



MML 2019 Summer Conference



THE FUTURE OF RECYCLING & ZERO WASTE

Chaz Miller

Maryland Municipal League

Summer Conference

June 23, 2019

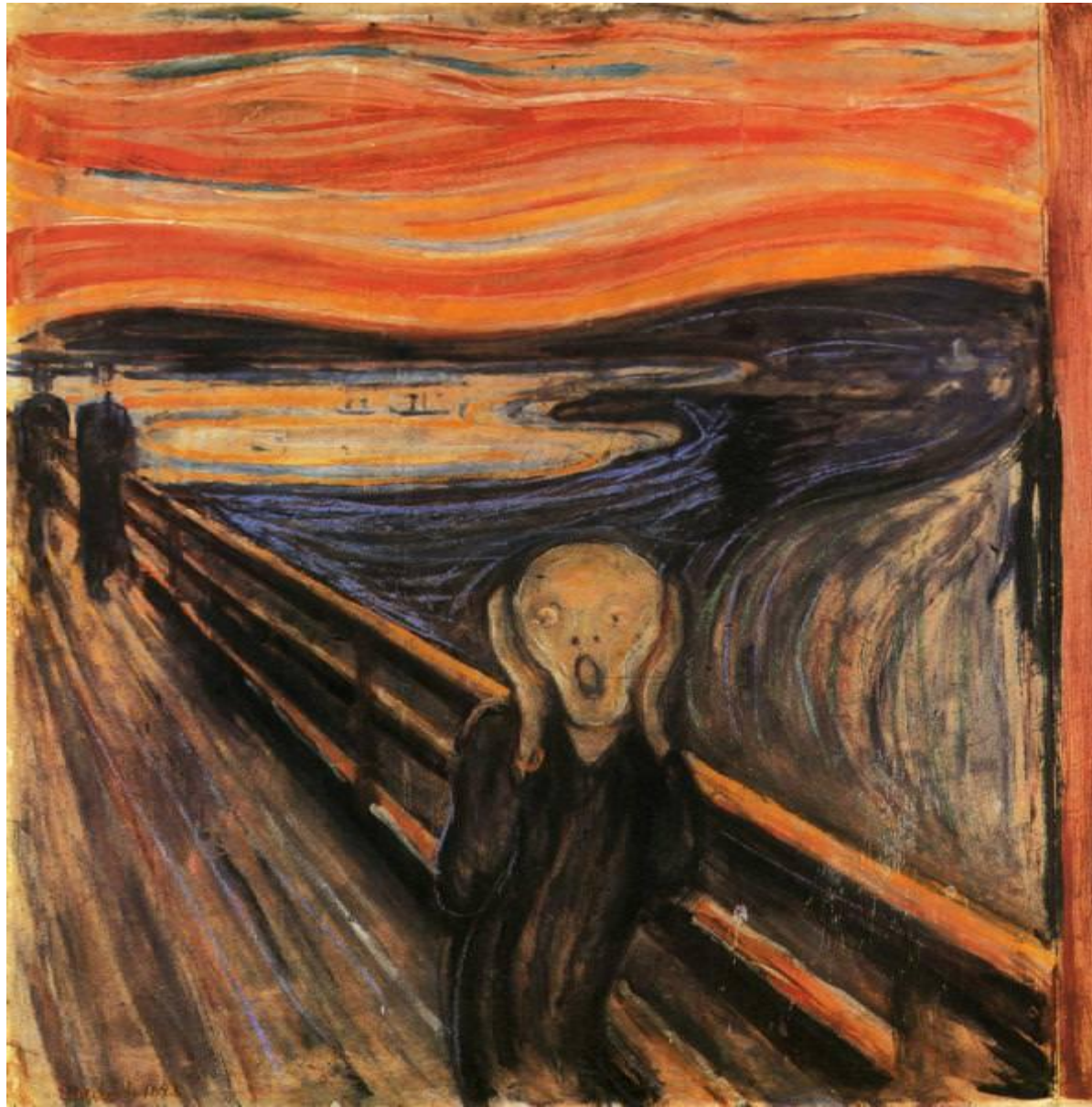
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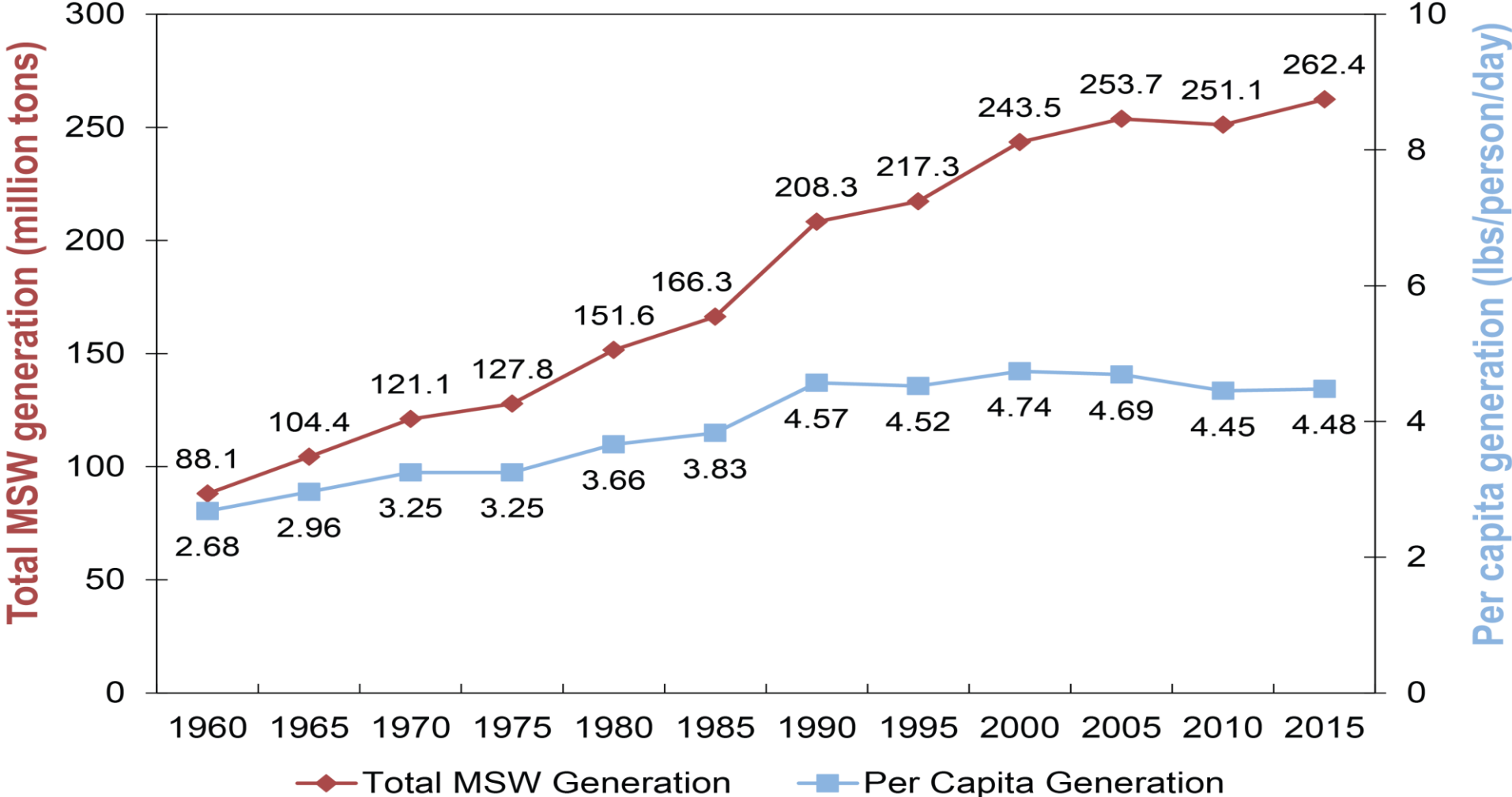
NATIONAL MEDIA HEADLINES MARCH-APRIL 2019

- Is This the End of Recycling? (Atlantic)
- 'Moment of reckoning': US cities burn recyclables after China bans imports (The Guardian)
- As Costs Skyrocket, More U.S. Cities Stop Recycling (NY Times)
- The World's Recycling Is in Chaos (Wired)
- Everything Americans Think They Know About Recycling Is Probably Wrong (NBC News)
- How American Recycling Is Changing After China's National Sword (City Lab)

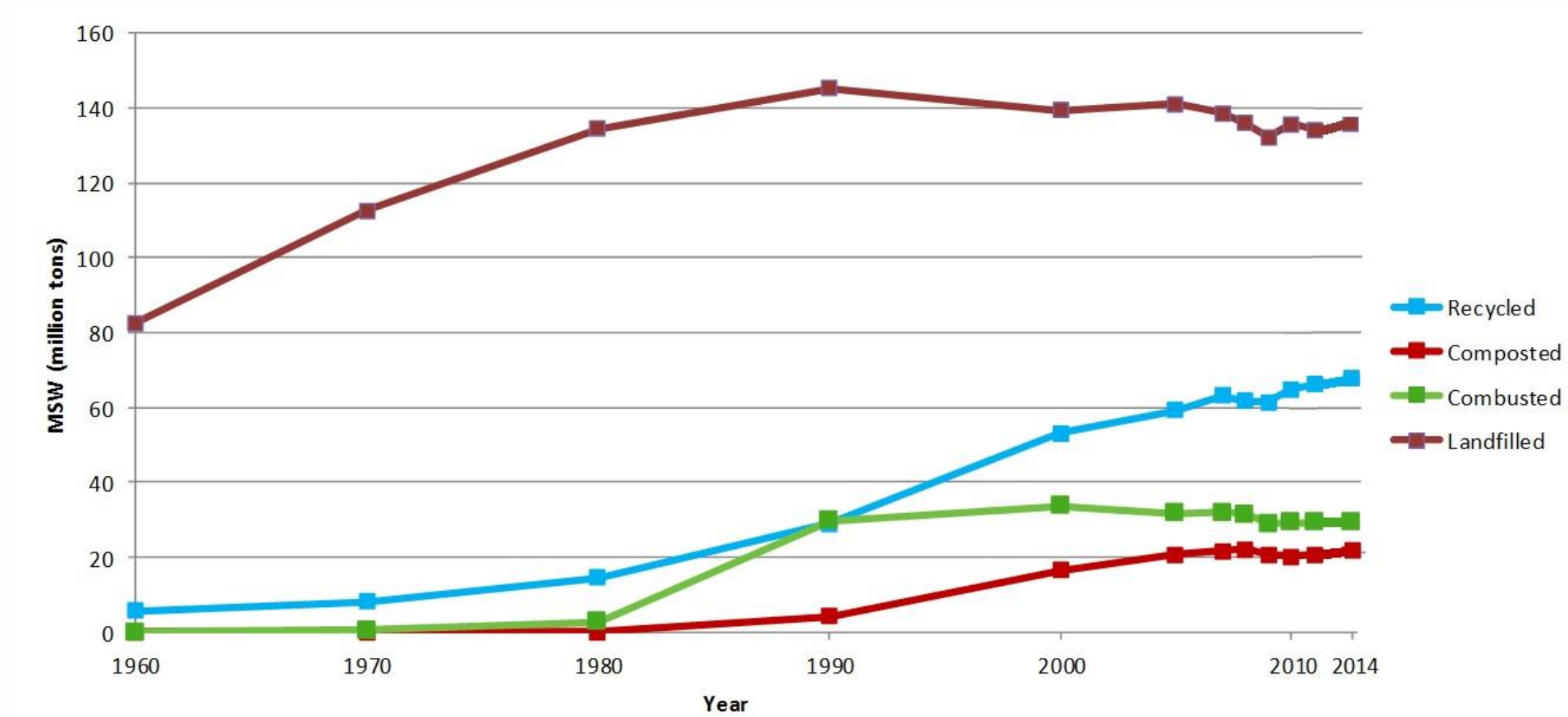
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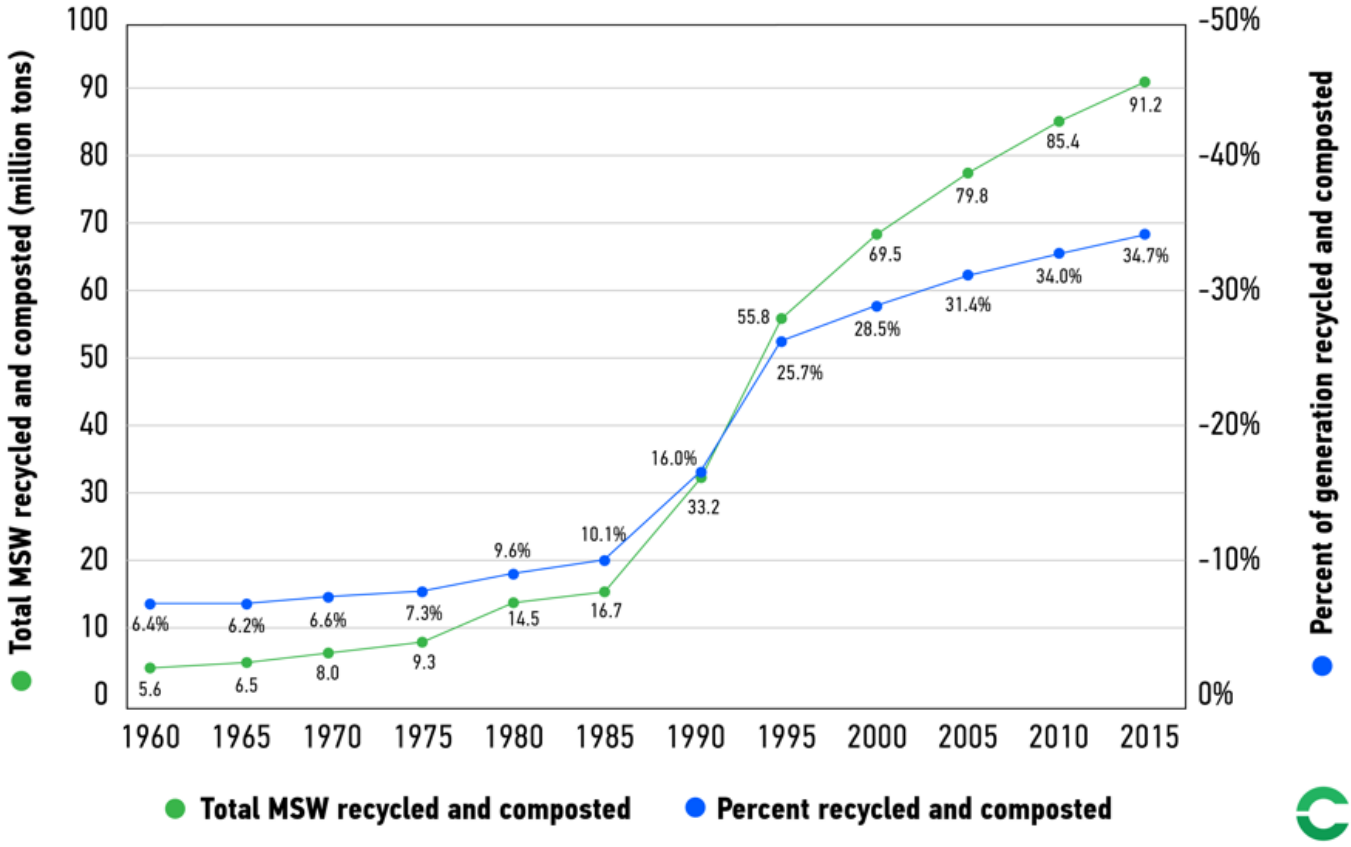
MSW GENERATION



MANAGEMENT TRENDS



RECYCLING & COMPOSTING



EVOLVING TON

- Less printed paper
- More packaging but less per person

PACKAGING CHANGES

- More plastic
- More wood
- Less glass & metals
- Paper packaging flat
- Flexible packaging second most used package

CHANGING MATERIALS/PRODUCTS

- E-commerce
- Drones?
- Flexible packaging?
- Reusable packaging?
- ?

SINGLE USE PLASTIC BANS

- Food service = 0.5% generated MSW
- Bags, wraps, sacks = 1.6% generated MSW
- Bottles = 1.45% generated MSW
- Flexible packaging (without bags, etc) = 3.0%?*

CRISIS?

危机

WHY RECYCLE?

- Avoid disposal?
- Increase recycling?
- Conserve resources?
- Lower greenhouse gas emissions & energy consumption?

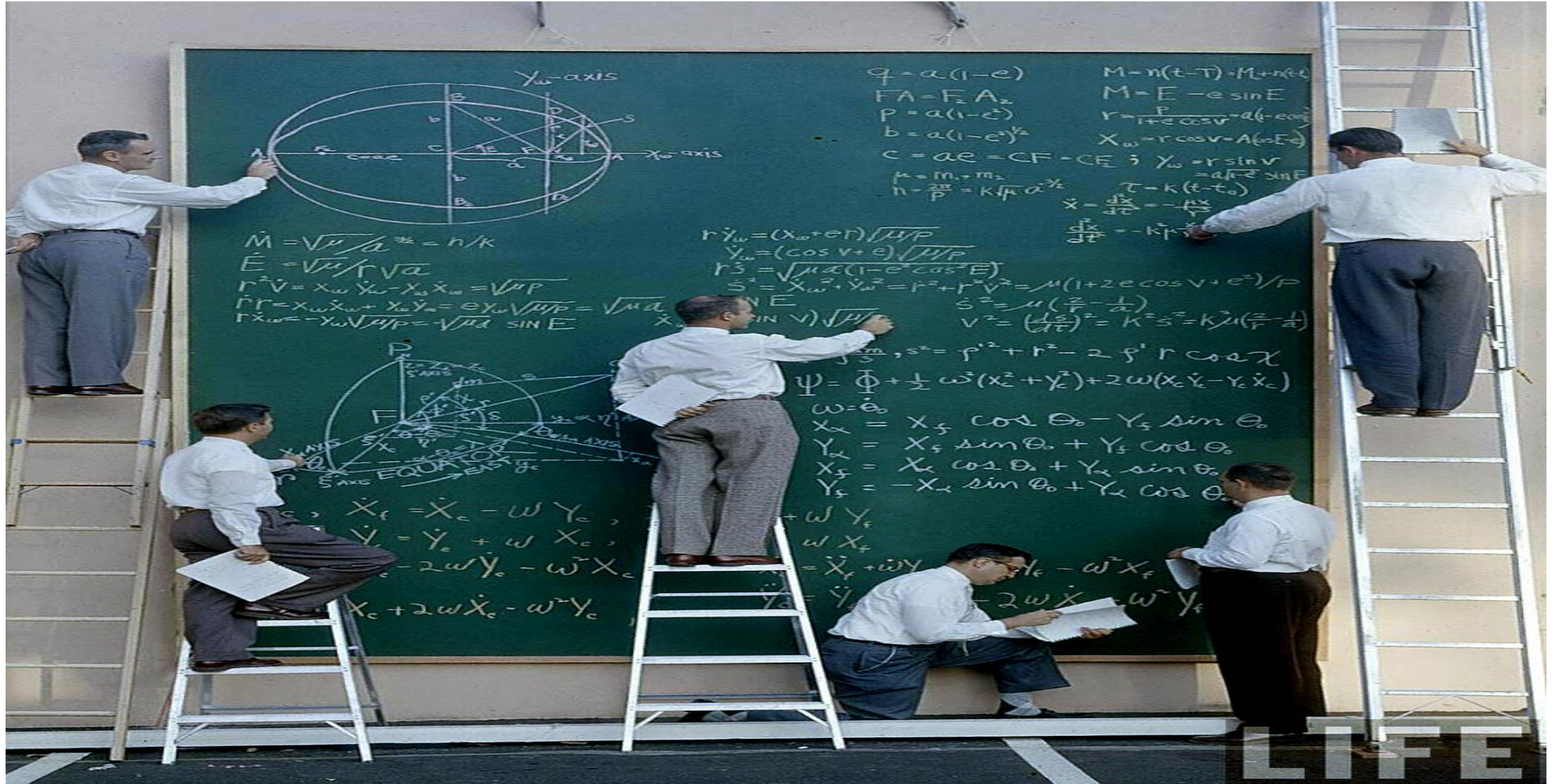
DIFFERENT RESULTS?

- Diversion: emphasis on less disposal
- Increase recycling: emphasis on more tons recycled
- Conserve resources: emphasis on recycling right
- Lower greenhouse gas emissions & energy consumption: emphasis on the big picture

WHAT ARE RECYCLABLES?

- Commodities w/fluctuating values
- Raw materials
- Inconsistent quality (curbside)

NOT ROCKET SCIENCE



LIFE

GARBAGE IS EASY, RECYCLING IS HARD

- Behavior change
- Culture
- Patience & education & consistency

THE GOOD NEWS



POSITIVE TRENDS

- 18 new paper mills or new machines using recycled fiber either in operation or on the way since January 2018
- 7 plastic recycling facilities now announced, one operating
- Chemical recycling
- Circular economy
- Sustainable materials management

SUSTAINABLE MATERIALS MANAGEMENT



SMM AT THE STATE LEVEL

- Oregon
- Maryland
- Washington

WHAT IS OUR ULTIMATE GOAL?

- Recycling?
- Less environmental impact?

CHALLENGING TIMES

- Recycling will survive
- Next two to three years challenging
- Domestic capacity increasing
- Did we learn anything?

CONTACT INFO

- Chaz Miller

chazmiller9@gmail.com

301-346-6507