



**Southeastern Asphalt User/Producer Group 2024  
2024 Annual Meeting**

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**The Sustainability White Paper on Bitumen Emulsions:  
Construction and Content**

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**THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION  
AND CONTENT**

- How and why this process was started?
  - IBEF surveyed and listened to members about the importance of sustainability and producing a white paper
  - IBEF ExCo started the process to construct a white paper on sustainability
  - Task Group formed
  - Task Group met Monthly for almost 1.5 years, with the June 2024 deadline for the white paper

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**8<sup>th</sup> International Symposium on Asphalt Emulsion  
Technology 2024 – Washington DC**

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**THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION  
AND CONTENT**

- A little bit about IBEF (International Bitumen Emulsion Federation)
  - IBEF was initiated in 1993 at the 1<sup>st</sup> World Emulsion Congress, and founded in 1996. (web site: [www.ibef.net](http://www.ibef.net))
  - Headquartered in Paris, France
  - AEMA is a Full Member of IBEF
  - Bitumen Emulsion – Asphalt Emulsion






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**THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION  
AND CONTENT**

- How and why was this process started?
  - Task Group Construction – Numerous associations and member companies across the globe
    - Xavier Guyot, Etienne Lebouteiller, Hamidreza Sahebzamani, Carl Robertus, Brice Delaporte, Phil Hendricks, Dennis Day, Patricia Lameda Febles, Lucia Miranda Perez, Stephane Charmot, Lucia Miranda Perez, Abdeltif Belkahia, Arlis Kadrmass, Stormy Brewster, Mike Tyree, and George Mariani



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**THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION  
AND CONTENT**

- How and why was this process started?
- Construction of the Task Group for the White Paper
- Content of the White Paper



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**THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION  
AND CONTENT**

- Content of the White Paper
  - Beginning of Construction
    - Gathering of Documents and ability to share content with members
    - Structure an outline for the document
    - Continuously review to make sure that information is available for content
    - Define main pillars and sub-pillars for the document






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THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION AND CONTENT

- Content of the White Paper
  - Three main pillars
    - Pavement Durability
    - Structural Improvement
    - Environmental and Social Impact






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THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION AND CONTENT

- Content of the White Paper
  - Structural Improvement Pillar
    - Cold In-Place Recycling (CIR)
    - Cold Central Plant Recycling (CCPR)
    - Base Stabilization and Full Depth Reclamation
    - Cold and Half Warm Recycling
    - Cold Patching






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THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION AND CONTENT

- Content of the White Paper
  - Pavement Durability Pillar
    - Prime and Bond Coats
    - Fog seals
    - Surface Dressings (Chip Seals) and Scrub Seals
    - Microsurfacing & Gravel Emulsions
    - Combination Treatments






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THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION AND CONTENT

- Content of the White Paper
  - Structural Improvement Pillar
    - Cold In-Place Recycling (CIR) Example
      - Use of existing materials from the road
      - HSE benefits from being done in place
      - VOC reduction, and GHG reduction from processing cold
      - Cost effective compared to traditional rehabilitation or reconstruction techniques






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THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION AND CONTENT

- Content of the White Paper
  - Pavement Durability Pillar
    - Surface Dressing (Chip Seals) example from white paper
      - Life extension when applied at the right time
      - Cost savings when used in a maintenance program
      - Sealing pavement to prevent water damage
      - CO<sub>2</sub> reduction compared to no treatments






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THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION AND CONTENT

- Content of the White Paper
  - Environment and Social Impact Pillar
    - Saving energy and lowering carbon footprint
    - Recycling Options
    - HSE Benefits
    - Social Impact
    - Economics





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THE SUSTAINABILITY WHITE PAPER ON ASPHALT EMULSIONS: CONSTRUCTION  
AND CONTENT

- > Content of the White Paper
  - > Final Document
    - > Over 60 papers referenced in the white paper, photos added for emphasis
    - > Each task group member gave input and wrote sections of the white paper
    - > Review team looked over document to finalize
    - > Document sent to editor to make sure it had a very professional look
    - > Final Document edited by IBEF members for release



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**THANK YOU**

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