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Bioplastics today – an overview

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Bioplastic Conference 2019



Agenda

Why am I here?

Bioplastics – what is it?

Bioplastic applications and market

Challenges and barriers



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			Automation	Transport and Electric Systems			

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Our brand promise



Expertise

We combine advanced knowledge with practical experience.

Our services are based on specialised expertise and state-of-the-art equipment.



Integrity

We are open and engaged in our collaborations.

Our credibility is based on integrity, transparency and impartiality.



Creating results

We provide solutions that create value for our customers.

Our commitment and insight drive us to achieve high-quality results.



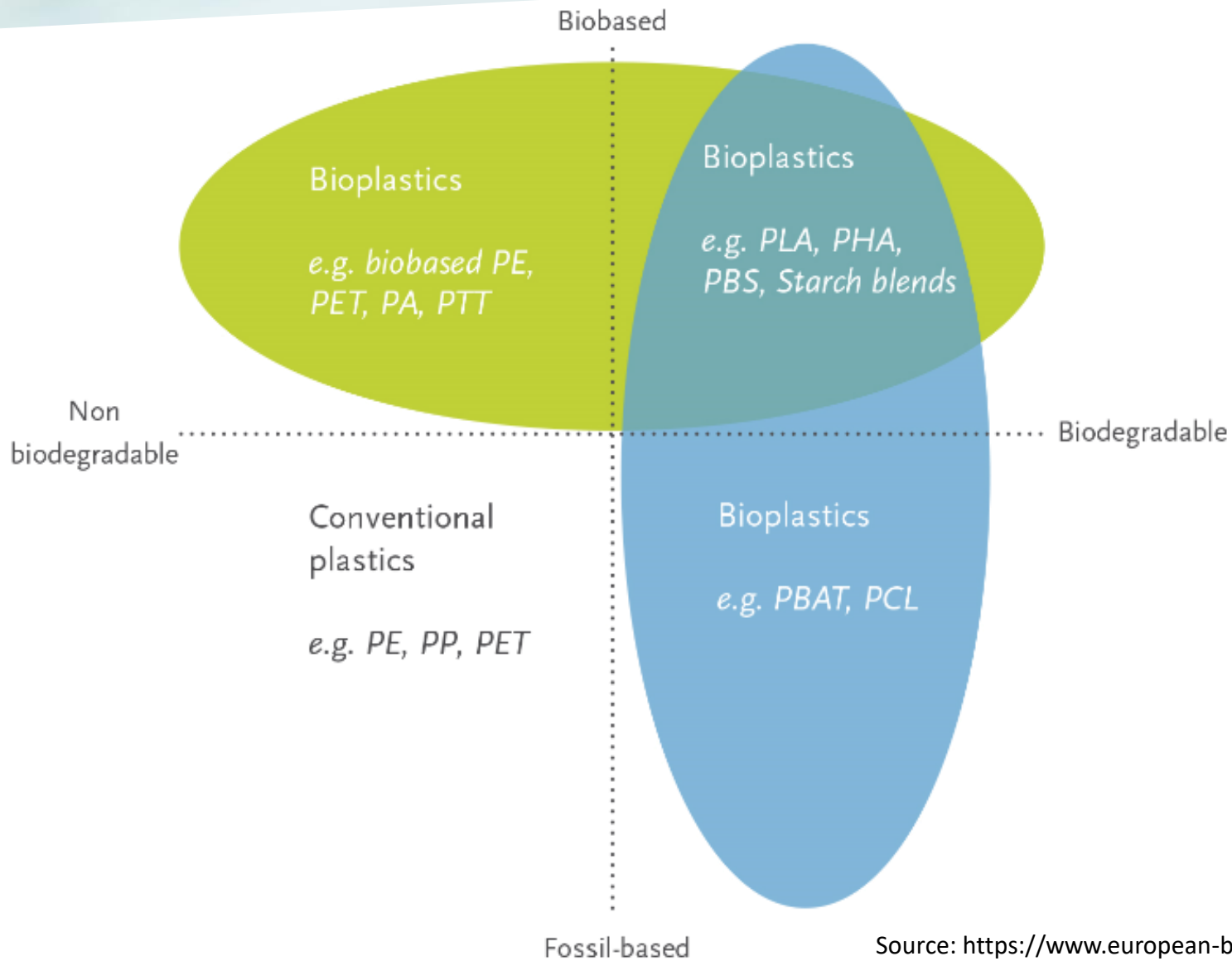
Ground-breaking

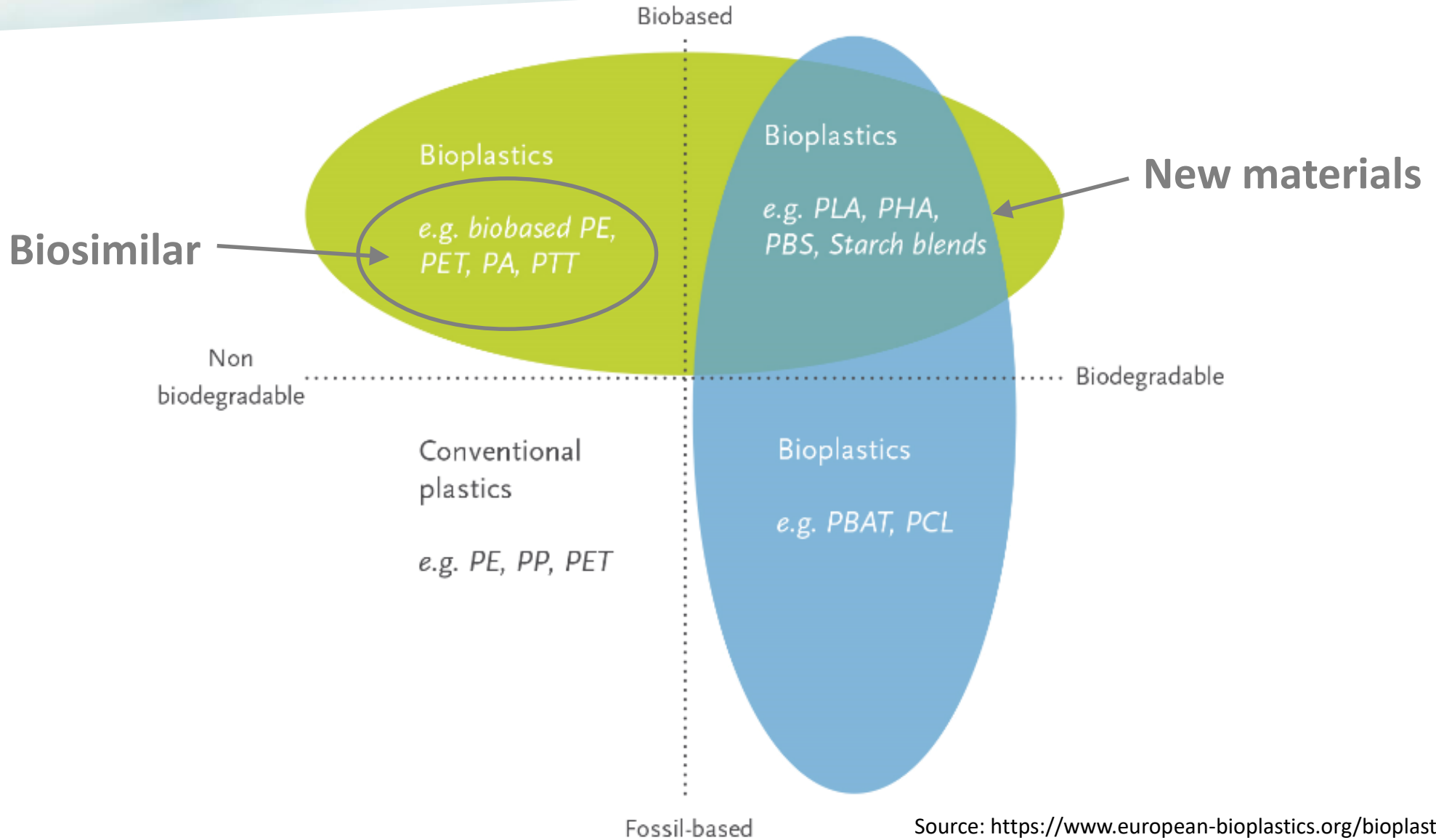
We apply tomorrow's technology.

We set the direction for applying technology within the business community.



Bioplastics: Biobased or biodegradable? Or both?







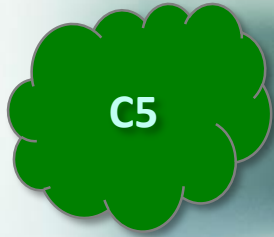
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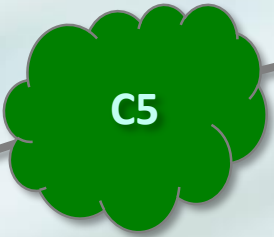


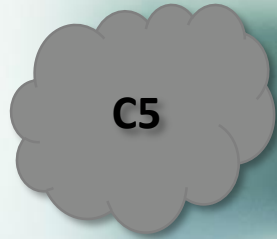
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71 % biobased





29 % biobased



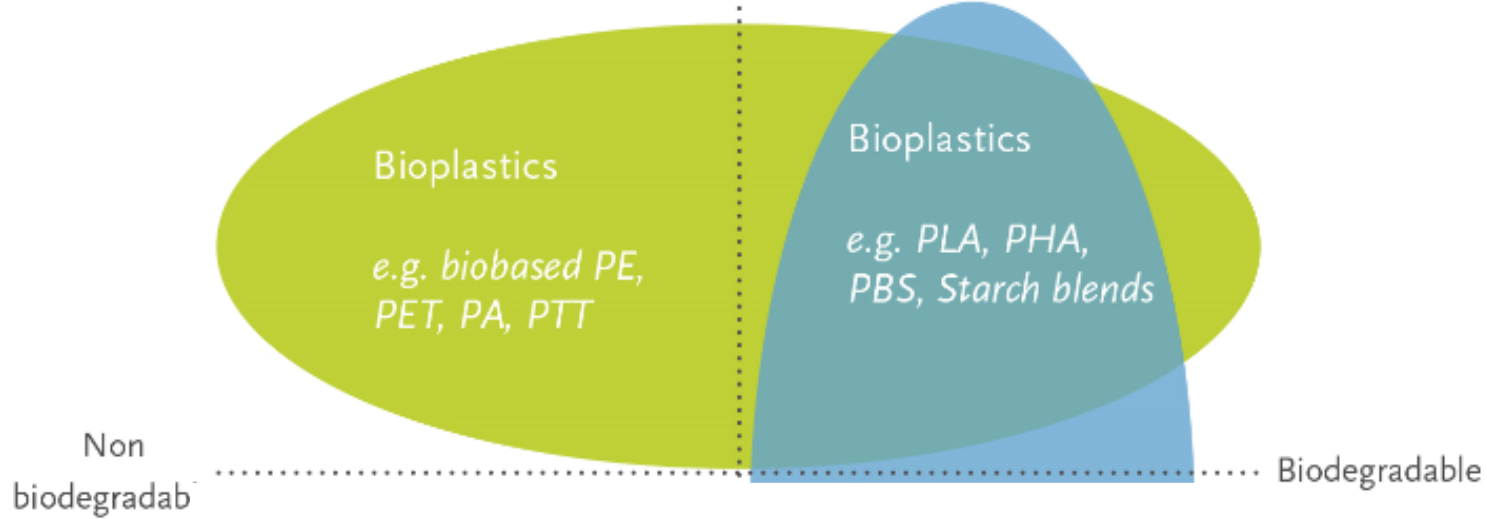


Biobased content





Biobased



compostable



- Important biodegradation parameters**
- timeframe
 - level of biodegradation
 - required surrounding conditions



Source





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Bioplastics are here!

Application and market





Examples



DuPont™ Sorona® EP
renewably sourced™ thermoplastic polymer*

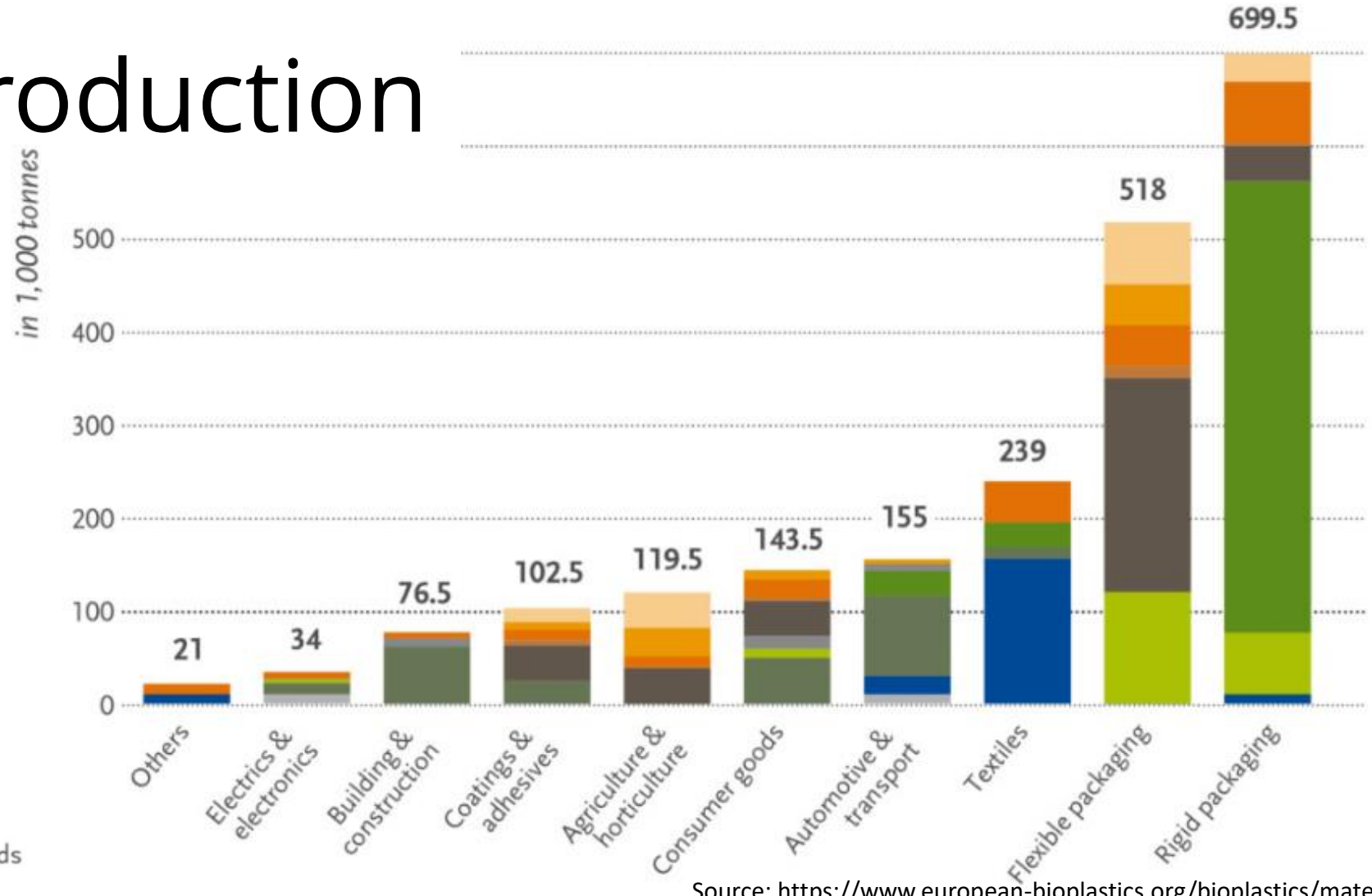


Meet the world's
1st recyclable
shampoo bottle
made with
beach plastic





Global production



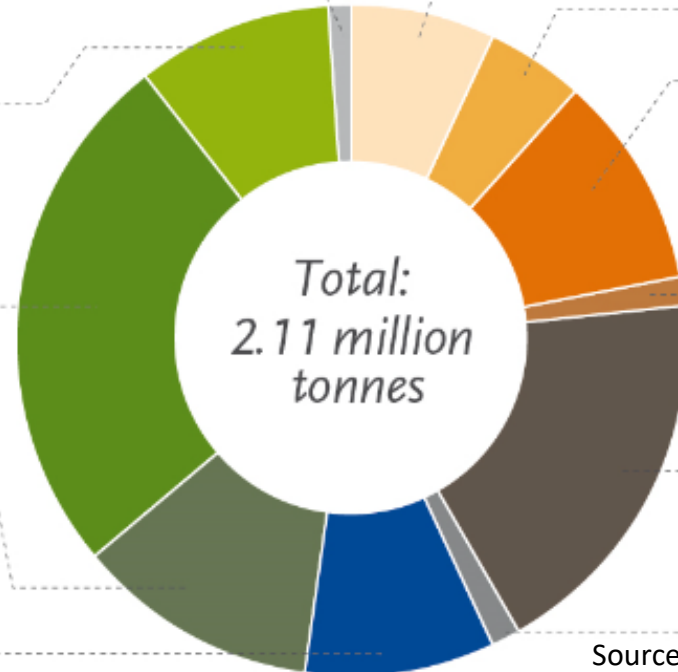


Global production



Bio-based/non-biodegradable
56.8%

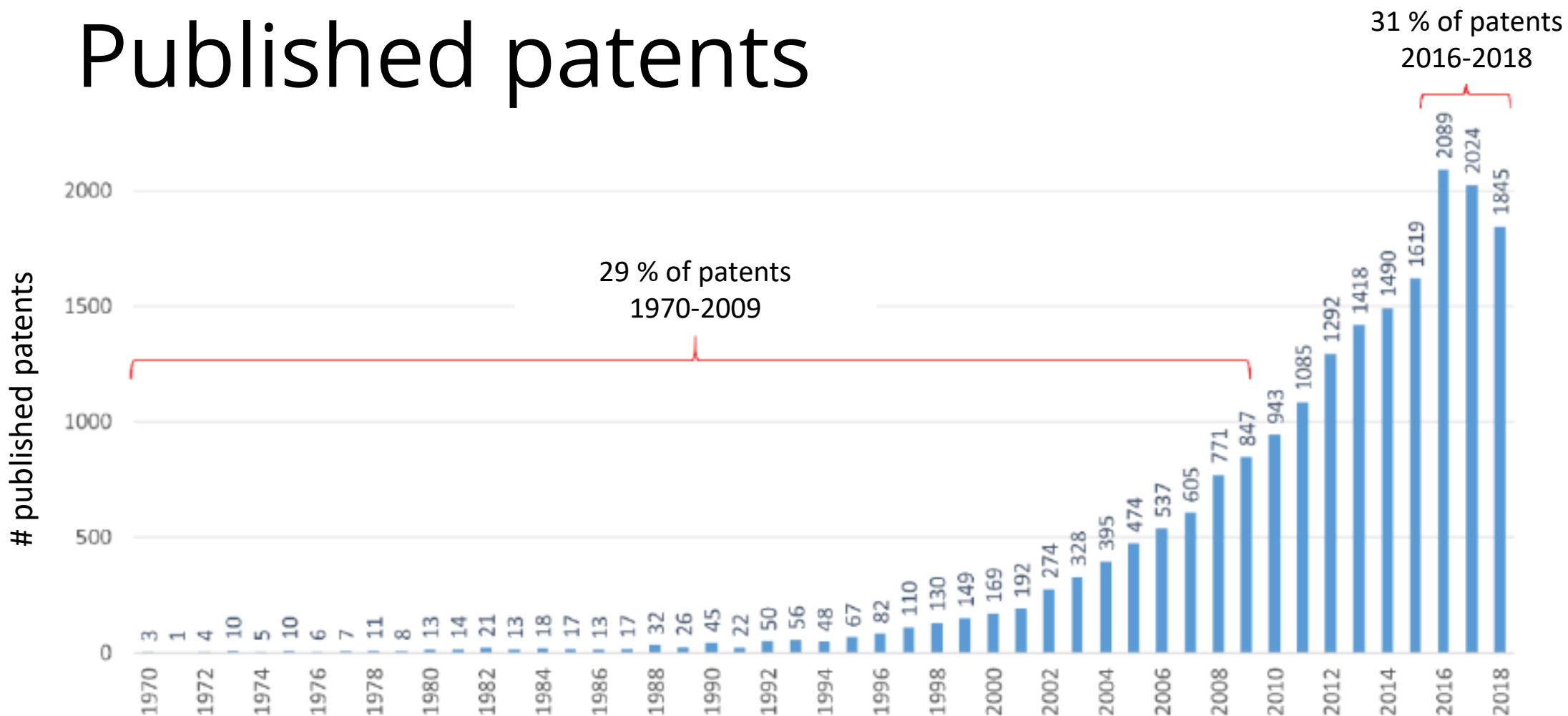
- Other (bio-based/non-biodegradable) 0.9%
- PE 9.5%
- PET 26.6%
- PA 11.6%
- PP* 0.0%
- PEF* 0.0%
- PTT 9.2%



Biodegradable
43.2%



Published patents





Great potential – what are the challenges?

- Transparency of terms, confusion of concepts:
 - Biobased, biodegradability
 - Standards, certificates and labels
- Handling of new material types, including after-life
- Technical potential
- Availability vs. demand
- The investment risk
- Which direction is the right?
 - Sources – 1st or 2nd generation, land use or waste fractions
 - Bio-similar or new bioplastic biodegradable materials?

Your why

Interpretation of
sustainability

Time
frame



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Thank you – questions?

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