

From Plastic to Organic

Myth: It's impossible for plastic to biodegrade into organic matter.

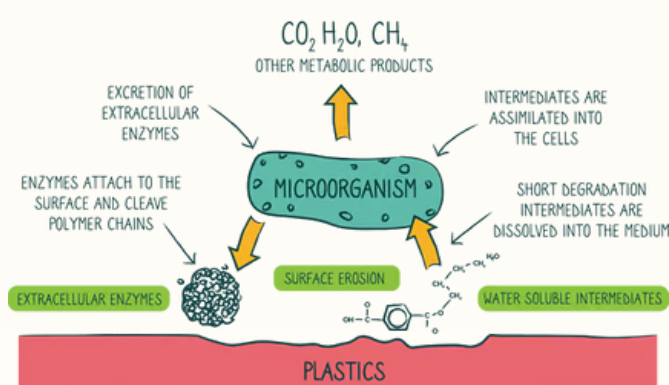
Truth: It IS possible! And now landfill-biodegradable technology makes it MUCH faster!

Plastic is made of long polymer chains that are incredibly strong and tightly bound, which is why it's so durable. But this also means microbes struggle to break it down - they don't recognise it as food, can't attach to its smooth surface, and lack the enzymes to cut through the tough bonds.

Landfill-biodegradable plastic changes that with a special supplement mixed into the material. This supplement acts like a "snack," attracting microbes to the plastic. Once the microbes start feeding, they release enzymes that break the polymer chains into smaller pieces called non-plastic intermediates.



These intermediates aren't plastic anymore. Unlike microplastics which are tiny fragments of plastic with the polymer chains intact, intermediates are organic molecules made from breaking down the polymer chains themselves.



Microbes can fully digest these intermediates, converting them into biogas and a rich organic material.

Thanks to this technology - verified by ASTM biodegradation testing - plastic can biodegrade much faster, reducing waste buildup without leaving harmful microplastics behind.