

# Capacity of the Marketplace and Availability



building  
rural  
and  
urban  
infrastructures



**Southeastern States Regional In-place Recycling Conference**

**Atlanta, Georgia – September 1<sup>st</sup>, 2011**

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# Presentation Outline

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- ◆ Introduction
- ◆ Pressures - Concerns
- ◆ Capacity of the Marketplace
- ◆ Availability of:
  - Contractors
  - Equipment & Technology
  - Product & Materials
- ◆ Resources Available



# Introduction

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- ◆ To know the capacity of the marketplace we must first understand it.
- ◆ What is the environment of the marketplace?
- ◆ How does recycling fit into this environment?



# Introduction

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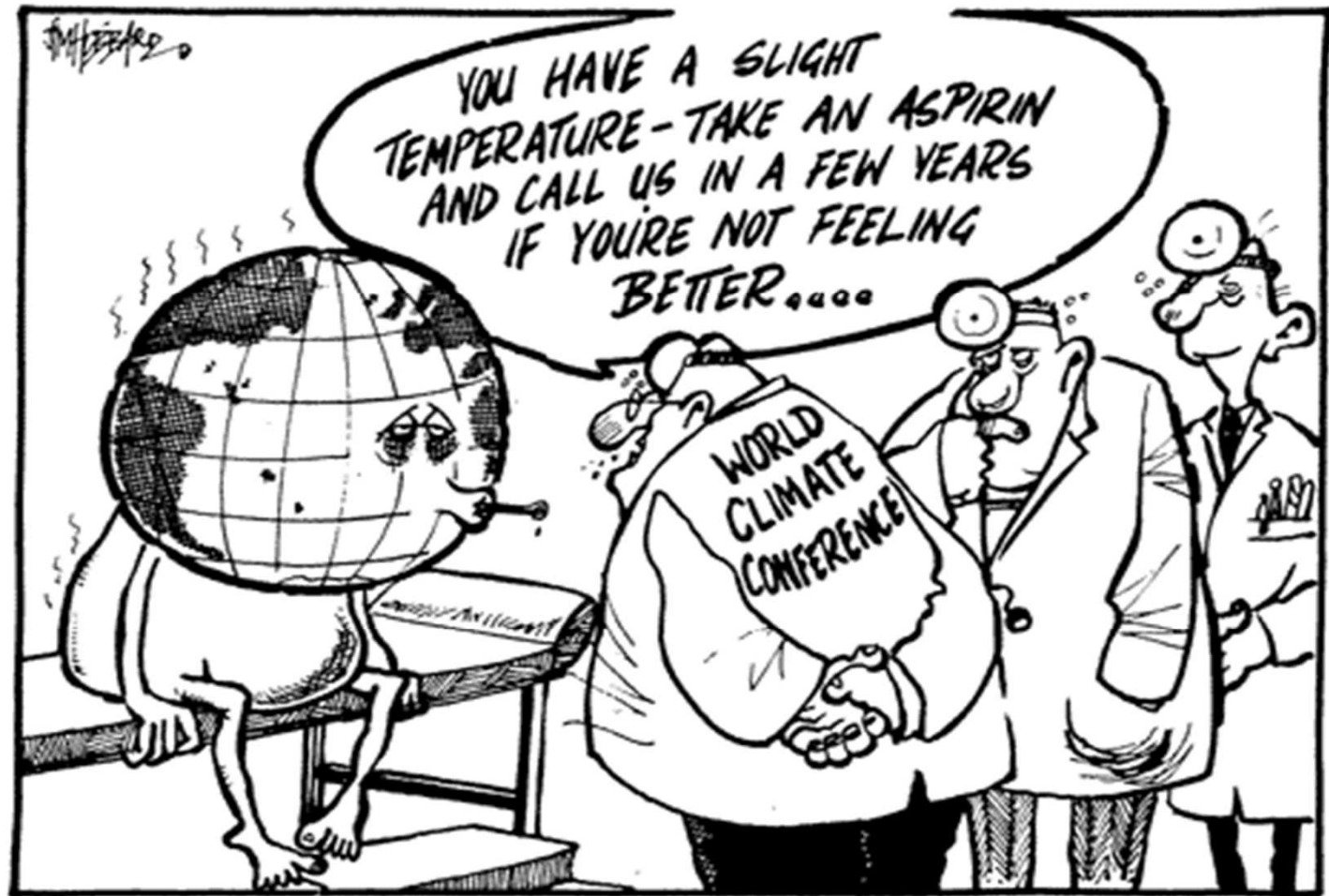
- ◆ Sustainability is the new **GREEN**
- ◆ Taking steps beyond compliance to continually improve the Economic, Environmental and Social performance of a business, product or service.



Triple Bottom-line



# Environmental Pressures



# Design Pressures

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- ◆ Take an adaptive approach
  - Change design standards (i.e. increase pipe sizes and increase rip rap to deal with more frequent large storm events).



# Design Pressures

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- ◆ Mitigation - reduce impact of:
  - Construction Practices
  - Materials



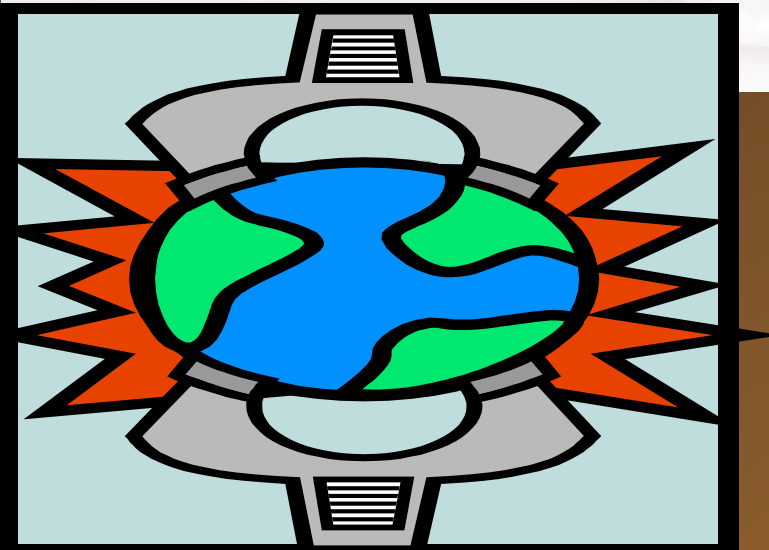
# Monetary Pressures

- ◆ Fix more with less
- ◆ Produce new materials from old.
- ◆ Treat an old road as an asset
- ◆ At least worth it's weight in GAB
- ◆ 1 mile = \$112k!
- ◆ Mine the existing materials.





# Pressure to find solutions



INNOVATION  
SUCCESS  
EVALUATION  
DEVELOPMENT  
GROWTH  
SOLUTION  
PROGRESS  
MARKETING



# Solutions for the Marketplace

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- ◆ Design (adaptive or mitigation) and construct utilizing practices that are sustainable, thereby balancing environmental, social and economic factors while ensuring technical performance.
- ◆ Capacity has been created in the marketplace because we have contractors, product and material suppliers, equipment manufacturers and owners who believe in these solutions.



# Solutions that achieve...

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## ◆ Sustainable development

- development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

*UN World Commission on Environment and Development (WCED) "Our Common Future"  
(The Brundtland Report)*



# ***Cold In-place Recycling***



**Reduced Carbon Footprint**

# *Full Depth Reclamation*



**Reduced Energy Consumption**

# *Hot In-place Recycling*

**Decreased Virgin Material**



# Owner's Concern

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- ◆ If I call the work, if I tender the work...
- ◆ Will I get bidders?
- ◆ How much can I call?
- ◆ If I bid it – will they come?





# FIELD OF DREAMS

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Reproductio  
www.Cartoonistock.com



"EARN IT... AND THEY WILL COME."



"He heard a voice saying:  
'If you build it they will come.' "

search ID: ysh0190



# Reality

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- ◆ Before it has been built...they have come



# Market Capacity

- ◆ Southeast has a unique situation
- ◆ Incredible capacity exists even before there is a full steam ahead market.
- ◆ Has created a very competitive marketplace
- ◆ Good for owners



# Market Capacity

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- ◆ How has it been created?
  - Capacity has been created in the marketplace because we have contractors, product and material suppliers, equipment manufacturers and owners who believe in these solutions.
  - Capacity has been created because the necessary components exist in the Southeastern USA



# Availability of Contractors

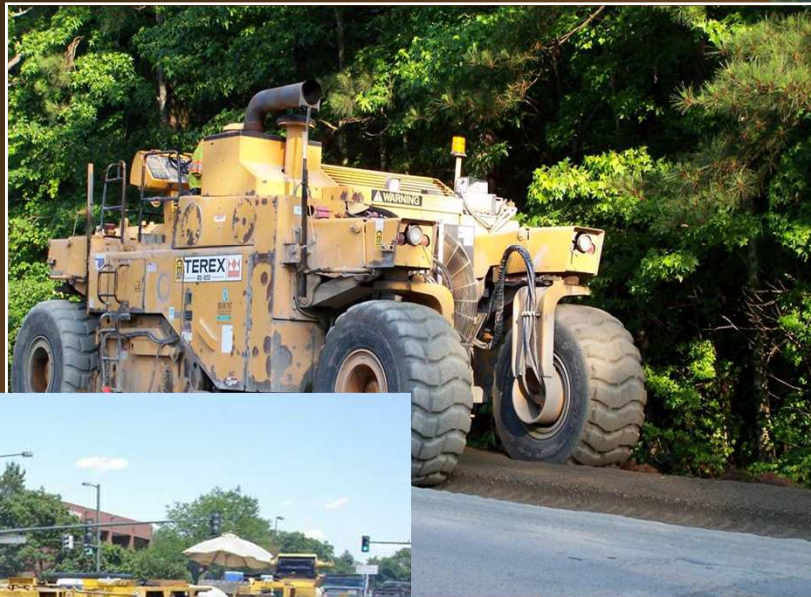
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- ◆ Reputable contractors
- ◆ Quality Contractors
- ◆ Spread throughout Southeast or...
- ◆ Have low-boy – will travel to Southeast



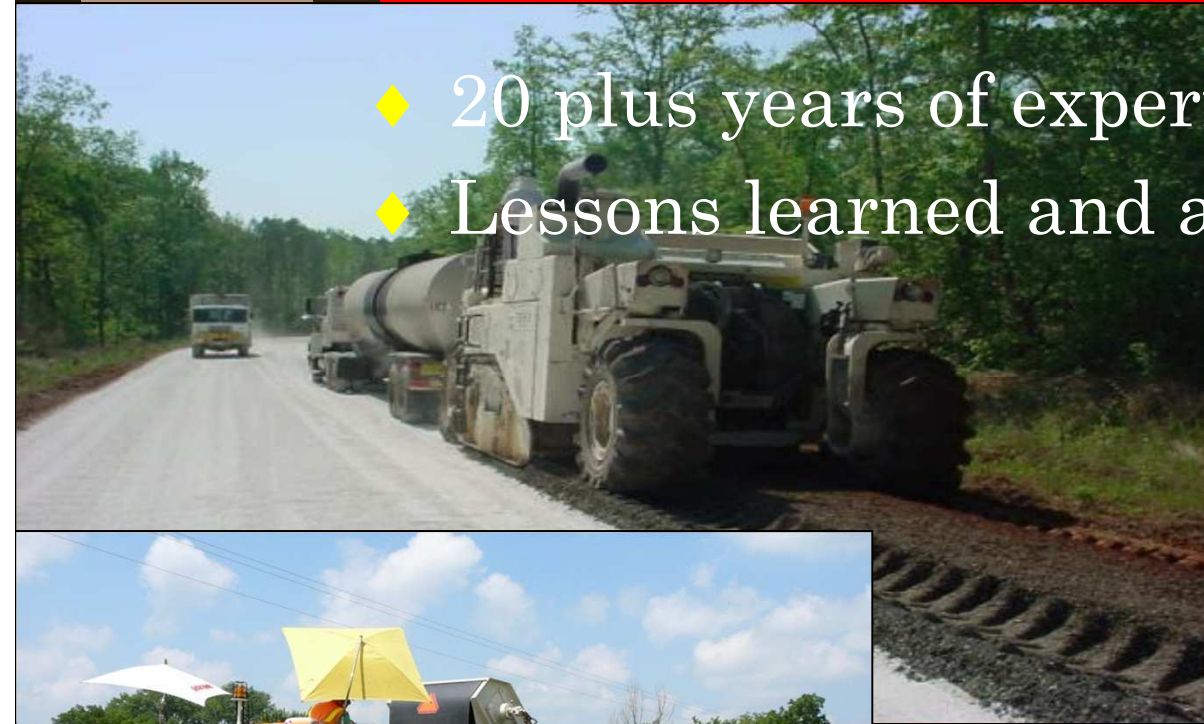
# Availability of Contractors

- ◆ All disciplines



# Experience of Contractors

- ◆ 20 plus years of experience.
- ◆ Lessons learned and applied



# Availability of Equipment

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- ◆ All major equipment manufacturers and suppliers have a presence in the Southeastern United States
- ◆ Take a look at our sponsors & exhibitors

**CATERPILLAR®**



# Availability of Technology

- ◆ World class expertise, support & training
- ◆ First rate technology in our own back yard.
- ◆ Example – 2 major CIP manufacturers within 4 hours of Atlanta





# Availability of Materials

- ✓ Lime
  - ✓ Fly Ash
  - ✓ Portland Cement
  - ✓ Asphalt Cement for expanded
  - ✓ Asphalt Emulsions
  - ✓ We've got them all!
- ...and more



# Resources Available

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- ◆ Pavement Recycling and Reclaiming Center (PRRC)
  - Executive Director Dr. Stephen Cross
  - Technical Director Dr. Dragos Andrei
- ◆ Asphalt Recycling & Reclaiming Association (ARRA)
  - Basic Asphalt Recycling Manual (BARM)
  - Industry Professionals
  - Training Courses



Asphalt Recycling & Reclaiming Association

*"We wrote the book on Asphalt Recycling"*



## Semi-Annual Meeting

**November 7 - 8, 2011**

Benson Hotel  
Portland, Oregon

Promoting Asphalt Recycling & Reclaiming since 1976

For reservations call 888-523-6766 or 503-228-2000, or email your request to [reservations@bensonhotel.com](mailto:reservations@bensonhotel.com). <http://www.bensonhotel.com/>



[www.arra.org](http://www.arra.org)

Asphalt Recycling & Reclaiming Association

#3 Church Circle - PMB 250  
Annapolis, Maryland 21401

Phone: 410-267-0023  
Fax: 410-267-7546  
E-mail: [cerone@arra.org](mailto:cerone@arra.org)



ARRA is part of the Pavement Preservation & Recycling Alliance

**Register now for the ARRA  
Semi-Annual Meeting  
in Portland, Oregon**

**Visit the ARRA website at  
[www.arra.org](http://www.arra.org) for complete  
registration information.**

# ARRA is a founding member of the Pavement Preservation & Recycling Alliance



Along with partners, the Asphalt Emulsion Manufacturers Association  
and the International Slurry Surfacing Association



# Come join ARRA's best

**Asphalt Recycling & Reclaiming Association**  
 #3 Church Circle - PMS 250  
 Annapolis, Maryland 21401 USA  
 410-267-0023 • Fax 410-267-7546 • krissoff@arra.org • www.arra.org



## ARRA MEMBERSHIP APPLICATION

Please complete the membership application form below and mail today. If you would like additional information, call or write to ARRA at the address listed above.

Please enroll the following as a

Contractor  Supplier  Affiliate

**Member of the Asphalt Recycling & Reclaiming Association with all rights, privileges, and benefits thereof:**

Company \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ Fax ( ) \_\_\_\_\_  
 Country ( ) \_\_\_\_\_  
 Telephone ( ) \_\_\_\_\_  
 E-Mail Address \_\_\_\_\_  
 Website \_\_\_\_\_

**Official Representative To ARRA:**  
 Name \_\_\_\_\_  
 Title \_\_\_\_\_

**Alternate Representative:**  
 Name \_\_\_\_\_  
 Title \_\_\_\_\_

**Our firm is engaged in the following:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_  
 Sponsor \_\_\_\_\_

(See reverse for membership categories, qualifications, fees and payment information)

## ARRA MEMBER TYPES

**Contractor Membership.....\$3,000 Annually**  
 Contractor membership in ARRA is limited to persons or firms engaged in the business of asphalt recycling and reclaiming.

**Supplier Membership.....\$3,000 Annually**  
 Supplier membership is available to persons or firms furnishing goods or services to the asphalt recycling and reclaiming industry.

**Affiliate Membership.....\$300 Annually**  
 Affiliate membership is available to consulting engineers, professional trade associations and societies, educators and government officials having an interest in the asphalt recycling and reclaiming industry.



Visit our Website at [www.arra.org](http://www.arra.org)

**PLEASE REMIT PAYMENT FOR YOUR FIRST YEAR'S DUES WITH THIS APPLICATION.**

Please indicate payment method:  
 Check  Mastercard  VISA  American Express

Account # \_\_\_\_\_ Expiration Date \_\_\_\_\_  
 Name as it appears on card \_\_\_\_\_  
 Signature \_\_\_\_\_

**FEDERAL TAX ID # 54-1922453**  
Contributions or gifts to ARRA are not deductible as charitable contributions for federal income tax purposes; however, dues, publications, advertising, and registration fees are generally deductible as ordinary and necessary business expenses. Check with your accountant.

Join online at [www.arra.org](http://www.arra.org) or print out the pdf application and fax to 410-267-7546



# Conclusions

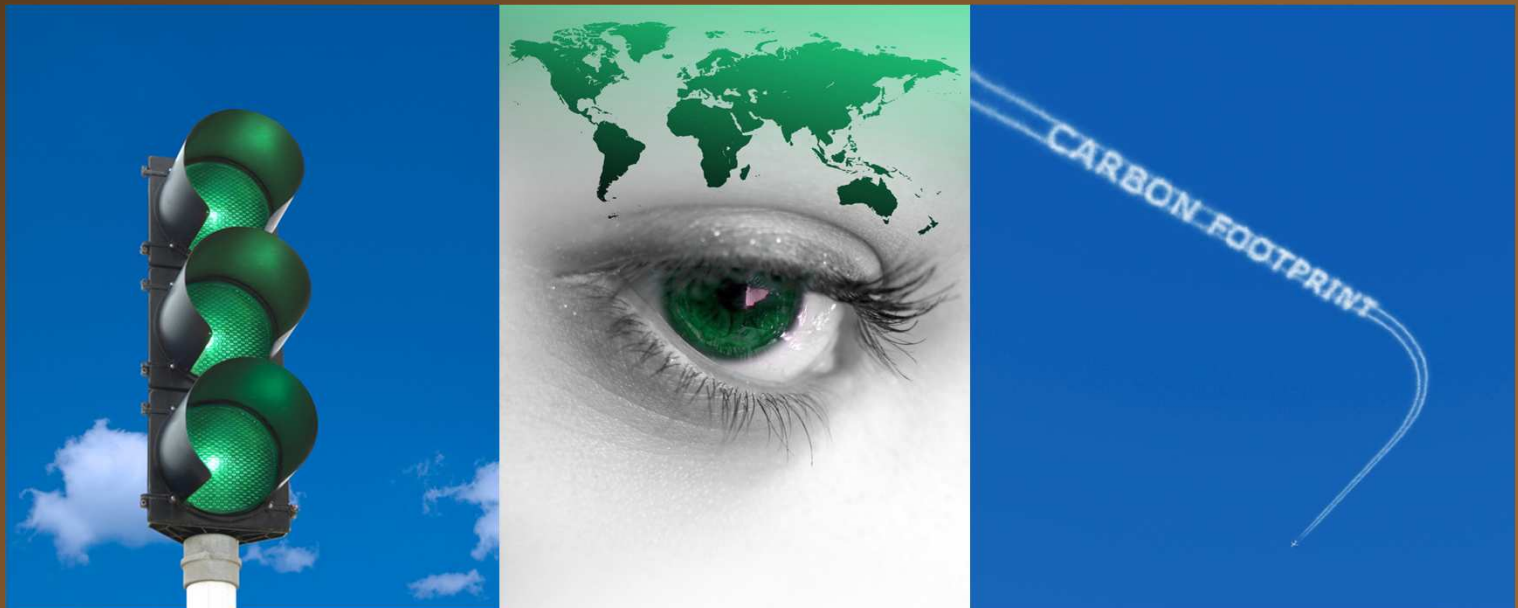
- ◆ Pressures exist that create the market
  - Design (Adapt vs. Mitigate)
  - Environmental (Climate Change)
  - Monetary (Do more with less \$\$\$)
- ◆ Sustainability is the new **GREEN**
- ◆ Capacity has been created at all levels to deliver solutions that meet the needs of the present without compromising the ability of future generations to meet their own needs.





# Conclusions

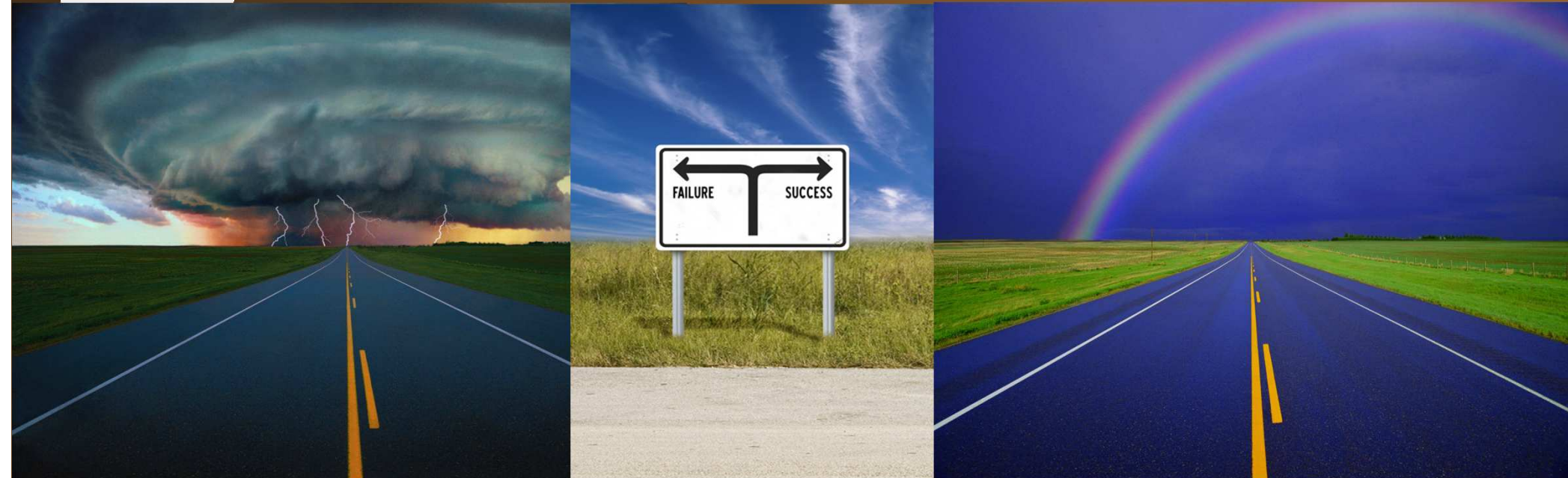
- ◆ Go ahead, keep building – they have come.
- ◆ Tremendous capacity in the market to increase all forms of in-place recycling.
- ◆ Components for a competitive marketplace exist - availability.



# Final Thoughts



- ◆ Vast amount of knowledge and experience exists in this market, throughout, the U.S., North America and the World.
- ◆ Let's continue to tap into those resources and expertise – no need to go it alone.





# Thank-you – Questions?



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