

# FOOD-GRADE rPET ECONOMICS



# Why do we still have this?



# The Answer is Simple

*~~“It’s the economy, stupid”~~*

**commodity**

James Carville, Chief Strategist  
Bill Clinton’s 1992 Election Campaign

Whether we like it or not, food-grade rPET is viewed by the marketplace as a substitution for (or as a competition to) virgin PET, i.e. as a PET commodity



# Marketplace for Food-Grade rPET

*“There is more than ample market demand available for you to easily sell out your plant, provided you can be cost-competitive against virgin resin. It has been shown over and over that, except for a small minority of enthusiasts, people will not pay more for Green. They really expect recycled/reprocessed product to be cheaper than virgin, but some will pay the same price to feel Green. But not a higher price. So, if, as you claim, PTP product can compete favorably on price, I would expect you to have no problem selling out your capacity”*

Rick Jones, Chief Operating Officer  
Continental Industries Group, Inc. (CIG), New York  
(Official Response to PTP Group Americas, Inc., 2008)

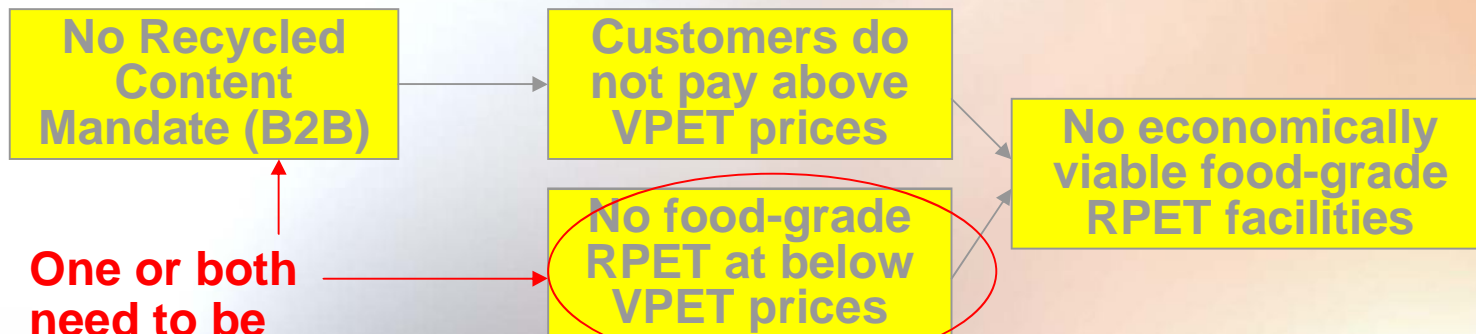
*“If the cost of recycled resin is lower than virgin, that will drive demand because I don’t think there are any players out there willing to pay more than virgin”*

Ed Byrne, Co-owner and General Manager  
Peninsula Packaging Company, Exeter, CA  
(Plastics News, April 6, 2009, p.9)



# Q4: Can rPET compete with VPET?

- Food-grade PET recycling technologies (“Bottle-to-Bottle”) have been around for quite some time – earlier DuPont processes (70’s-80’s), Erema (80’s), Buhler (90’s), Phoenix Technologies (90’s), URRC (90’s), etc.
- All of these technologies have been implemented commercially, have obtained FDA approvals, and have produced food-grade RPET in industrial quantities
- Why is there no plants in California (and very few elsewhere in the US)?



# PET Recycling in California\*

Comparison of 2006 PET and Estimated 2010 PET Reclaiming Capacity

Actual 2006 (in millions of pounds)	PET Reclaiming and/or End-Use	Estimated 2010 (in millions of pounds)	Change
180*	Export (Bales) China, Hong Kong, Canada	120*	↓
60*	Export (Dirty Flake) China (AE-Way, Goalson, Guangyi)	80*	↑
20	Clean Flake (Global PET, Allan Co., ECO <sub>2</sub> , Greenpoint, Goalson, New Earth Systems, others?)	190*	↑
10	Sheet/Thermoforming (Global PET, Allan Co., others?)	50*	↑
!!! ○ -	Bottle Grade (PET LLC, others?)	60*	↑
43*	Domestic U.S. Reclaimers (Mohawk)	40*	↓
313	Total Reclaimed	540	↑
313	Total Recycled	440	↑
-	Supply Shortfall	100	

\*Estimated quantities.

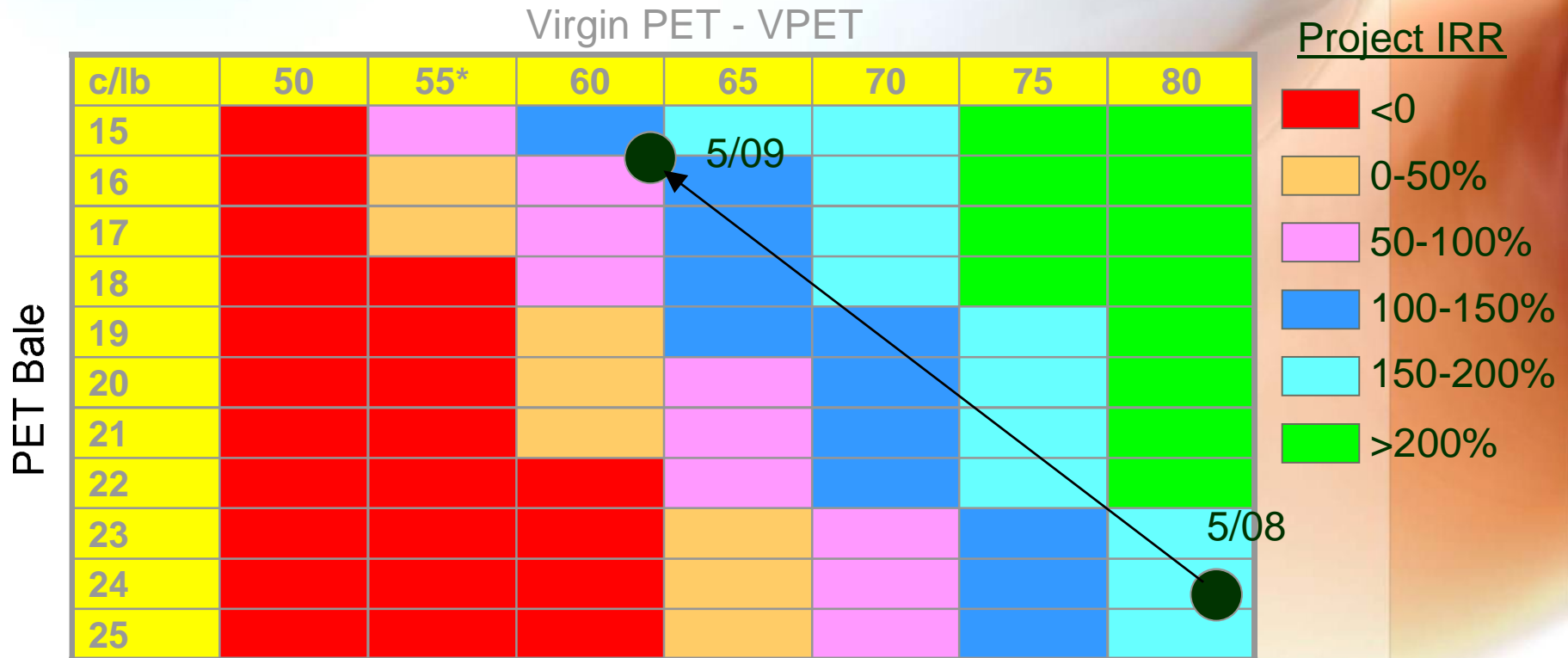
- ~60% of post-consumer bottles goes to China
- No food-grade recycling capacity



\* Market Analysis for Recycled Beverage Container Materials, 2007 Update Report, dated May 10, 2007 (prepared by NewPoint Group for California Division of Recycling)

# Food-Grade rPET Business Model

- Production of rPET is a fundamentally simple business: converting one commodity into another



\* ~55c/lb is a conversion cost for many technologies

