Bioplastics – start and end of life

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Sustainable Biomass
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why do we care about packaging?
WWF’s 35 Priority Places
business lenses
cost protection marketing
environmental lenses

deforestation

landfills

ocean waste

pollution
are we asking the right questions?
recycled vs virgin
impact

value
System IMPACT
end of life

raw materials IMPACT
processing/manufacturing

VALUE
product & product use

VALUE
we’re focused on two points in the packaging chain
raw material production
end of life
move from **fossil-based** to **bio-based** plastics
bio-based plastics?
just because it’s bio-based doesn’t automatically make it more sustainable
Agriculture...

- Uses **70%** of fresh water
- Generates **20%** of GHGs
- Uses **33%** of land area
- Uses **30%** of global energy
food vs fuel vs bioproducts
land use competition
what is a sustainable bioplastic?
it starts with globally agreed upon and accepted minimum criteria
Sustainable raw material production

No land fill

Recycling for degradable

Compostable / Digestable Plastics
Degradable ≠ Biodegradable

• Biodegradable means that a material will completely degrade into substances found in nature under customary disposal conditions within a reasonable time frame.
• The additives that are incorporated into non-degradable plastics to make them “degradable” react with oxygen or light to break the polymer chain.
• However, these additives are generally not effective enough to totally break down the polymer. The result is small pieces of plastic instead of one larger piece.
• **These smaller pieces are not inherently less impactful than one large piece.**
driving for more sustainable packaging by seeing through more...

lenses
will be key as we face the future and challenge ourselves to do more with less.
thank you