

# ISAP TC APE Working Group 2 Cold Recycling of RAP

**Kim Jenkins**  
Chair

Parma, Italy (EATA2010)  
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**Thank you Wirtgen for  
Sponsoring Lunch & Beverages**



# Minutes from TRB 2010: ISAP TC Asphalt Pavement and Environment

- WG1 on Recycling (Chantal de la Roche)



**WG1**

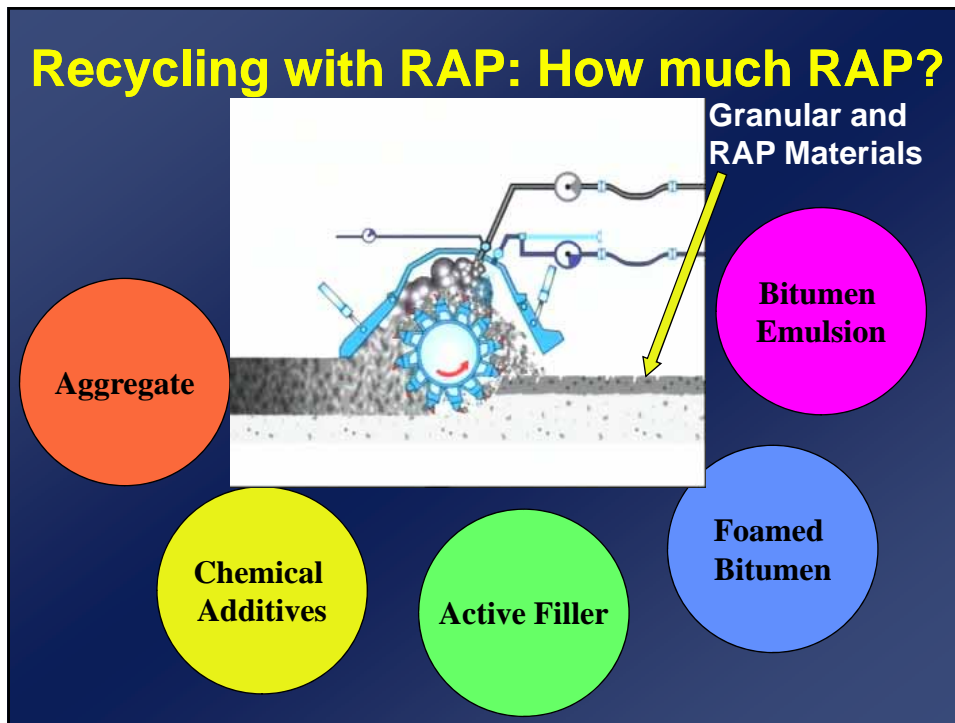
**Hot Recycling-RAP**  
(Peter Sebaaly)

**WG2**

**Cold Recycling-RAP**  
(Kim Jenkins)



## Recycling with RAP: How much RAP?



## Use of RAP Worldwide (2005)

COUNTRY	RAP in HMA
• South Africa	• < 5%
• France	• 13%
• Australia	• 50%
• Netherlands	• 75%
• USA	• 70%
• Germany	• 82%
• Japan	• 99%

## Global Trends: Cold Recycled RAP Xi'an, China



## Global Trends: Cold Recycled RAP I80, California, USA



## Alternatives



## Focus of presentations

- Research focus areas (Global)
  - Laboratory
  - Field (APT and LTPP)
- Key findings and developments
  - Mix design
  - Structural design
  - Specifications
- Publications, documents and manuals



## **Continental issues to be highlighted**

- **100% RAP versus Granular-RAP blends**
- **Emulsion vs Foam Bitumen Selection**
- **In Place versus In Plant mixing**
- **Active filler: Type and application**

## **Issues for discussion**

- **Barriers to Cold Recycling of RAP?**
- **Is current research addressing needs?**
- **Distress mechanisms (rut, fatigue, dur)?**
- **Key areas for future research?**
- **Harmonisation of mix & structural design?**
- **Global research cooperation?**
- **Future activities of WG2?**