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Puraffinity

The 15th of June 2022 is a day that will be remembered.

It's the biggest change we've seen in the last six years for any contaminant in water...

That day, the US EPA administrator, Michael Regan, announced the following:

"People on the front lines of PFAS contamination have suffered for far too long. That's why EPA is taking aggressive action as part of a whole-of-government approach to prevent these chemicals from entering the environment and to help protect concerned families from this pervasive challenge"

How aggressive? I'll let you judge for yourself:

Compared to 2016, the EPA determined PFOA to be 17,000 times more toxic than they thought. And that's 100,000 times more toxic than they considered in 2009!

100,000x =

We can't decently let people be exposed to something that dangerous, or can we?

Well, it's one thing to frame the challenge, but it's entirely another to define the right solution.

Technically, Ion Exchangers work well to remove short-chain compounds, and Activated Carbon filters take a fair cut on long-chain ones.

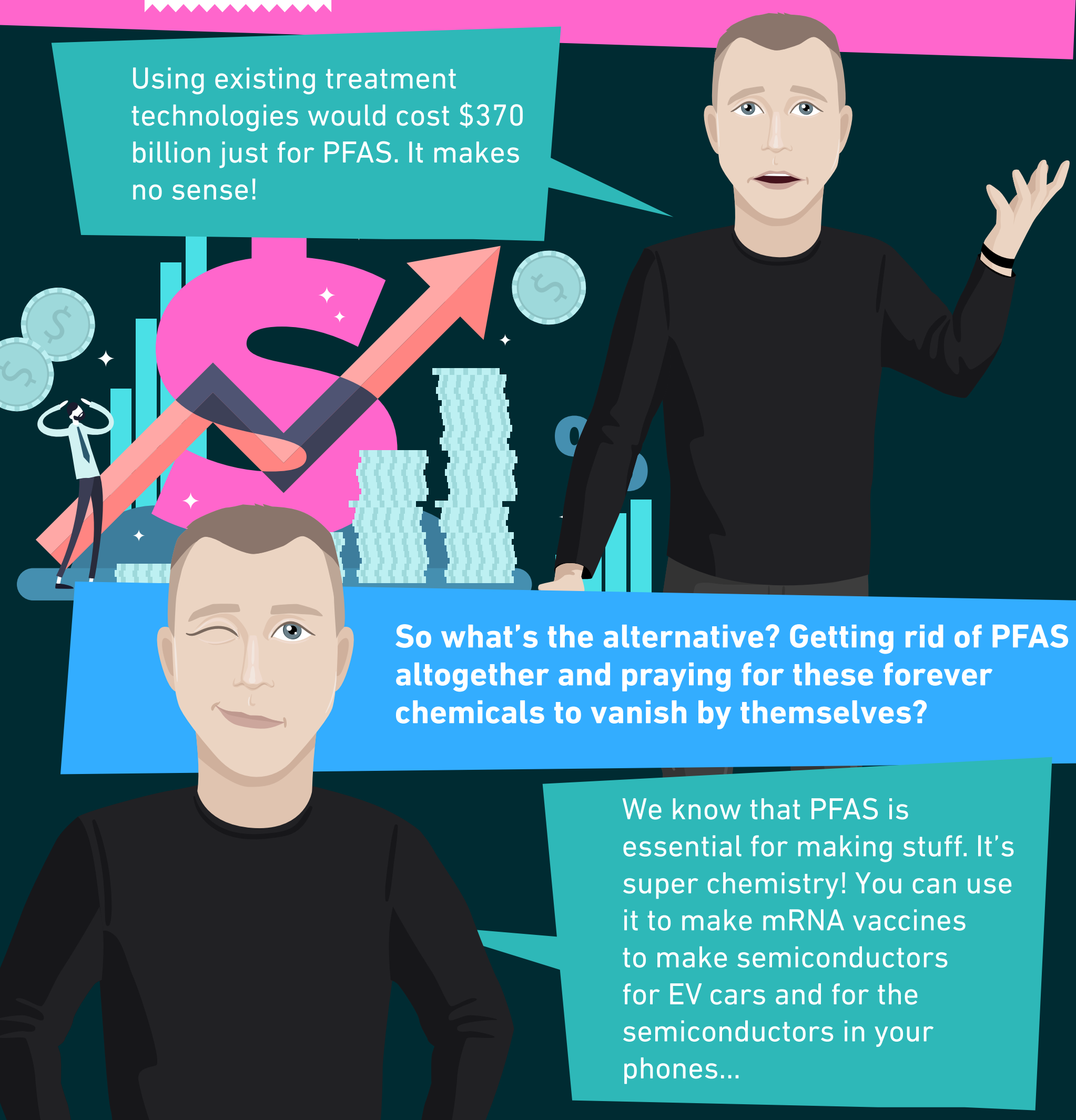
(DON'T!)
WASTE WATER

Yet:

1. “Middle-Chain” compounds - i.e. GenX tend to slip through the cracks. (And for the first time, GenX comes with a health advisory level.)

2. All existing solutions may well become far too expensive under this new paradigm. This is at least what a recent report by the American Water Works Association suggests:

Using existing treatment technologies would cost $370 billion just for PFAS. It makes no sense!



So what’s the alternative? Getting rid of PFAS altogether and praying for these forever chemicals to vanish by themselves?

We know that PFAS is essential for making stuff. It’s super chemistry! You can use it to make mRNA vaccines to make semiconductors for EV cars and for the semiconductors in your phones...

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But actually, without you noticing, there was a source of inspiration waiting for you in your kitchen all that time:

The refrigerators we use leverage a PFAS-based chemistry: the refrigerator fluid. Of course, you could use something else, but it won't be as efficient without that PFAS. And so, the industry built an infrastructure to capture it and reuse it in a circular economy.

What if PFAS recycling was the future of PFAS removal?

Think of it, instead of producing and destroying PFAS in a devil's circle that's inefficient multiple times across the value chain; we could follow what Henrik defines as a "Space-X" type approach.

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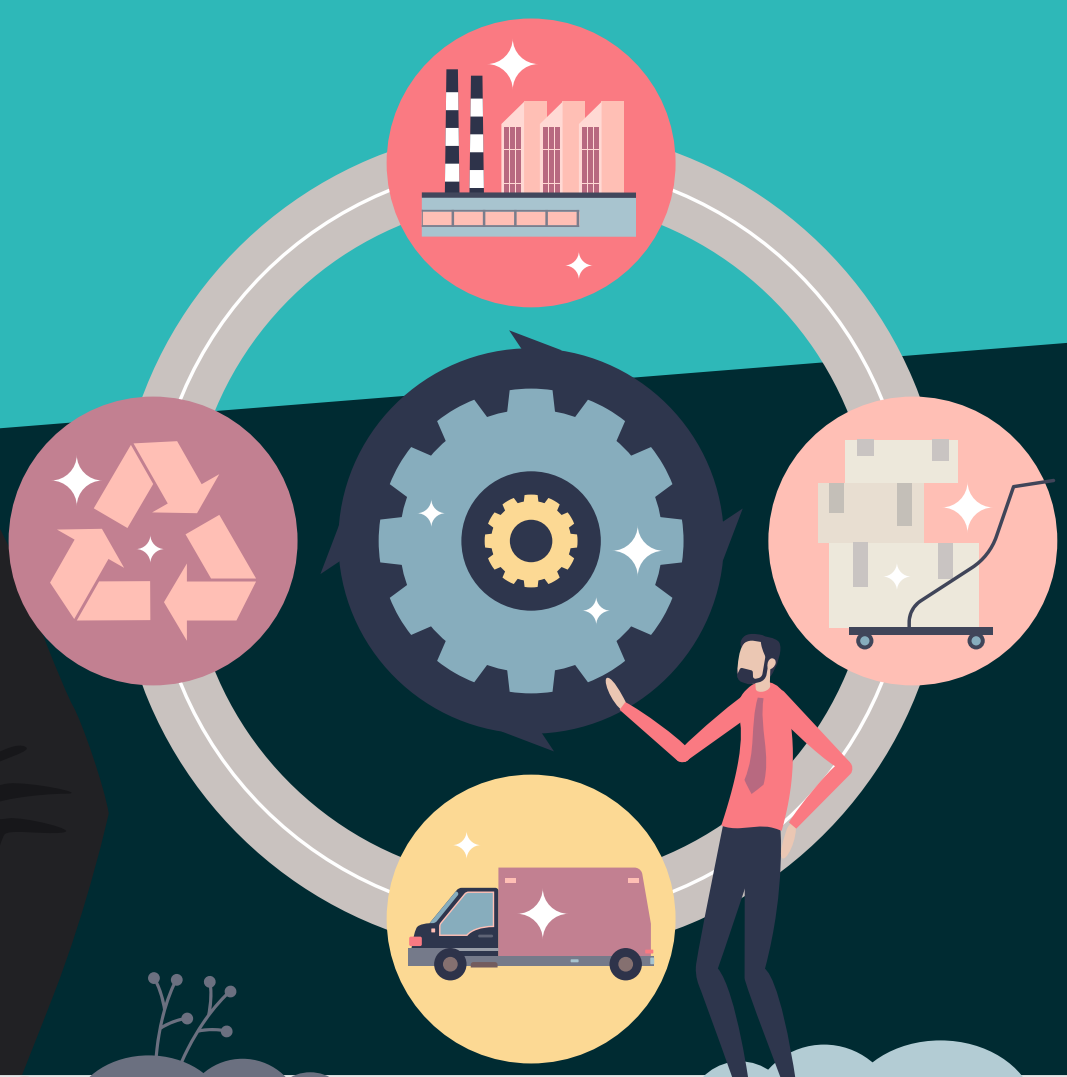
Reuse as much as possible of both the removal catalyst and the separated substance!

And Puraffinity actually has a roll-out plan for this vision to come true:

We are executing a new roadmap, which is getting us beyond a hundred tons of production capacity. This will enable us to start addressing just some of these front runners' issues with PFAS!



Still a drop in the ocean. But an incredible drop of hope!

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We also covered:

- How miracle PFAS removal technologies that break the news have to be placed into their context
- How, with the new PFAS regulations, we enter the realm of parts per quadrillion
- How PFAS removal has greenhouse gas emission consequences and how the 2030 clock is ticking
- How Puraffinity strives to monitor what comes next in PFAS science, regulation, and roll-out
- How Utilities' new PFAS liability may represent an unfair burden, considering they don't reap the benefit of the chemicals' first use
- How PFAS are everywhere around us in our daily lives and how it is an Iceberg we may want to address as a whole
- How American regulators may want to emulate the European approach and why
- But also thinking you're safe as long as you're not proven unsafe, the consequences on private wells, people delegating their water safety, bringing stakeholders together, Ellen McArthur, Erin Brockovich... and much more!

Don't miss a single bite: head over to dww.show!