



Quality + Quantity: Developing Robust Recycling Markets in California



THE RECYCLING
PARTNERSHIP

Dylan de Thomas, The Recycling Partnership
CalRecycle Recycling ZoneWorks Workshop

May 29, 2019

TOGETHER

Transforming Recycling For Good



We're all in this bin together





Only half of Americans can recycle at home as easily as they can throw something away.*

Those that can recycle easily are only recycling half of what they could.**

* 2015-16 Centralized Study on Availability of Recycling.

<https://recycle.com/spc-recycling-access-study/>

** 2016 State of Curbside Report

OUR WORKING MODEL

INFRASTRUCTURE

Cart grants deliver year over year results and measurable incremental tonnage.



EXPERT ASSISTANCE

Aligning operations and education helps cities deliver better recycling.



TOOLS AND DATA

More than 20K local programs lack resources but determine success.



SYSTEM SOLUTIONS

The system is loosely connected but highly dependent.

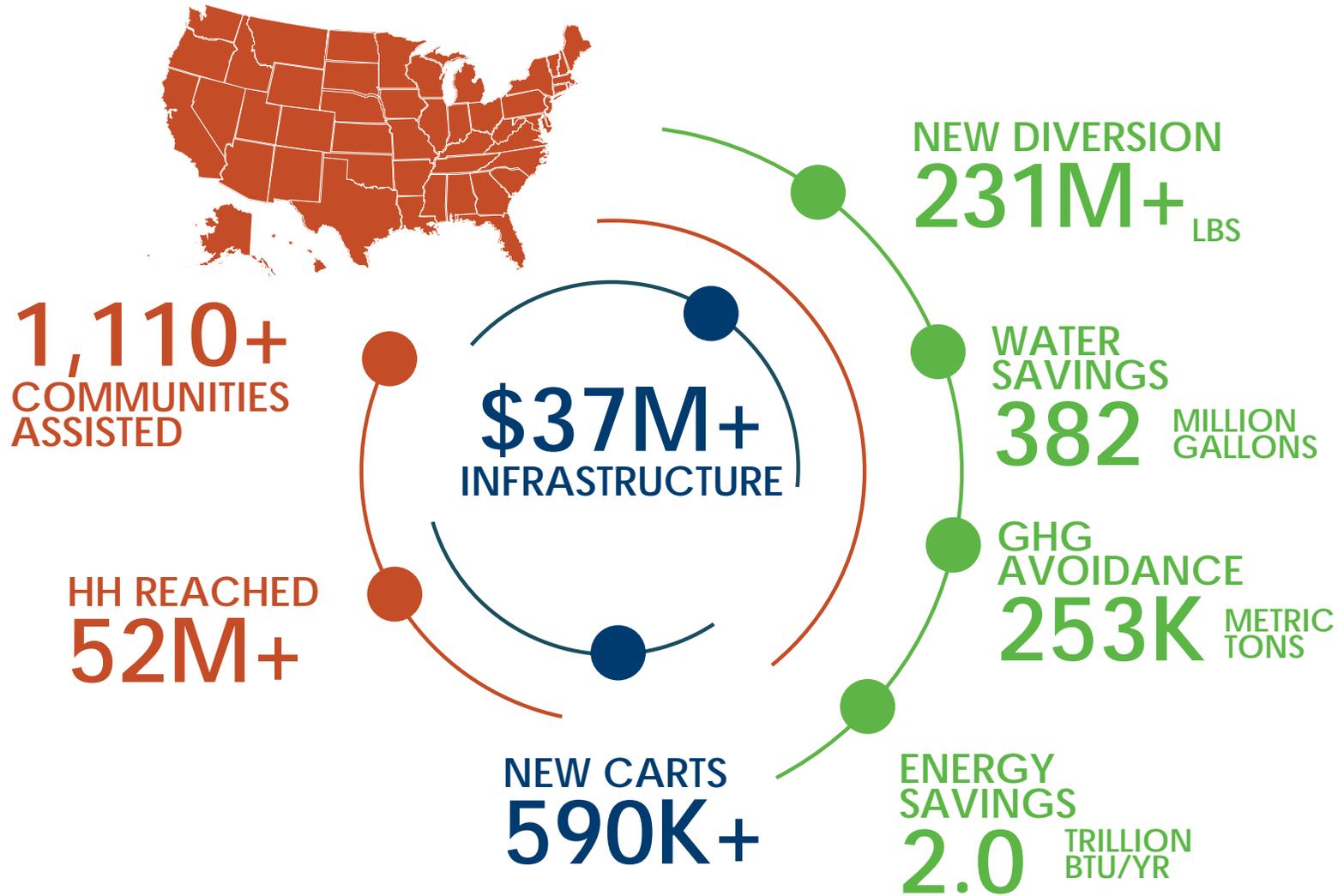


Unlocking the Circular Economy in California



- How Did We Get Here?
- What is the Impact of China's Scrap Ban?
- Opportunities in California and Beyond

Making an Impact





What Are Recyclables Anyway?

A large pile of raw plastic waste, including bottles and containers, is shown in a recycling facility. The waste is being processed by a conveyor belt system. The text "RAW MATERIALS" is overlaid on the image in large, white, bold letters.

RAW MATERIALS

THE RECYCLING
SYSTEM IS LOOSELY
CONNECTED,
HIGHLY DEPENDENT





**MANUFACTURING
FEEDSTOCK** that competes
with **OTHER** raw materials

Only when **RECYCLED
CONTENT REPLACES** virgin
content, will we enjoy the
ECONOMIC and
ENVIRONMENTAL benefits
RECYCLING promises and
delivers.



Why Clean Up Recycling?



DYLAN DE THOMAS
V.P. OF INDUSTRY COLLABORATION
AT THE RECYCLING PARTNERSHIP

“ WE WERE EXTERNALIZING THE LABOR OF SORTING THE MATERIAL, BUT NOW THAT CHINA HAS GOTTEN TO THE POINT THAT THEIR *own* LABOR FORCE HAS MATURED AND GROWN, THEY'RE ABOUT TO EXTERNALIZE IT THEMSELVES.

THEY'RE *still* BUYING A LOT OF THE SAME MATERIALS; THEY'RE JUST BUYING IT FROM OTHER PARTS OF S.E. ASIA. ”



Recycling is so easy!



This Has Happened Before (and Not)

- 1990: Explosion of Curbside Programs following Mobro
- 2008: Beijing Olympics + Global Recession
- 2018: The Same, but Different



Is the Sky Falling?

- Mixed paper value decline (\$88 in Mar 2017 to about \$0 now)
- Small number of programs closing/suspending operations
- Smaller number moving to Dual-Stream



What's Happening and Where?

- 13 states "Heavy"
- 30 states "Noticeable"
- 9 "minimal"
- Impacts on California, Western States most acute

Sources: Waste Dive & Resource Recycling

State	Disposal Ban	Landfilling	Accepted Materials Chang	Effects	Contamination Work?
Alabama	N			Noticable	
Alaska	N	Y	Y	Heavy	
Arizona	N	Y	Y	Heavy	Y - in Phoenix
Arkansas	N		Y - at drop-off	Minimal	
California	Y - Partial, not f	Y - Composting	Y - at some drop-offs	Heavy	Y
Colorado	N		Y	Noticable	Y
Connecticut	Y			Noticable	Y - Workshops
Delaware	Y			Noticable	
District of Colur	Y			Noticable	
Florida	N	Y	Might be in future	Noticable	Y - campaigns
Georgia	N		Y	Noticable	Y
Hawaii	N		Y	Heavy	Y
Idaho	N		Y	Heavy	
Illinois	N			Noticable	Y
Indiana	N		Y	Noticable	Y
Iowa	N	Y	Y	Noticable	Y
Kansas	N			Noticable	
Kentucky	N			Minimal	
Louisiana	N			Minimal	
Maine	N		Y	Noticable	Y - campaigns
Maryland	N		Y	Noticable	
Massachusetts	Y		Y	Heavy	Y - TRP Recycling IQ Kit

What's Happening and Where?

- Reports of some landfilling/WTE (42 states)
- Accepted materials lists changing (42 states)
- Some programs changing/shuttering
- Commodity prices drop



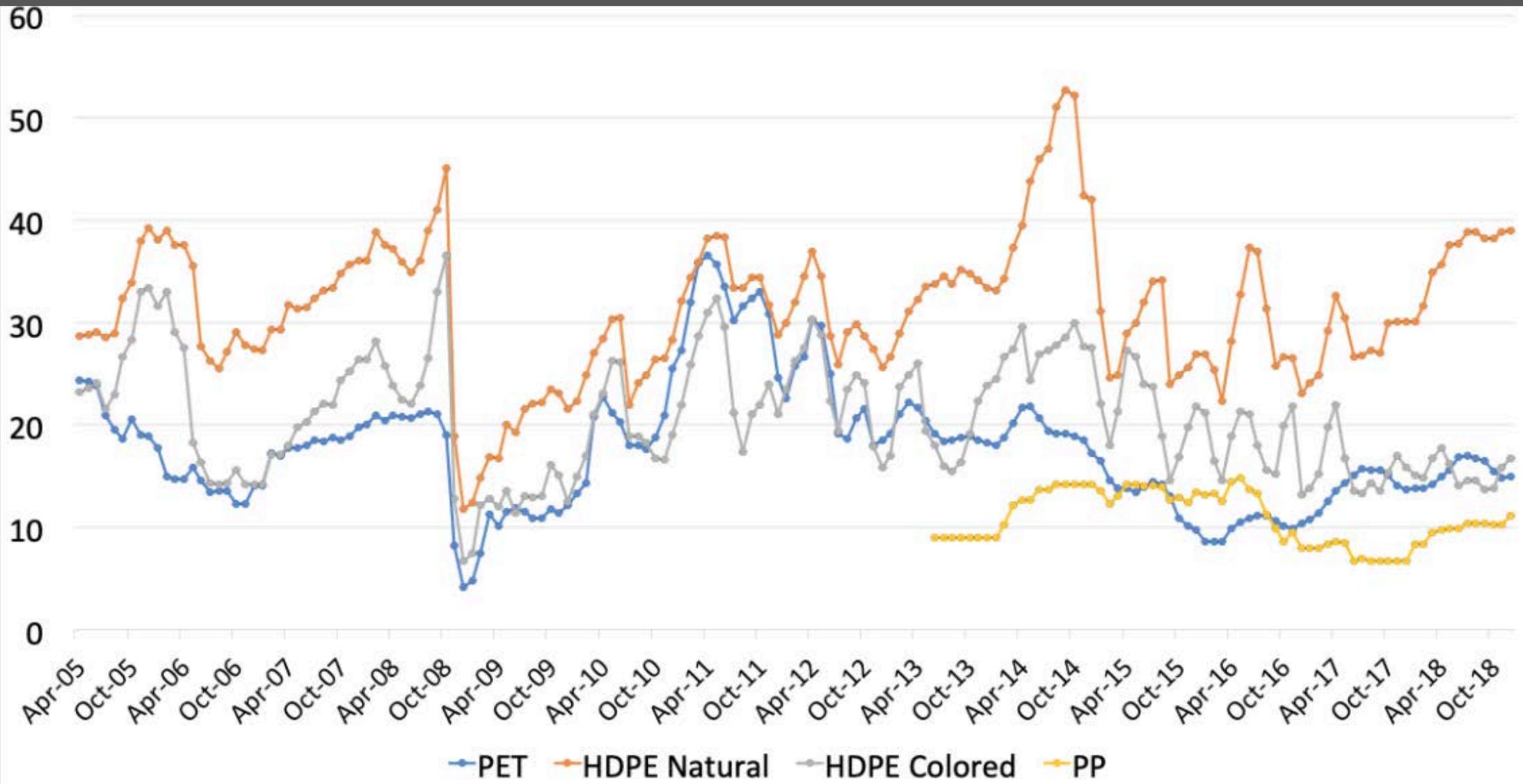
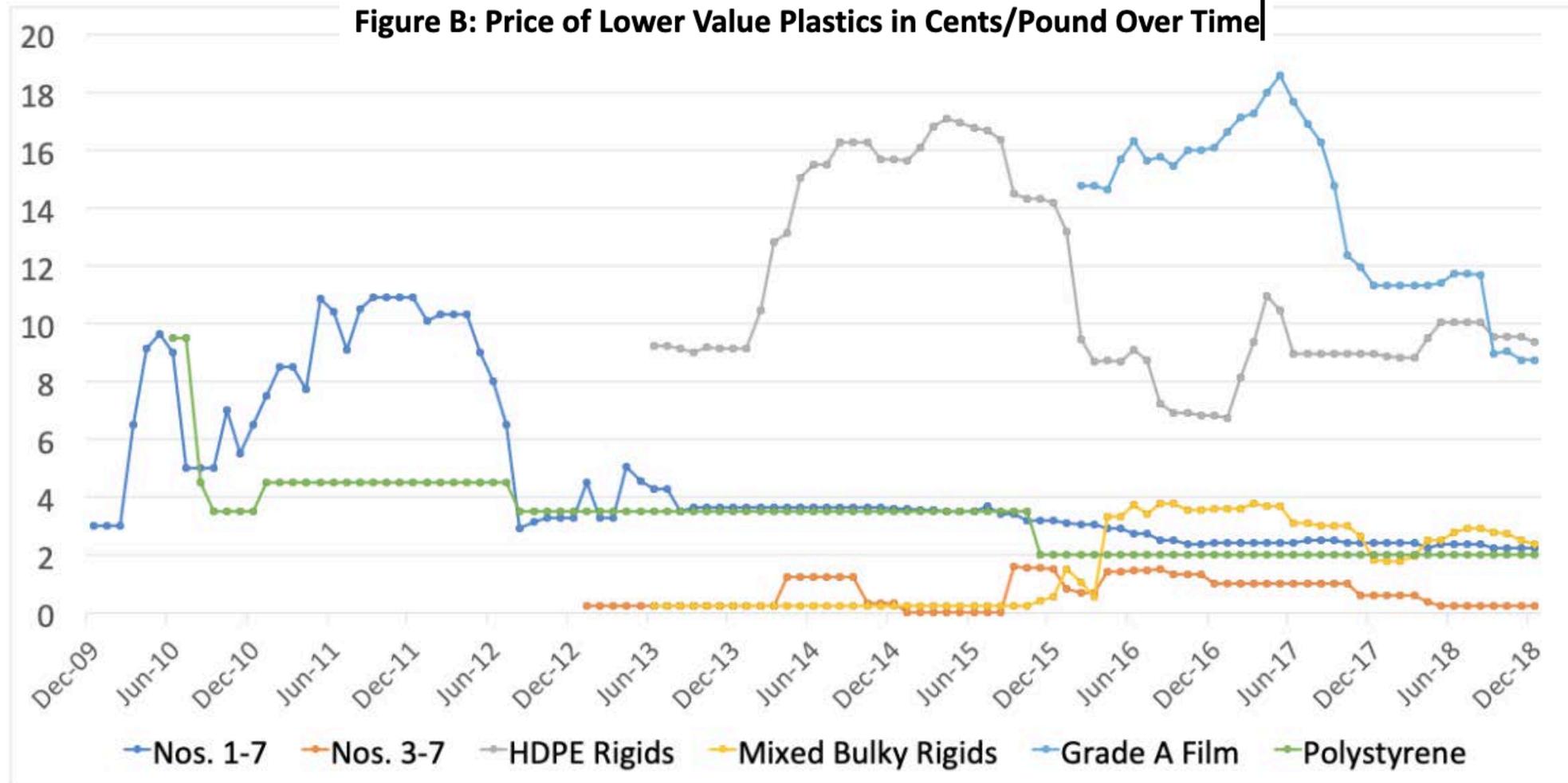
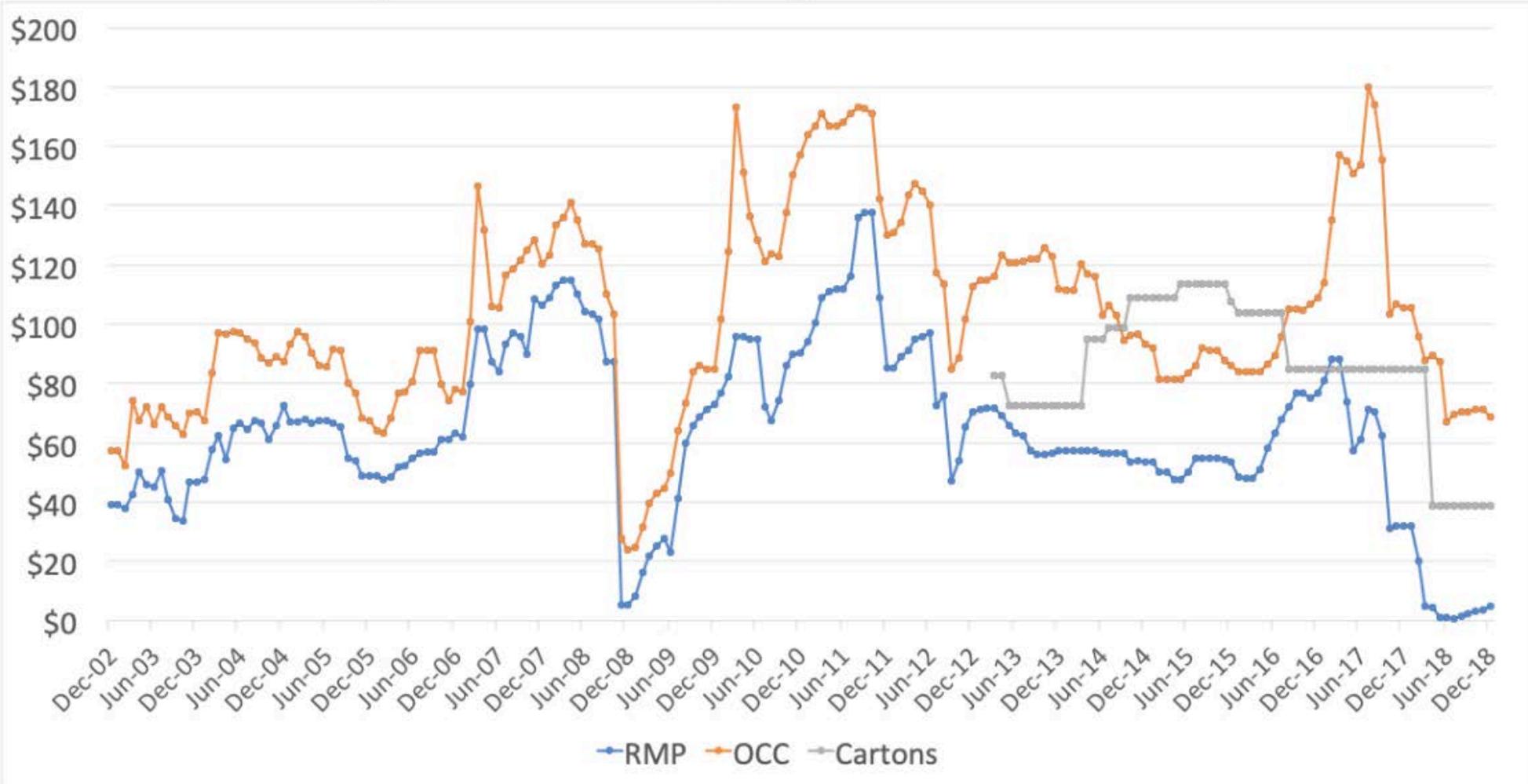


Figure B: Price of Lower Value Plastics in Cents/Pound Over Time

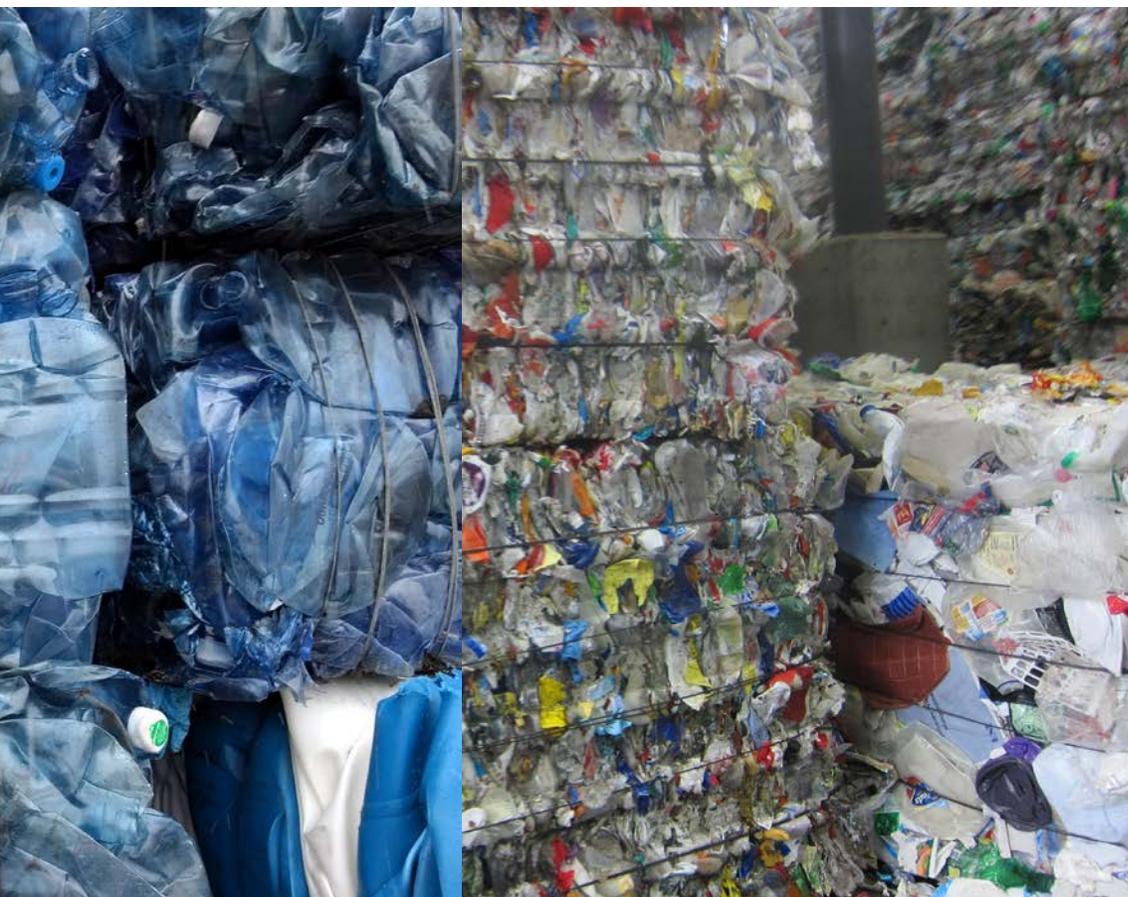


Data provided by RecyclingMarkets.net.

Figure C: Paper Pricing in \$/Short Ton Over Time



Data provided by RecyclingMarkets.net.



- Paper and Plastics recovery capacity is growing in the U.S. to consume some of these materials (RMP, Plastics, etc.)
- Chinese investment a signal that the scrap ban is forever

Connect with Recycled Plastics Buyers and Suppliers

[Advanced Search >](#)

PlasticsMarkets.org connects suppliers and buyers of all types of scrap plastic (from bales to post consumer resin).
It's supported by the plastics industry and intended for use by the recycling industry in North America.

**6.8
MILLION**

**POUNDS OF
POSTCONSUMER
RESINS**

LDPE

PET

PP

HDPE

PCR USES INCLUDE:

GAYLORD LINERS

GAYLORDS

PACKAGING

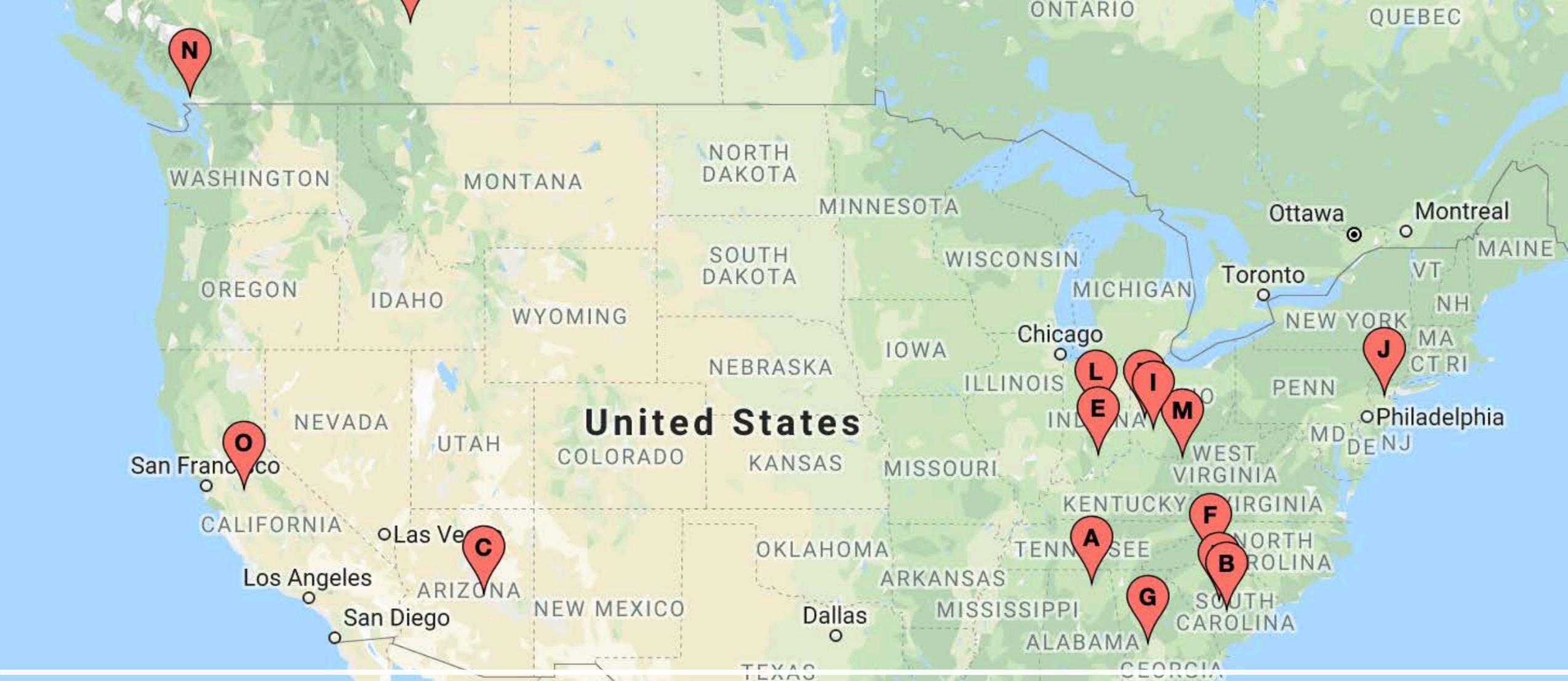
TIER/SLIP SHEETS

TRASH BAGS



Become an APR Recycling
DEMAND CHAMPION

**Post-Consumer Content
in Industrial Goods**



National Plastics Recycling Investments

What's Next for Plastics?

Plastics Reclaimers Buying and Building:

- EFS
- Azek
- GDB International
- East-Terra Plastics
- PureCycle Technologies
- Merlin Plastics
- Peninsula Plastics



What's Next for Plastics?

Plastics Reclaimers Buying and Building:

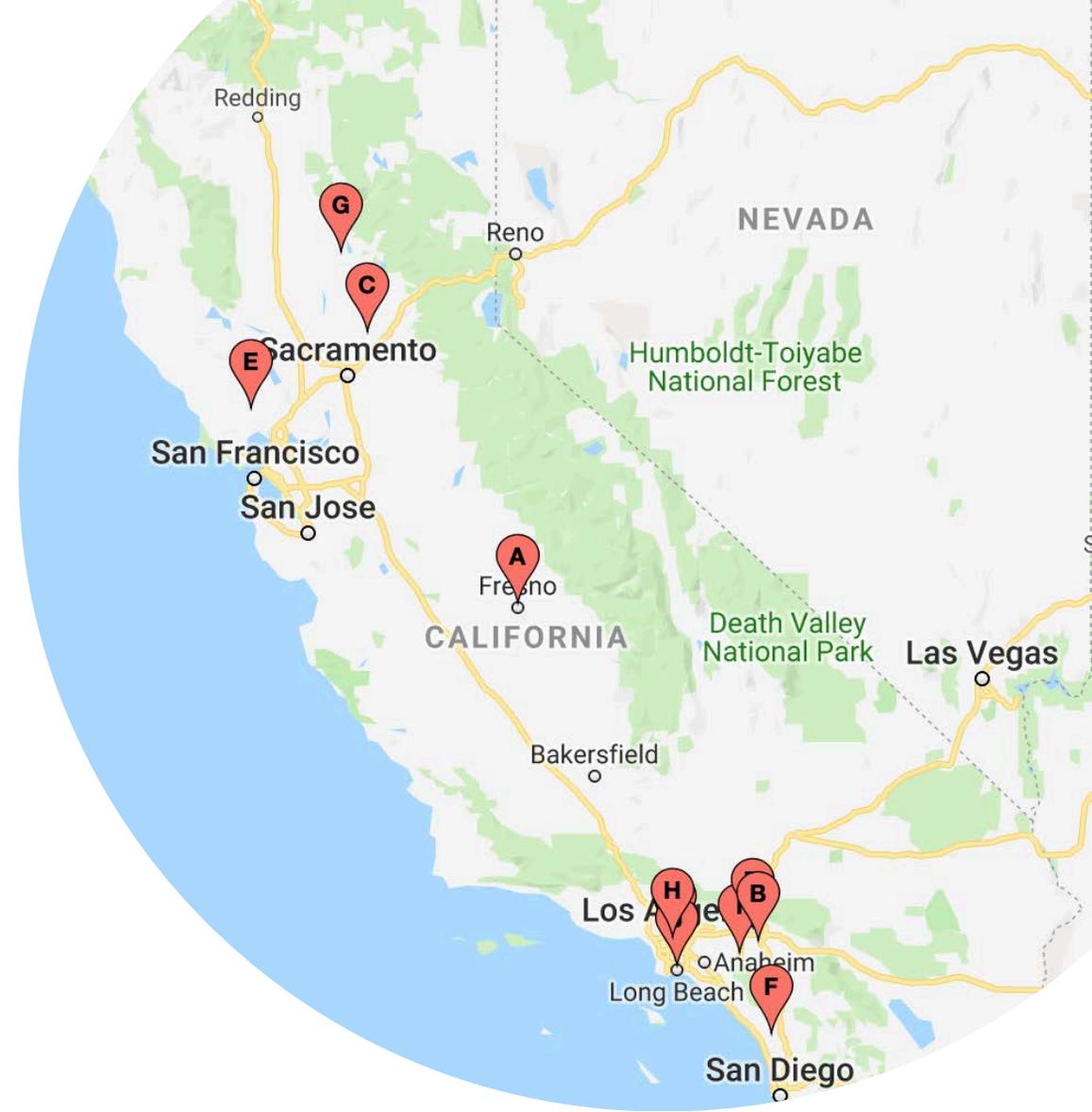
- Roy Tech
- Ecomelida
- GreenCycle
- Tian Yuan/Shaw Brothers
- Green Tech Solutions
- UPT

Well Over \$300 MM in investments
and over 328,000 tons of annual
consumption



APR Plastics Recyclers in California

- Allan Company
- CarbonLITE
- Circular Polymers
- Green Fiber International
- Prime Plastic Products
- Roplast Industries
- rPlanet Earth
- Talco Plastics (two locations)
- Verdecoco Recycling





National Paper Recycling Investments



What's Next for Paper?

Paper Mills Buying and Building:

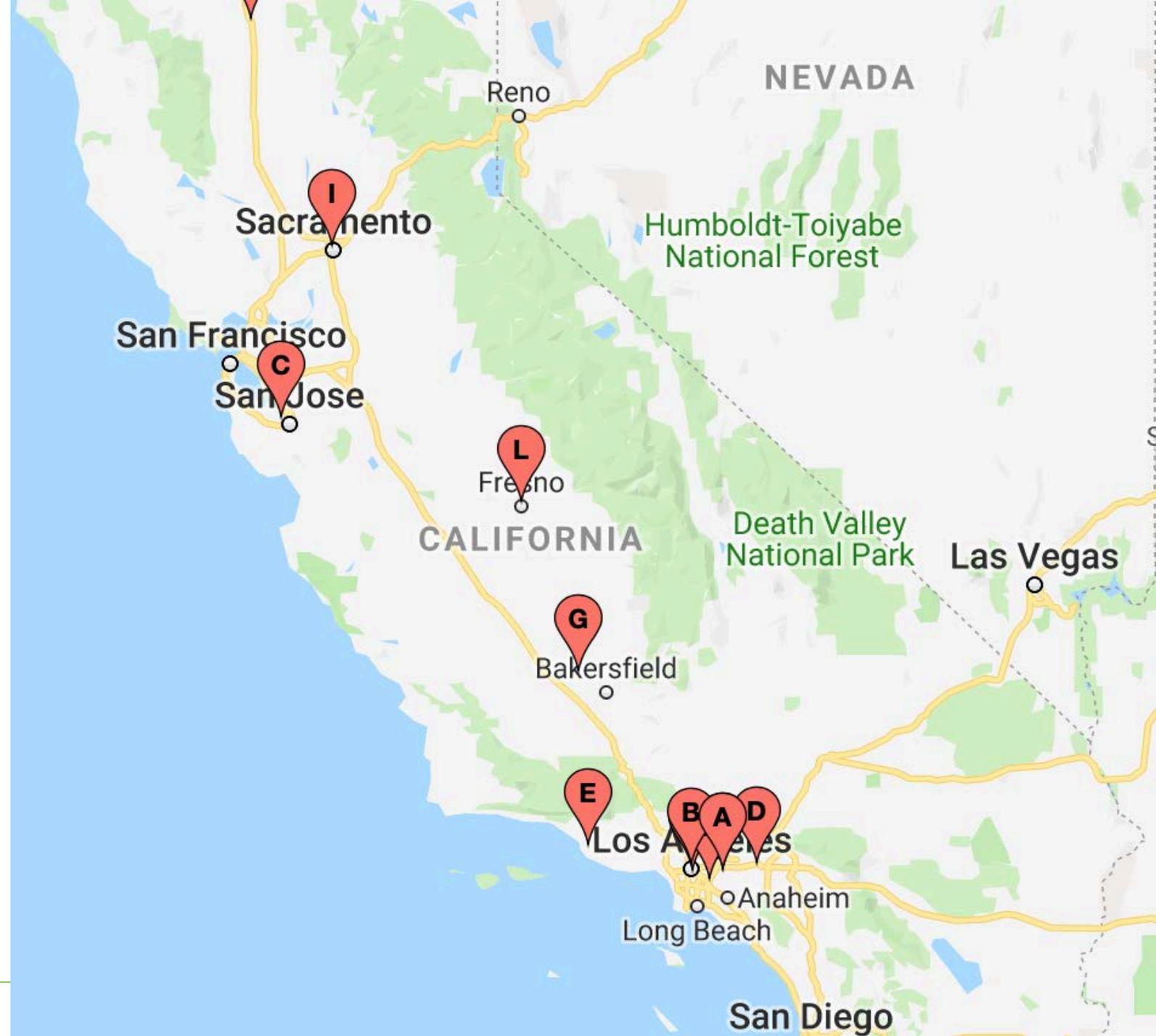
- Pratt Industries
- Green Bay Packaging
- Cascades
- Georgia Pacific
- Nine Dragons
- Shanying International
- Bio Pappel
- Ecomelida

Over \$1.6 BN in investments +
2.6 MM tons of annual
consumption



Paper Recyclers in California

- Fox Paper
- International Paper
- New Indy Containerboard
- PCA (Packaging Corporation of America)
- Resource Management Group
- Rite Box
- RockTenn
- Sonoco Products Company
- Western Pacific Pulp and Paper



A large industrial facility, likely a recycling plant, with a massive stack of compressed plastic waste in the foreground. The waste is a mix of white, clear, and colored plastics, including bottles and containers. In the background, there are large blue recycling bins and industrial machinery. The scene is dimly lit, with a dark blue overlay.

We Want This

...Not This





...Or This

A large, messy pile of discarded food waste and packaging. In the foreground, a clear plastic rectangular container is prominent. To its right is a red bag with some text. The background is filled with various food items, including what looks like a pizza box, a yellow bag, and other food containers. The overall scene is one of significant food waste.

...Or This



The Recycling Partnership launches West Coast Contamination Initiative



... Because What Are Recyclables Anyway?



A photograph of a recycling facility. The scene is filled with a large pile of plastic waste, including bottles, containers, and fragments, in various colors like white, blue, and red. The waste is situated on a metal grate or conveyor system. A prominent green arrow points from the top right towards the center of the image. The overall lighting is somewhat dim, and the background shows industrial structures.

RAW MATERIALS

TOGETHER

Transforming Recycling For Good



Thank You!

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www.RecyclingPartnership.org