



VerdaFresh™

RECYCLE READY PROTECTIVE PACKAGING

Global Pouch Forum

May 2024



A wide-angle photograph of a massive landfill filled with plastic waste, including bottles, containers, and other debris. The scene is set against a dramatic sunset sky with warm orange and yellow tones. The plastic waste is piled high, stretching across the horizon.

Verdafresh's mission is to eliminate plastic waste from landfills and the environment by enabling truly recycled barrier packaging.

Our barrier coating keeps food fresh in mono-material packages.

Our philosophy is to streamline the transition to sustainable materials through partnerships, flexible sales models, and technology.

Our Solution



Advance the circular economy with Verdafresh, a true PE mono-material film structure

- ✓ High oxygen barrier (<math><0.1\text{ cc} / 100\text{in}^2 / \text{day}</math> for laminate)
- ✓ Enhanced moisture, grease, and aroma barrier
- ✓ Meets APR requirements for recyclability
- ✓ Exceptional clarity, physical properties, and processability
- ✓ Approved for indirect food contact
- ✓ Full drop in with conventional converting infrastructure



Product readiness by film type

Packages made from Verdafresh-coated films are ready for commercial deployment

	<u>Shelf Life Tests Passed</u>	<u>Printing and Converting</u>	<u>OTR Demonstrated</u>	<u>Coating Validated</u>
<i>MDO-PE</i>	✓	✓	✓	✓
<i>Ex-PET¹</i>	<i>In progress</i>	✓	✓	✓
<i>PET</i>	✓	✓	✓	✓
<i>BOPE</i>			✓	✓
<i>BOPP</i>	✓	✓	✓	✓

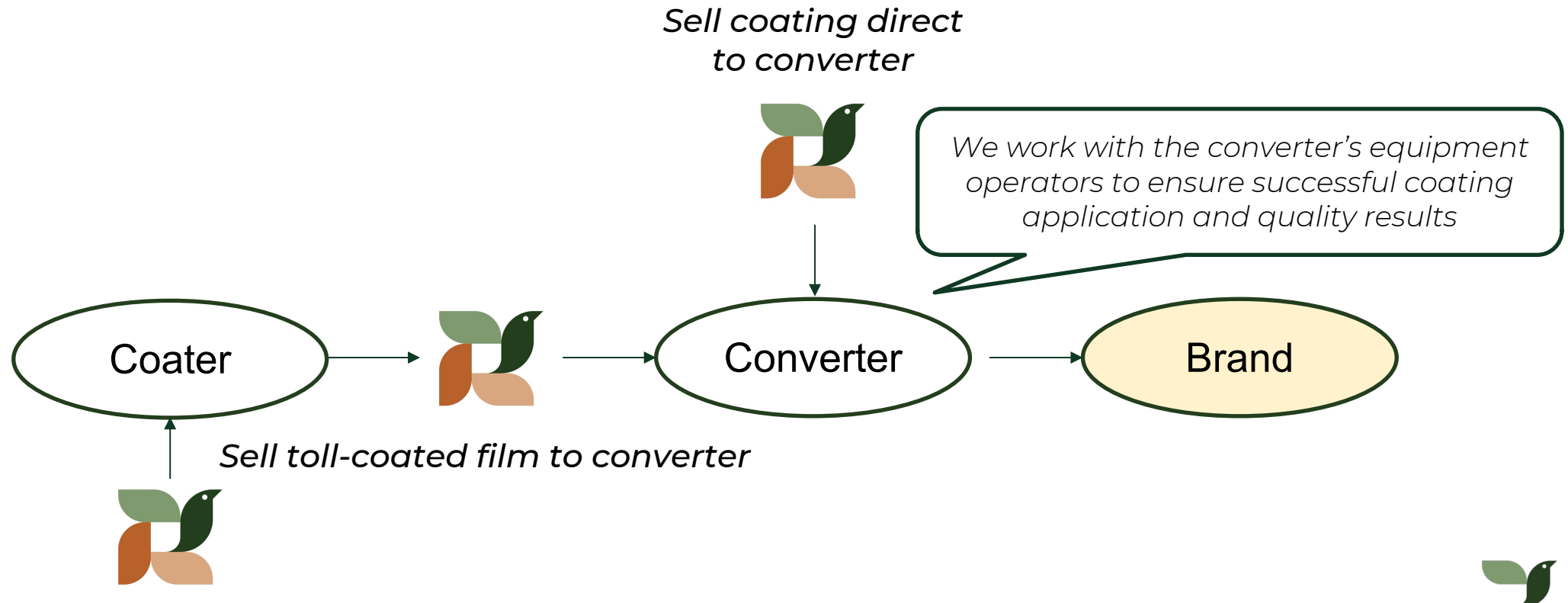
¹ Coating applied inline on PET extrusion lines



Strong partnerships & flexible sales model

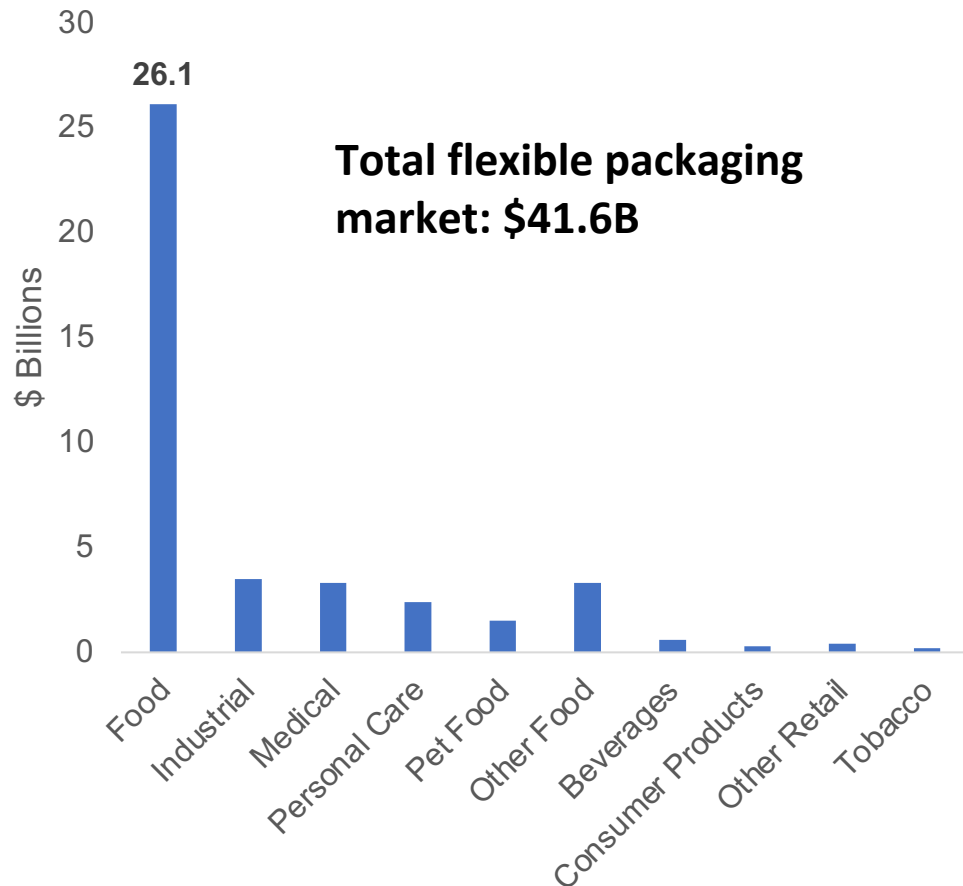
Depending on a converter's capabilities and capacity, Verdafresh can:

- Sell barrier film that is toll-coated
- Sell coating directly to apply in-house



Flexible Food Packaging is a huge market, and sustainability trends drive converters to Verdafresh

2023 Market Size



- 75% of packaging converters expect to use **Recycle Ready** packaging in 2024
- Converters consistently rate Recycle Ready packaging as the most important initiative in their business
- **Regulations** push converters to Verdafresh / recycle ready materials



Food Packaging requires oxygen barrier – existing solutions fall short

- **Saran** coatings contain PFAS, they are being regulated out, and is not recyclable
- **EVOH** films are supply constrained and limited in recyclability



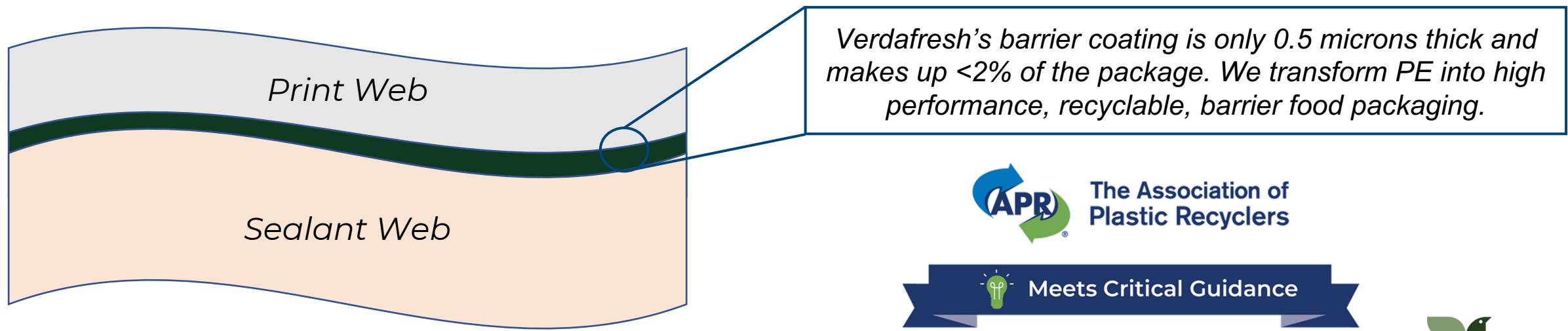
Verdafresh delivers a sustainable oxygen barrier coating that is trusted by the industry with no green premium



Our patented coating is the secret sauce

Verdafresh's core innovation is an aqueous coating formulation that:

- (1) Provides exceptional oxygen, aroma, and grease barrier
- (2) Is compatible with many film types (PE, PP, PET, etc) and with high throughput printing methods (gravure, flexo, etc)
- (3) Achieves exceptional adhesion and bond strength to polyolefin and polyester films with no need for primer





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