Warm mix asphalts
The French situation

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Summary

1. Context
2. The role of Sétra
3. Objectives
4. Work structures
5. IDRRIM technical guide
6. Evaluation of performances
7. Quantities produced since 2008

1. Context
- 03/25/2009: Voluntary commitment agreement
- Signed by:
- Objectives:
  • Preserve unsustainable resources
  • Decrease greenhouse gas emissions and energy consumption
  • Improve corporations' environmental performance
  • Take part in research and innovation development

These commitments lead to the development of new techniques, including warm mix asphalts.

2. The role of Sétra
- Supporting operational services
  - Who?
    • Scientific and technical (public) network,
    • Owners and technical engineers (public and private),
  - How?
    • Elaboration of technical reference documents → first step to update the French doctrine concerning warm mix asphalts,
    • Integration of these techniques in the normative reference,
    • Organization of technical workshops to promote exchanges between actors

3. Objectives
- Promote warm mix asphalts
  • Maintain the sustainability of infrastructure and quality of road network
  • Optimize maintenance operations (saving natural and financial resources)
  • Reduce workers' exposure to bitumen fumes

- Significant work concerning the evaluation of warm mix asphalts, their characteristics and performances

4. Work structures
- IDRRIM (Partenarial French institute concerning streets, roads, and infrastructures of mobility)
  • Creation of working groups dealing with topics targeted by the voluntary commitment agreement: warm mix asphalts, recycling...
  • Consideration of working conditions of workers (working group on health and recycling)
  •...
- Standardization committees (WMA are not standardized yet)
- Device of road innovation support
- Instances of the Ministry of Ecology and Sustainable Development (public concertation)
- Union of the French road industry (private concertation)
5. IDRIM Guide

- IDRIM technical guide concerning warm mix asphalts:
  - Description of the different techniques: additive, foaming, …
  - Recommendations for use and implementation for master builders and building owners.
  - Description of additives used in formulas (and the associated safety sheets to be provided by the manufacturer).
  - Contract monitoring

- Technical guide in progress, expected in 2012
  - Important because of the normative vacuum on the subject
  - Eagerly awaited by the whole profession

6. Evaluation of performances

- Monitoring the quality of national road network
  - Road network database
  - Identification and location of projects completed in warm mix asphalts
  - Exchange groups of contracting authorities

- Device of road innovation support – on roads or highways
  - Monitoring experimental sections
  - About 7 products currently receive these devices: technical monitoring before, during and after completion of projects (evaluation of surface characteristics and performances)
  - 2 warm mix products certified in 2011
  - At least 3 certificates between 2005 and 2008

7. Quantities produced since 2008

- Production multiplied by 3 since 2008
- Proportion is still low compared to hot mix asphalts: ~ 2.5%

Thank you!