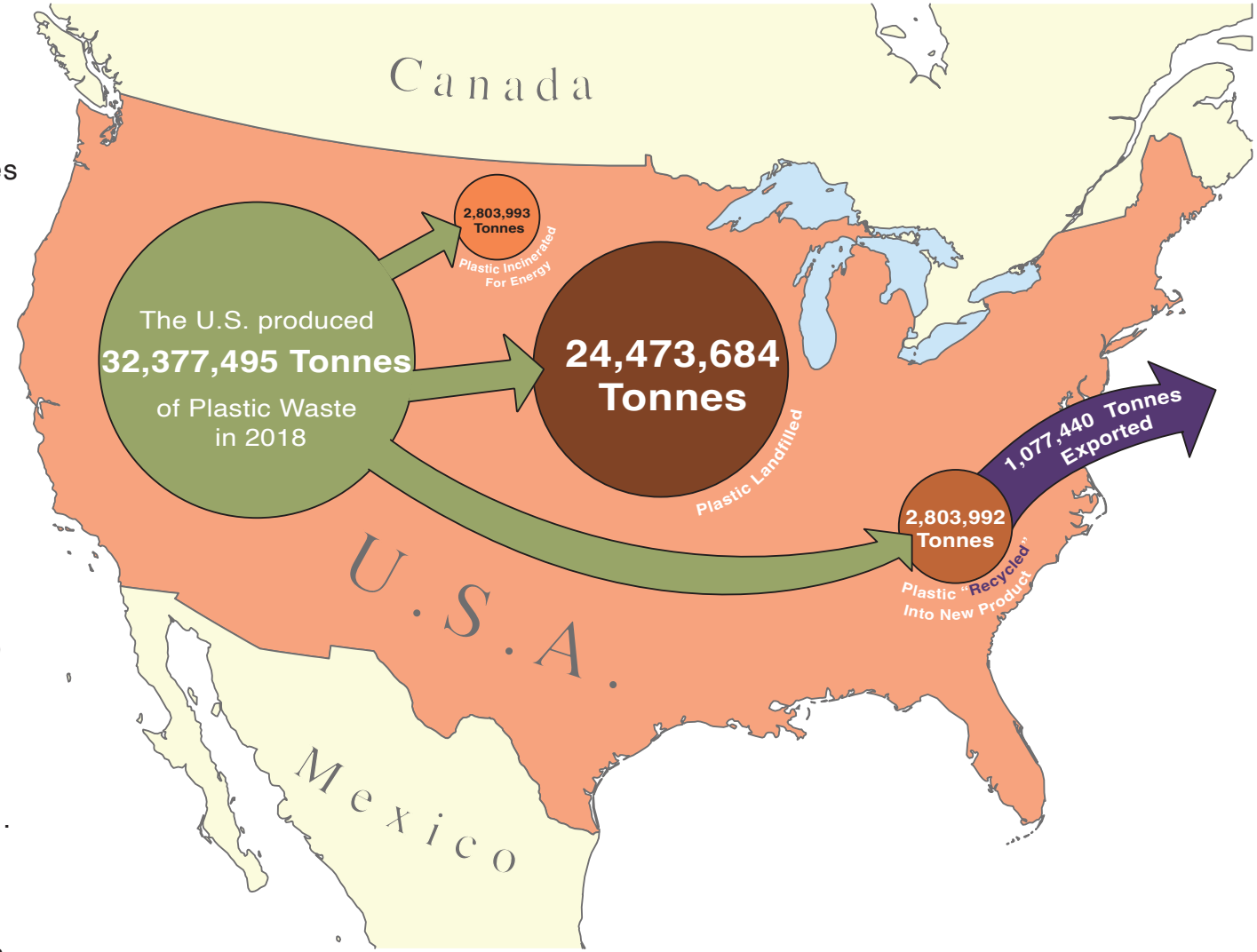
An Atlas by Pat Hall

Welcome to Plastic Obscura

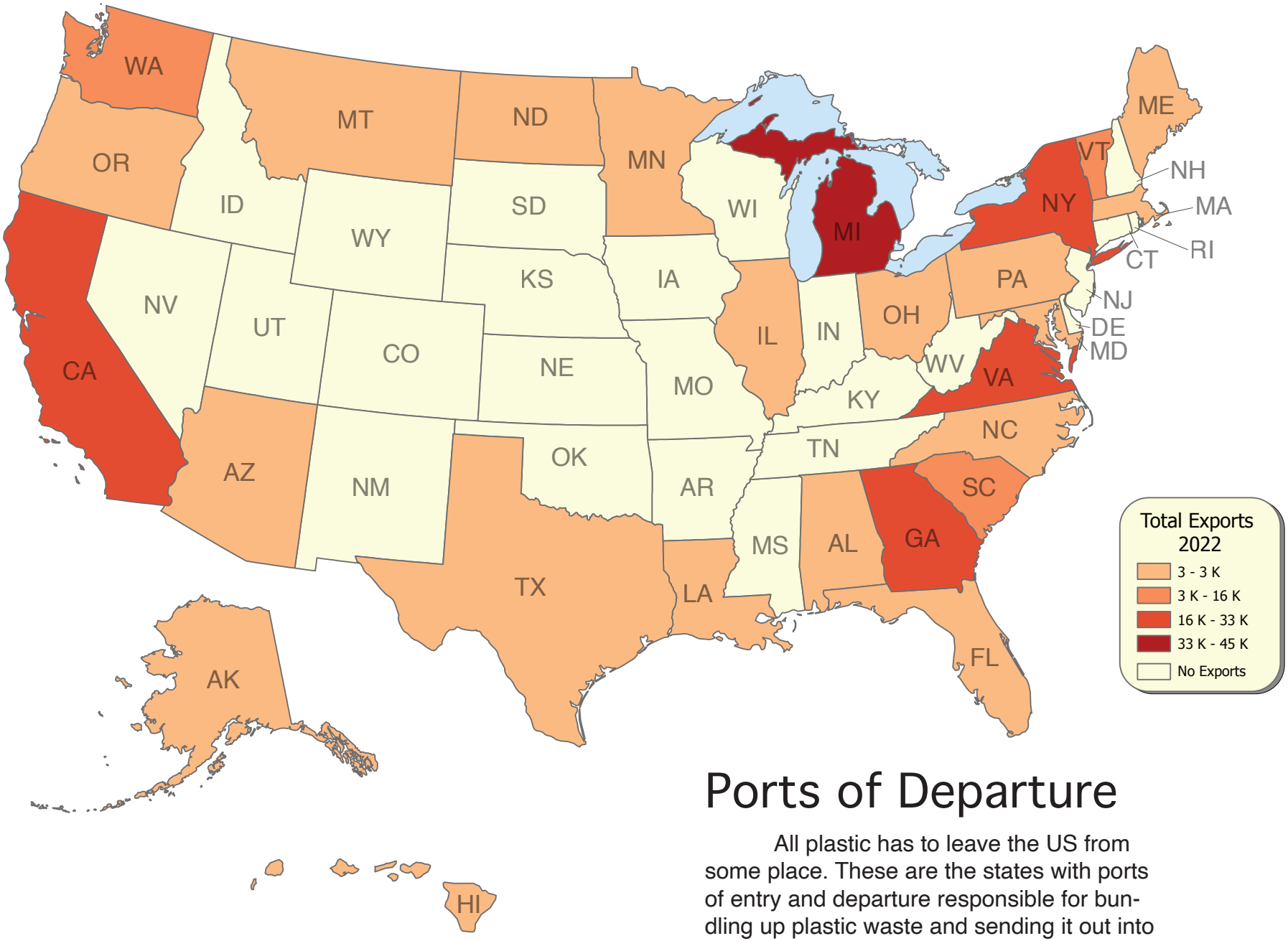
The United States generates a staggering amount of Solid Waste each year, and it's not always clear what happens to it. Most people in the United States have two bins in their home- one for trash and one for recycling.

Intuitively, many people know that what goes into to the trash bin is going to the landfill. But what of the refuse that ends up in the recycling bin? There is an expectation that it is going to be recycled. But, depending on the material, less gets recycled then you imagine.

Plastic is one such material. Long considered to be "recyclable", Plastic has never been the closed loop wonder product we are told it is. Since the inception of plastic recycling in the 1960s, recycling has never accounted for more than 9.05% of US plastic disposal. (EPA) and even that percentage is a bit misleading. This is because The EPA has considered Plastic waste exports to be "recycled" since at least 1992, when the US Census Bureau started tracking US exports of plastic Scrap. (EPA) As long as the country the US pays to import our plastic waste to says that they will recycle, the plastic it's good on our books.

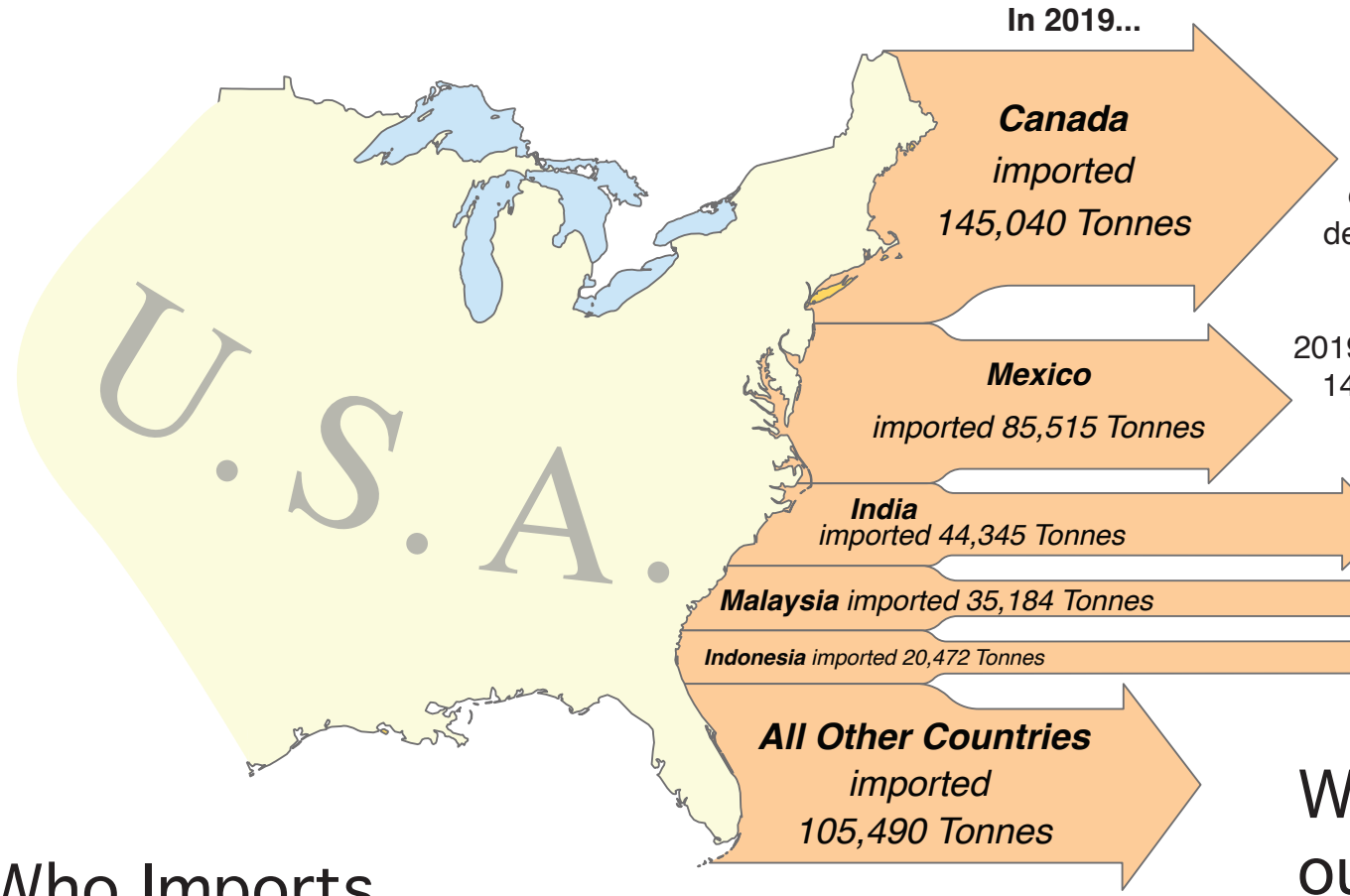


In the above map, you can see how plastic waste in the US was managed in 2018. A little less than half of the amount the US claimed to recycle was actually shipped overseas. This Atlas aims to begin to examine what happens to that plastic.



Ports of Departure

All plastic has to leave the US from some place. These are the states with ports of entry and departure responsible for bundling up plastic waste and sending it out into the world.



the US has signed neither the original treaty nor these new amendments, 187 countries have. (U.S. Department of State) This has caused global trade in plastic waste to decline. But the number is still not 0.

The top 3 importers of US plastic in 2019 were Canada, which accepted 145,040 tonnes of plastic scrap, Mexico, which imported 85,515 tonnes of plastic scrap, and India which imported 44,345 tonnes of plastic scrap. Honorable mentions can go out to Malaysia and Indonesia, which collectively imported over 55,000 tonnes of plastic. (U.S. Census Bureau)

Who Imports our Trash?

There is some good news to be had. the amount of plastic being exported from richer nations has been declining year over year since 2018. There are two main factors in this. the first factor is that China, historically the biggest importer of US plastic waste, passed the "National Sword Act" in 2018, whidh barred further imports of plastic waste from other countries. To that point, plastic waste imported from other countries had added an additional ~7 million tonnes of plastic waste to the ~61 million tonnes they were producing each year. (Dell)

The other factor has been the passing of amendments to the Basel convention into international law in 2019. The treaty restricts plastic waste exports of participating nations unless they lack recycling or disposal capacity. (World Economic Forum) While notably

Why do we Export our Recycling?

Because its Cheap. When China was in the Plastic Waste importing game, They would often purchase it as a product from the US. China and other countries could afford to do this at the time because thye had freely available cheap labor, with lax health and safety standards and few environemntal regulations. (Dell)

Think about the connotations of the last paragraph. If what it takes to succesfully recycle plastic is a cheap workforce with few protections and a disregard for the health of the environment,

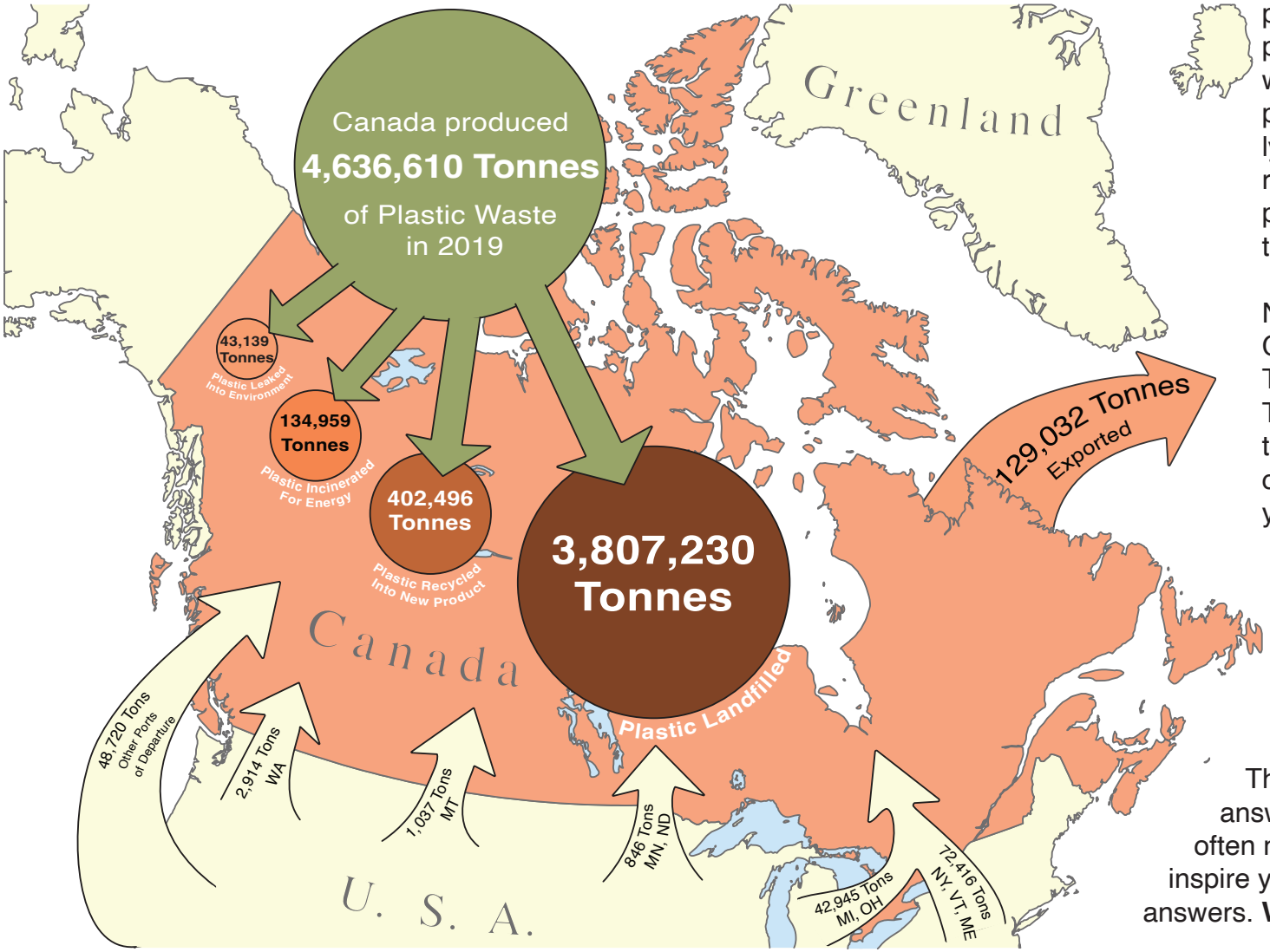
What are we even attempting to recycle plastic for? Our attempts to recycle plastic in order to reach an environmentally fiendly “circular economy” seem to cause harm to human well-being and as much or more detriment to the environment then is being averted.

Things become more bleak knowing that many ofthe plastics exported are never recycled, left unprotected to leach into the environment. (Dell)

It seems Americans often conflate “out of sight, out of mind” with responsible disposal.

Importer Number One

in 2019, Canada was the largest importer of US Plastic waste. Canada is generally accepted as a country with strong plastic recycling infrastucture; The map on this page breaks down how they manage their waste.

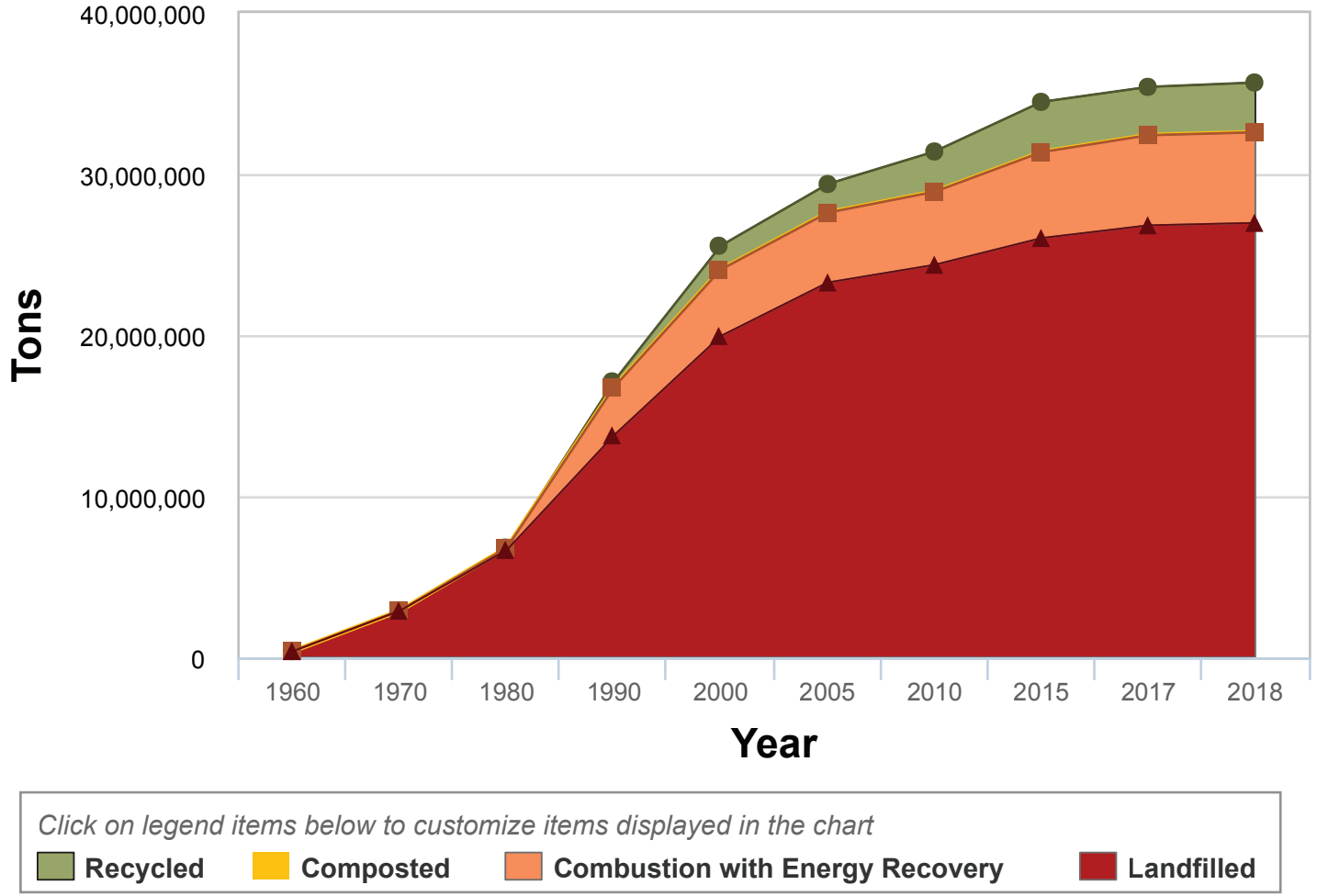


Canada has a much smaller population then the US, but still produced 4.6 million tonnes of waste in 2019. The largest portion of that waste goes directly to the landfill; Canada only recycles about 9% of their plastic waste each year. (Statistics Canada)

Note the “exports” arrow. Canada exported 129,032 Tonnes of plastic scrap in 2019. This number is less than 20,000 tonnes smaller than the imports of Plastic from the US that same year. While More research needs to be done, it can be inferred that Canada acts as a stopping point for American Plastic Waste before it is sent elsewhere in the world.

There are more questions to be answered, where the plastic goes is often not easily seen. Let this Atlas inspire you to go out and look for more answers. **Where does your plastic go?**

Plastics Waste Management: 1960-2018



This Chart was produced by the Environmental Protection Agency (EPA) and shows how the US has managed it's plastic waste since 1960. Three points of interest to take note of:

1. The US composts little to no plastic waste (included because of the rise of newer biodegradable plastics)
2. The % of recycled plastics in 2018 was only 8.66%. Little progress has been made in 60 years in increasing the US bandwdth to recycle plastic.
3. Most Plastics are Landfilled without energy recovery (Methane Recovery). In 2018, Plastic Waste made up 18.5% of all Municipal Solid Waste Landfilled.

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