



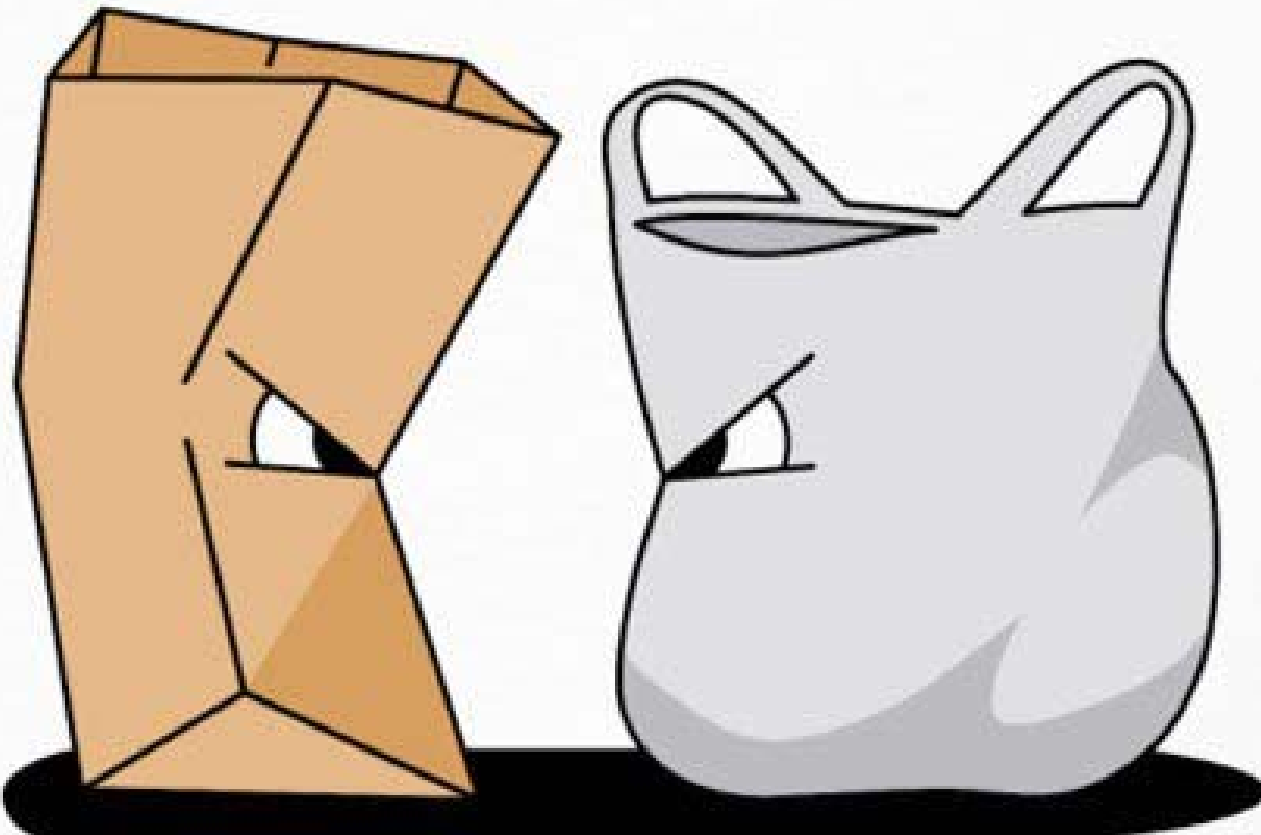
Montreal Bag Ban Commission Hearing June 4th 2015

All information contained in this presentation is strictly confidential and by no means does Mettler-Packaging allow to distribute this information to other vendors or Retailers or any other interest group!



Paper vs. Plastic

A practical comparison



Paper vs. Plastic - The Distribution

Warehousing space – 65 Million bags



10,900



4,100



Warehousing space – 105 Million. bags



17,500



6,600



Paper vs. Plastic - The Distribution

Transportation needs – 65 Million bags



416



97



Transportation needs – 105 Million bags



675



157



Paper vs. Plastic - The Distribution - cost comparison

Distribution cost – 65 Million bags



10,900

X 20 \$ (2 months storage + Handling)

4,100

218,000 \$

82,000 \$



416

X 1500 \$ (avg. truckload)

97

624,000 \$

145,500 \$



Paper vs. Plastic - The Distribution - cost comparison

Distribution cost – 105 Million bags



17,500

x 20 \$ (2 months storage + Handling)

6,600



350,000 \$

132,000 \$



675

x 1500 \$ (avg. truckload)

157



1,012,500 \$

235,500 \$



Paper vs. Plastic - The environmental impact

(study was performed for a nationwide US retailer - strictly confidential information)



CO 2 equivalents: 275 lbs / 1000 bags

Includes: Trucking from KY to Tracy, CA



CO 2 equivalents: 39 lbs / 1000 bags

Includes:

Sea transportation from Europe, Trucking from Plant to Port and Port of Oakland to Tracy, CA

Based on Mettler-Packaging trademark ecoloop (made from 80% PCR), Virgin materials have a higher carbon footprint



Paper vs. Plastic - The environmental impact

65 Million bags

17,870,000 lbs.
CO2 equivalents



2,530,000 lbs.
CO2 equivalents



105 Million bags

28,880,000 lbs.
CO2 equivalents



4,100,000 lbs.
CO2 equivalents



Paper vs. Plastic - International review



Ireland's Internationally recognized for "Plastic bag ban"

Recognized Customers Ireland

(All data shown below are from actual Mettler-Packaging customers)

Upscale Retailer Bag Usage:

6 Million Soft Loop
320 k Reusable PP bags
No paper bags

Traditional Retailer Bag Usage:

5 million Soft Loop
250K Reusable PP bags
No Paper Bags

Discount Retailer Bag Usage:

3 million Soft Loop
150K Reusable PP Bags
No Paper Bags



Paper vs. Plastic - International review



UK – The country of the “Bag 4 Life”

Recognized Customers United Kingdom/England

(All data shown below are from actual Mettler-Packaging customers)

Upscale Retailer Bag Usage:

10 Million Soft Loop
400 k Reusable PP bags
No paper bags

Traditional Retailer Bag Usage:

7 million Soft Loop
300K Reusable PP bags
No Paper Bags

Discount Retailer Bag Usage:

5 million Soft Loop
200K Reusable PP Bags
No Paper Bags



****T-Shirt Bags Still in use – Staged Phase Out Underway will be complete by OCT-2015****



Paper vs. Plastic - International review



Germany: no free bags in Grocery Stores since more than 20 Years

(All data shown below are from actual Mettler-Packaging customers)

Recognized chain :	8 Mio. Paper
High End customer	100 Mio. PE bags
Recognized customers :	3.5 Mio Paper
Traditional Grocers	50 Mio. PE bags
Recognized chain:	6 Mio Paper
Discounter	100 PE bags

Common spread: 8% paper and 92% plastic by customer choice



Bag Ban Legislation - Most California Ordinances

- 1) Min Lifetime of 22 pounds with 125 reuses over 175 feet
- 2) Loading capacity 22 pounds
- 3) Min 15 litres
- 4) Reusable bags can be cleaned or disinfected
- 5) No toxic amounts of heavy metals (less than 100 ppm)
- 6) 2.25 mil plastic
- 7) Min charge of 10 cents for Paper bags and reusable bags
- 8) No Plastic bags below 2.25 mil are allowed



Paper vs. Plastic - US Bag Ban review



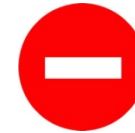
Minimum Gauge



Minimum Loading Capacity (Volume)



Reusable bag specification



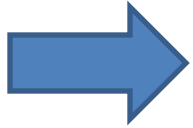
Minimum Loading Capacity (Weight)



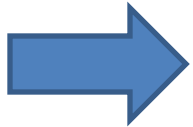
Sturdy Handle requirement



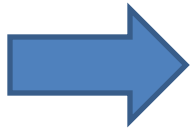
Conclusion



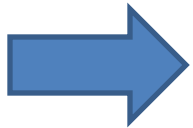
Paper Bags are not the more environmentally sound choice



Bag bans worldwide have shown that if charged a fee, customers prefer sturdy and reusable plastic bags over single use paper bag



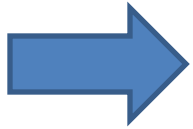
US bag bans have set a high standard for plastic carrier bags, but not for paper bags



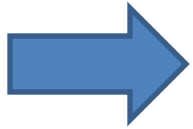
Single Use plastic bag bans are an effective way to reduce waste in landfills



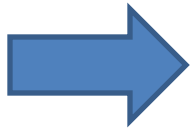
Recommendations for Montreal Bag Ban



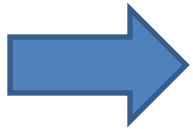
Implement a requirement to charge for all bags



Implement clear reusable bag specifications for paper bags to avoid default to paper bags due to cost



Use Los Angeles Bag Ban or proposed California statewide ban as a guideline and amend paper bag section



Promote the use of reusable plastic bags by requiring Retailers to offset their carbon footprint with climate projects.

→ Will force retailer to choose most environmentally friendly option. (see next slide for example)



CO₂-neutral Carrier bags

Approach



Production
= emits CO₂



2. Support of climate projects to balance out CO₂ deficit of production process.



Climate project

= sustainable reduction of CO₂ emissions



1. CO₂ life cycle analysis of carrier bag production

