

# **BIG BUYERS**

## **FOR CLIMATE & ENVIRONMENT**

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

#### **Joint Declaration of Intent**

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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 asphalt<sup>1</sup>.

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

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

promotes innovation through linking public buyers with market actors and identifying where joint actions, dialogue and international cooperation among public buyers across Europe can successfully trigger a positive impact on the market.

The Working Group on Circular Construction has brought together municipalities, road authorities and market actors from across Europe open to changing existing road construction methods to favour more sustainable practices. The work of the Group included site visits and dialogue with market players (individual producers and their national and international associations<sup>2</sup>). The Group cooperated to collectively raise awareness and improve the common understanding of barriers, challenges and promising solutions.

### **Position of the Public Buyers**

The Members of the Working Group recognise that the public expenditures allocated to the use of asphalt for road construction are relatively high and so are the associated social and environmental impacts. The Members thus aim to highlight to market actors that there remains an unmet need for asphalt road construction that is economically and environmentally sustainable.

The Members also recognise that road construction projects should foresee that the material reclaimed during maintenance or other construction work is used for producing asphalt for future projects. This requires planning to reuse or recycle<sup>3</sup> the material already since the stage of its production (e.g., using materials that are suitable for reusing or recycling). This is however currently not possible in all member states due to local regulations and in others, the possibility is limited by e.g., suboptimal information-sharing between the Public Buyers and the industry.

The Members acknowledge that the sustainability of asphalt production does not result only from the use of reclaimed or recycled material. It requires, among others, reducing transport distances, changing the type of fuel in the burners of the asphalt mixing plants, introducing new technologies, reducing temperatures of asphalt mixing and layering etc.

Therefore, the Members' objective is to ensure sustainability, with a clear understanding of the degree to which cities can accept risk factors that can affect roads' longevity. This can result in more frequent maintenance leading to increased financial and environmental costs, therefore potentially impacting the cities' overall sustainability targets and the required attention to spending public funds. This priority needs to be addressed by market actors.

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<sup>2</sup>[KWS](#), part of Royal VolkerWessels; [Koninklijke Bouwend Nederland](#), an association of construction and infrastructure companies; Asfaltcentrale Rotterdam facility in Rotterdam; EAPA - European Asphalt Pavement Association (European Association of the national associations).

<sup>3</sup>Asphalt reuse: operation by which reclaimed asphalt (RA) is reincorporated into the pavement, with the aggregates and the aged bituminous binder performing the same function as in their original application; asphalt recycling: operation by which reclaimed asphalt (RA) is used as foundation, fill or road material, with the recovered aggregate and bitumen performing a lesser (or alternative engineering) function than in the original application (source: EAPA).

### **Recognised challenges and areas for action**

The Members of the Working Group recognise that the innovation procurement is complex and the situation in the market varies across Europe, resulting from local conditions (geographic, e.g., access to materials and transport distances, regulatory and in terms of market maturity, e.g., coordination between market actors on the local level).

However, based on the information presented by market actors<sup>4</sup> during market dialogues, the Members recognise that there are major difficulties that increasingly affect Producers and Suppliers in most member states. Since the asphalt industry is very energy-dependent, the rising energy costs, the current economic and supply chain crises, scarcity of resources and the resulting increased production costs present a significant risk for the market and consequently for public projects.

The Group recognizes the need to reduce indirect emissions caused by procurement activities in road construction. Increasing recycling rates in asphalt pavement is seen as a promising reduction opportunity. While the sector is currently under pressure due to the rising energy prices and resource scarcity, the Group wants to accelerate the development and uptake of competitive solutions. Adopting a performance-based procurement approach is seen as a way to react in a flexible manner to these changing market conditions. The use of circular asphalt for road construction should be seen as an element of the strategy to meet the cities' climate targets (particularly important in view of the ambitious targets set by the Fit-for-55).

The Members hence recognise that to adequately react to the pressure on the industry resulting from the significantly rising costs of asphalt production and road construction, the market depends on regulations that allow more flexibility (e.g., to offer new solutions resulting from development of new circular technologies in response to resource shortages).

### **Recommended response by the Buyers:**

The Members would see value in introducing by the European Commission and/or the national level measures that would stimulate the level of ambition as regards the use of circular asphalt, in order to achieve high sustainable solutions everywhere .

The Members recognise that Public Buyers and the industry need to improve dialogue with the legislators to facilitate the process of adapting the EU waste framework directive in line with the changing definition of waste materials.

The Members further recognise the need for Public Buyers to address the current limits on the allowed percentage of reclaimed material imposed by national and regional regulations or resulting from specifications on the material itself or on technical limitations of production sites.

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<sup>4</sup> KWS, EAPA and CEDR

The Buyers can stimulate the use of circular solutions in asphalt by requesting a higher share of reclaimed or recycled content in the asphalt material, recognising that relevant technologies are available. The Members however acknowledge that imposing the exact percent of reclaimed material is not always optimal.

Hence, in order to better support the development of new technologies that improve circularity, the Members recommend that Public Buyers allow bidders more flexibility in terms of the solutions they offer. They can do this by awarding contracts based on performance, i.e., using Product Category Rules (PCRs) and performance-based indicators, including Environmental Product Declarations (EPDs)<sup>5</sup>.

Consequently, the Members see the need for a reference document (guidebook) on PCRs and EPDs that can be used across the EU member states, regardless of the differences in the national regulations and other conditions. The document should support Public Buyers within the procurement process to optimally combine high quality and longevity, stimulate innovation and maximally reduce the amount of asphalt treated as a waste product. Priority should be given to ensuring sustainability and reaching cities' climate goals.

The Members underline that this requires addressing the expertise gaps on the Public Buyers' side by increasing their capacity to evaluate bids to select those that offer innovative solutions that guarantee long-term sustainability, e.g., by using the existing channels of exchanging information on procurement across the EU.

The Members also recognise the need to further evaluate smart methods to optimise the management of supply and demand (e.g., by improving information-sharing and material flow analysis). This can be achieved by improving how the reclaimed material is redistributed and by facilitating the industry's access to information about the flow of reclaimed asphalt. This would support the market actors by enabling better means of analysing where and when asphalt will be reclaimed from and could be transported to production plants in suitable locations in synergy with upcoming investments.

The Members of the Working Group also recommend that Public Buyers work to trigger more market dialogue on the national and local levels (e.g. through working with national or local associations of asphalt producers), so that there is more information gathered and shared on an EU level.

However, the Members emphasise that the Buyers' focus should be to ensure lower environmental impact without compromising durability of construction and posing other risks that would impact the maintenance and accessibility of infrastructure in the long term. Through tendering procedures, the Buyers should require that market actors optimally mitigate such risks.

It has been recognised that some of the climate change-related goals may lead to conflicting approaches resulting in the need to accept certain trade-offs. Therefore, Public Buyers should be aware of conflicting interests that cannot be addressed simultaneously and need a transparent method to assess where priority should be

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<sup>5</sup>Product Category Rules (PCR): set of specific rules, requirements and guidelines for developing Type III environmental declarations for one or more product categories; Environmental Product Declarations (EPD): provides quantified environmental information for a construction product or service on a harmonised and scientific basis. It also provides information on health related emissions to indoor air, soil and water during the use stage of the building. The purpose of an EPD in the construction sector is to provide the basis for assessing buildings and other construction works, and identifying those, which cause less stress to the environment (source: EN 15804+A2).

placed. For example, a requirement for light-reflecting layers may consequently limit the possibility to use recycled materials in these layers (it is not yet clear, how light reflecting layers can be recycled in the future).

## **Declaration**

Since the issue of circular asphalt is in line with broader goals that concern sustainability and adaptation to climate change, it will be taken into consideration as part of implementing our climate and energy action plans. Therefore, we jointly declare that we intend to:

- Reduce the environmental impact of asphalt road construction from cradle to grave, avoiding any problem shifts within the life cycle or comprising its technical performance.
- Accelerate innovation through a performance-based procurement approach allowing eco-efficient solutions, such as dematerialized and zero-emission construction methods, cleaner production of asphalt mixtures, appropriate end-of-life treatment and recycling.
- Create opportunities to increase the amount of reclaimed asphalt in road construction through matching supply and demand while minimising transportation of materials.
- Recommend to the European Commission to cooperate with asphalt pavement contractors and academia to develop a reference manual (guidebook)<sup>6</sup> for sustainable road construction including a performance-based tender evaluation procedure, common Product Category Rules for Environmental Product Declarations and a uniform verification approach for innovative asphalt mixtures and construction methods,
- Facilitate and/or participate in market dialogues and information-sharing in order to optimally respond to future challenges faced by cities and the industry. For example, Lisbon plans to hold local market dialogues, to an extent permitted by the national regulations, to understand the current challenges that affect development of circular asphalt production on the national level while ensuring optimal quality.
- Reduce CO<sub>2</sub> emissions in the implementation of construction projects through (1) further promotion of low-temperature asphalts (mastic asphalts, asphalt concretes) through appropriate contract provisions/award criteria, (2) determination & evaluation of the CO<sub>2</sub> emissions of construction materials through environmentally related award criteria, and (3) increase in the proportion of reclaimed asphalt to increase the proportion of recycled asphalt, if allowed by local regulations.

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<sup>6</sup> The aim of the manual would be to facilitate preparation of tender evaluation criteria that would effectively award performance at the same time reducing risk of compromised quality (the reference manual is not recommended as a requirement but as a support tool for Buyers).

- Launch internal dialogue to consider the use of a performance-based procurement approach using Product Category Rules and Environmental Product Declarations, if permitted by local regulations, in order to allow more sustainable asphalt mixes.
- If applicable, work towards developing, re-evaluating and/or adapting verification processes of the current local standards and norms regulating the percentage of reused or recycled asphalt, in order to boost innovative solutions that guarantee high quality.
- If applicable, work towards revising regulations that currently categorise asphalt as waste, which prevents producers from storing and reusing asphalt reclaimed from road maintenance or reconstruction projects.
- Improve dialogue, information-sharing and mutual understanding with market actors in order to optimally respond to the challenges faced by cities and the industry (for example, by using the existing channels of exchanging information on procurement across the EU and/or sharing data through local online platforms, if possible).

**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

**Invitation to join the group of signatories**

We invite other Public Buyers across Europe who share our ambition and want to support developments in the circular asphalt by participating in the achievement of the economy of scale to sign this declaration. All interested Buyers can contact the Big Buyers Secretariat at [info@bigbuyers.eu](mailto:info@bigbuyers.eu).

## DEFINITIONS:

- **Site-won asphalt:** the material to be recycled, in the form of milled asphalt road layers or as slabs ripped up from asphalt pavements, or being asphalt from reject, surplus or failing production (source: EAPA).
- **Reclaimed asphalt (RA):** the processed site-won asphalt, suitable and ready to be used as constituent material for asphalt, after being tested, assessed and classified according to this standard (source: EAPA).
- **Asphalt reuse:** operation by which reclaimed asphalt (RA) is reincorporated into the pavement, with the aggregates and the aged bituminous binder performing the same function as in their original application (source: EAPA).
- **Asphalt recycling:** operation by which reclaimed asphalt (RA) is used as foundation, fill or road material, with the recovered aggregate and bitumen performing a lesser (or alternative engineering) function than in the original application (source: EAPA).
- **Product Category Rules (PCR):** set of specific rules, requirements and guidelines for developing Type III environmental declarations for one or more product categories (source: EN 15804+A2).
- **Environmental Product Declarations (EPD):** provides quantified environmental information for a construction product or service on a harmonised and scientific basis. It also provides information on health related emissions to indoor air, soil and water during the use stage of the building. The purpose of an EPD in the construction sector is to provide the basis for assessing buildings and other construction works, and identifying those, which cause less stress to the environment (source: EN 15804+A2).

## Big Buyers for Climate & Environment

The core proponents of this joint statement are members of the Big Buyers working group on circular construction, active since May 2019. The Big Buyers Initiative is a European Commission platform for promoting collaboration between big public buyers in implementing strategic public procurement. By working together to aggregate demand and jointly approach market actors, public buyers can maximise their market power and impact, promoting the creation of new solutions more targeted to their needs.

[ICLEI Europe](#) and [EUROCITIES](#) are currently running the initiative on behalf of the [European Commission, DG Internal Market, Industry Entrepreneurship and SMEs \(DG GROW\)](#).

