

Sétra
Service d'études sur les transports, les routes et leurs aménagements

Warm mix asphalts

The French situation

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Australian asphalt pavement association study tour in Europe

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Présent pour l'avenir

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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

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1. Context

✓ 03/25/2009 : Voluntary commitment agreement

✓ Signed by:

LES TRAVAUX PUBLICS DE FRANCE

✓ Objectives :

- Preserve unsustainable ressources
- Decrease green house gases 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.

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2. The role of Sétra

→ **Supporting operational services**

✓ Who?

- Scientifical 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

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3. Objectives

✓ Promote warm mix asphalts

- Maintain the sustainability of infrastructure and quality of road network
- Optimize maintenance operations (saving natural and financial ressources)
- Reduce workers exposure to bitumen fumes

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

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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)

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5. IDRRIM Guide

- ✓ IDRRIM 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

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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

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7. Quantities produced since 2008

Year	Thousands of tons of WMA
2008	500
2010	1000
2012	1500

Source : IDRRIM

- Production multiplied by 3 since 2008
- Proportion is still low compared to hot mix asphalts : ~ 2,5%

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Thank you !

**A 75 – Béziers-Valros - Enrobé 3^E
GB et BBSG- sept 2008**

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