

How to procure Recycled Asphalt?

Overview of the work of Working
Group on Circular Construction

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European
Commission

WORKING GROUP: introduction



Aim:

to develop an understanding of the necessary pre-conditions for successful circular infrastructure procurement:

- identify barriers from the contractors' side,
- understand legal conditions,
- understand national context that may hinder international cooperation and successful operating conditions.

→ compare procurement strategies

WORKING GROUP: introduction



The working group focused on **procurement strategies likely to be applicable in many Member States.**

Focus:

- benefits and practicalities of **using performance-based award criteria** to allow bidders flexibility to offer innovative solutions;
- methods of asphalt production (e.g. **indirect heating**);
- circularity vs sustainability: **trade offs?**

Challenge the sector faces: resource scarcity and rising energy costs.

- market dialogue has brought attention to the links between the current energy crises and material scarcity and the industry's interest in offering more innovative solutions **to remain profitable.**
- WG identified the need for discussions on adjusting procurement approaches to **promote innovative solutions while minimising the risk of lower quality and longevity.**

TAKEAWAYS: Lessons Learnt

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Zurich

Zurich plans to include the required minimal and maximal percentages of recycled asphalt in every project's 'general provisions'. It intends to meet the allocation of reclaimed asphalt according to the standards published in the 2021 *Recycling of asphalt aggregates and use of warm asphalt – Guide to good practices*.

In Switzerland, recycled and warm mixes have already been used and implemented in road construction projects. However, warm manufacturing technology is less known than recycling asphalt aggregates. There are also projects where warm manufacturing and recycling technologies have been combined. Currently, references relating to recycled and warm asphalt are available at all levels (municipal, cantonal and national) and for all pavement layers (from the base layer to the surface layer). It is still difficult to find references regarding warm manufacturing technology as it is still little known in Switzerland and rarely used. Most examples available in Switzerland were carried out within the framework of the PLANET research project and in the canton of Vaud.[20]



[21]

5. How to support innovation within circular asphalt?

Not all EU countries are at the same stage regarding asphalt reuse and recycling. EAPA recommends Public Buyers to stimulate the use of sustainable solutions by asking for higher reclaimed asphalt content in the asphalt material. At the same time, the industry's position is that Buyers should not push for a very high share of recycled material. The set limits on the percentage of reclaimed material resulting from strict regulations or specifications on the material itself can limit competition

solutions that could enable increasing the amount of recycled asphalt without compromising the quality. Studies are also underway throughout Switzerland to analyse the recycling rate of asphalt aggregates and to identify the various existing recycling, disposal and treatment routes.



[14]

3. Opportunities and risks: overview and examples

Circular asphalt has a good potential to contribute to reducing road construction's carbon footprint and, therefore, allowing cities to reach their CO₂ emissions reduction targets. However, there are also limitations. Both have been described in detail, for example, in the *Recycling of asphalt aggregates and use of warm asphalt – Guide to good practices* (in the chapter "Factors hindering the development of recycled asphalt and warm asphalt") and in the *Recommendations for Road Authorities to achieve circular economy goals through the reuse and recycling of asphalt* by European Asphalt Pavement Association (EAPA).

Circularity or sustainability?

The working group members emphasised their objective to ensure sustainability and improve the understanding of the degree to which cities can accept risk factors affecting roads' longevity. The latter could result in more frequent maintenance

JOINT DECLARATION OF INTENT



BIG BUYERS FOR CLIMATE & ENVIRONMENT

**Working Group on Circular construction - roads,
infrastructure, public space**

Joint Declaration of Intent

Date of publication: 28 October 2022

This is a joint Declaration of Intent by the Members of the Big Buyers for Climate and Environment's Working Group on Circular Construction. The document aims to indicate the unmet need in the field of road construction, in particular asphalt pavements. It aims to provide Public Buyers and the market with a recommended direction of investments in road construction, as regards the tendering approaches and issues that require further analysis to address the identified risks and the potential for broader use of circular asphalt¹.

The Members of the Working Group recognise that in order to offer new high-quality sustainable solutions while remaining competitive and profitable, the asphalt industry needs to plan investments in innovative technologies with a certain degree of confidence in the expected volume of contracts, both as regards the scope, timeline and the conditions applied in future tenders. Such conditions would refer to, among others, the requested minimum and maximum percentages of reclaimed material in asphalt, if applicable, and the methods of bids evaluation and contract awarding under the Public Buyers' procurement processes most commonly used in each member state. At the same time, the Members recognise that asphalt production is heavily dependent on local conditions, i.e., the availability of material and national regulations that vary across Europe.

The aim of the Working Group on Circular Construction

The Working Group on Circular Construction is one of four working groups established under the European Commission's Big Buyers for Climate and Environment initiative, coordinated jointly by ICLEI and Eurocities. The initiative

¹ Asphalt that consists of reclaimed, reused or/and recycled material (see "Definitions").

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MAIN RECOMMENDATIONS



Reduce CO₂ emissions from the implementation of construction projects:

(1) further **promotion of low-temperature asphalts** by indicating appropriate contract provisions or award criteria

(2) determination and evaluation of the CO₂ emissions of construction materials through **environmentally-related award criteria**

(3) **increase in the proportion of reclaimed and thus recycled asphalt**, if allowed by local regulations.

MAIN RECOMMENDATIONS



- Accelerate innovation through a **performance-based procurement approach**, Product Category Rules and Environmental Product Declarations.
- Create opportunities to increase the amount of reclaimed asphalt in road construction by **matching supply and demand while minimising transportation of materials**.
- Work towards developing, evaluating and **adapting verification processes of the current local standards and norms** regulating the percentage of reused or recycled asphalt.
- Work towards **revising regulations that categorise asphalt as waste**.
- **Improve dialogue, information-sharing and mutual understanding** with market actors

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Current Signatories:

The City of Haarlem
The City of Lisbon
The City of Rotterdam
The City of Valladolid
The City of Vienna
The City of Zurich
Bezirksamt Neukölln von Berlin
Bordeaux Métropol
Nantes Metropolis
Wallonie - Secrétariat général - Direction du
Développement durable
Belgian Post
Brussels Mobility
Conference of European Directors of Roads (CEDR)
Rijkswaterstaat

Examples from WG members



- **Rotterdam** and **Lisbon** have progressed towards pilot tenders using performance-based selection criteria to allow bidders more flexibility.
- **Vienna** is going to work on a new strategy for procurement rules and to reduce asphalt as part of lowering temperatures in the city.
- **Bordeaux metropole** has declared that their goal is to recycle 70% of construction waste in all projects.
- **Haarlem** uses the environmental cost indicator to compare various scenarios and the 'CO2 prestatieladder' – a certification scheme for builders to lower their CO2 emissions.
- **Toulouse** plans to launch a 'Reuse platform' at the scale of the metropolitan area.

MORE INFORMATION

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The Joint Declaration of Intent
and the Lessons Learnt Report
can be downloaded from the
**Public Buyers Community
Platform:**

[Click here](#)

Thank you

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www.bigbuyers.eu



The Big Buyers is a European Commission platform for promoting collaboration between big public buyers in implementing strategic public procurement for sustainable and innovative goods and services.