

Recovered aggregates are articles under Regulation 1907/2006

Written submission in response to the request of the 52nd Meeting of Competent Authorities for REACH and CLP: "*Recovered aggregates: aggregates from construction and demolition waste*"

Background

Recovered Aggregates result from the mechanical processing of a mixture of mineral based demolition waste and waste from the production of mineral construction products and selected demolished types of material such as concrete, aggregates, bricks, asphalt and other minor materials ("*Input Materials*").

Essentially, the manufacturing process mechanically crushes the Input Materials to produce a granular output of a given particle size and shape which is then used for bound and unbound applications. In this process, type of crusher employed, and the processing conditions applied (e.g., rotating speed) determine the properties and shape of the output in view of its specific use.

In March 2024, the ECHA's HelpNet Borderline Working Group's ('BWG') provided the Competent Authorities for REACH and CLP ('CARACAL members') with their paper "*Recovered aggregates: aggregates from construction and demolition waste*".¹ This paper proposes to review the current position under ECHA's "*Guidance on recovered substances and waste*" ('2010 Guidance')² which considered Recovered Aggregates as *articles* under Regulation 1907/2006 ('REACH Regulation') and, thus, exempted to registration (under certain conditions). BWG now argues that Recovered Aggregates should be considered as *substances* or *mixtures*.

Within this context, CARACAL members met on their 52nd meeting held on 1-2 July 2024 to further discuss the findings of BWG and the most appropriate approach to update the 2010 Guidance, considering the ongoing development of EU wide End of Waste Criteria, the possible impacts on recycling operations of CDW and the present implementation. During this meeting, CARACAL members hypothesized that Recovered Aggregates could be considered as (i) substances of Unknown or Variable composition, Complex reaction products, or Biological materials ("UVCB")³ or (ii) mixtures.

To that end, they launched a call for comments to deepen whether (i) Recovered Aggregates are considered as articles, (ii) they are subject to notification obligation under Articles 7(2) and 33 of REACH, (iii) exist differences in implementation where national (and regional) End of Waste criteria apply, as well as the impacts on the circularity of the mineral fraction of Construction and Demolition Waste ('CDW')⁴ and (iv) the exemptions under Article 2(7)(b) and Article 2(7)(d) are generally considered as applicable.

Within this context, an extensive coalition of European manufacturers⁵ of Recovered Aggregates resorted to the assistance of the law firm Fieldfisher (Belgium) LLP to assess the legal regime applicable to Recovered Aggregates in a memorandum and, ultimately, prepare this position paper.

¹ BWG, *Recovered aggregates: aggregates from construction and demolition waste* (2023)

²https://echa.europa.eu/documents/10162/23036412/waste_recovered_en.pdf/657a2803-710c-472b-8922-f5c94642f836

³ "Substances of Unknown or Variable composition, Complex reaction products or Biological materials, also called UVCB substances cannot be sufficiently identified by their chemical composition, because: (i) the number of constituents is relatively large and/or; (ii) the composition is, to a significant part, unknown and/or (iii) the variability of composition is relatively large or poorly predictable, ECHA Guidance for identification and naming of substances under REACH (2023), p. 35

⁴ Following the manufacturing process, Recovered Aggregates should meet the status of "*end of waste*" under Article 6 of the WFD, thus ceasing to be considered as "*waste*". However, EoW criteria are not established in all Member States

⁵ AE-JEPG, Concrete Europe, EAPA, EURIC, FEAD and FIR (for a detailed description, see **Annex I**)

According to the legal and factual assessment contained in the memorandum it has been concluded that **Recovered Aggregates**:

- A. Meet the definition of **articles** under REACH Regulation;
- B. Cannot realistically benefit of the **exemptions** under **Articles 2(7)(b) and 2(7)(d) of REACH Regulation**; and
- C. The potential registration of Recovered Aggregates under REACH Regulation **defeats the purposes of the European Green Deal and Circular Economy**.

(A) Recovered Aggregates should be considered 'articles' under REACH Regulation

Article 3(3) of REACH Regulation defines an article as "*an object which during production is given a special shape, surface or design which determines its function to a greater degree than its chemical composition*".⁶ In other words, an article is an object made from one or more substances or mixtures which was given a specific shape, surface or design during the production process.⁷

According to the 2010 Guidance considers Recovered Aggregates as "*articles*" within the meaning of Article 3(3) REACH Regulation for two main reasons.

First, "*particles from aggregates from construction and demolition waste are produced with specific shape and surface characteristics depending on their application, like e.g. in asphalt pavements*".⁸ Second, the shape, surface or design determine the function of the Recovered Aggregates to a greater degree than their chemical composition.⁹ Therefore, they meet the definition of "article" under Article 3(3) of REACH. Contrary to BWG's views, these findings are accurate, for the following reasons.

(i) Particles from aggregates from construction and demolition waste are produced with specific shape and surface characteristics depending on their application, e.g. asphalt pavements

Recovered Aggregates result from the mechanical processing of a mixture of mineral based demolition waste and waste from the production of mineral construction products and, specially, selected demolition materials such as concrete, aggregates brick, asphalt and other minor materials ("Input Materials"). In this manufacturing process, the type of crusher employed, and the processing conditions applied (e.g., rotating speed) determine the properties and shape of the output in view of its specific use.

EU case-law, Guidance on requirements for substances in articles ("*SiA Guidance*"), Requirements for SCIP notifications' ("*SCIP Guidance*") and EN standards support that an object is regarded as an article when it is given a special shape/surface/design during production.

- **EU case-law**

The case law of the EU Court of Justice¹⁰ establishes that: "*the classification of an object as an article within the meaning of the REACH Regulation turns on three factors. Firstly, the term 'article' refers only to objects which have undergone 'production'. It therefore pertains only to manufactured objects, in contrast to objects in their natural state. Secondly, the production process must give the object in question 'a special shape, surface or design', except for inter alia physical or chemical properties.*

⁶ More information on how to determine if an object fulfils the above definition, including instructions on how to address borderline cases, is included in the ECHA Guidance on requirements for substances in articles, Chapter 2

⁷ ECHA Guidance on requirements for substances in articles (2017), p. 16

⁸ ECHA Guidance on recovered substances and waste (2010), p. 23

⁹ ECHA Guidance on recovered substances and waste (2010), p. 23

¹⁰ Case C-106/14, Fédération des entreprises du commerce et de la distribution (FCD) and Fédération des magasins de bricolage et de l'aménagement de la maison (FMB) v Ministre de l'écologie, du développement durable et de l'énergie, ECLI:EU:C:2015:576

Thirdly, that shape, surface or design resulting from the manufacturing process must be more decisive for the function of the object in question than its chemical composition"(emphasis added). In the case of Recovered Aggregates, the three conditions are met, i.e.:

- They result from the production of objects that are otherwise not present in their natural state (first condition),
- The production process provides a special shape and surface to the object in question (second condition), and
- That shape and surface are more critical for the final product than its chemical composition (third condition).

More specifically, if the 'assembly' of the individual particles of the Recovered Aggregates changed their shape, the resulting bulk of Recovered Aggregates would not exert its function through interlocking. Hence, the bulk of Recovered Aggregates should be considered as an article and the previous steps in the production process should be seen as essential steps for the production of that article.

- **SiA Guidance**

The SiA Guidance identifies the following conditions in order to establish whether an object fulfils the definition of article: (i) assess the object's function (i.e., the "*intended purpose for which an object is to be used*")¹¹ and (ii) establish whether its shape, surface or design, which are given during production, determine its function to a greater degree than the chemical composition.¹²

The SiA Guidance specifies that (i) shape, surface or design should not be confused with physical characteristics that result from the chemistry of materials (e.g., cleavage, density, ductility, melting point, etc).¹³ and (ii) shape, surface or design of articles "*must be deliberately determined and given during a production step*" (emphasis added).¹⁴

Based on the SiA Guidance, Recovered Aggregates are articles in that their shape, and their surface and their design are deliberately formed during their manufacturing process and determine their function to a greater degree than the chemical composition.

- **ECHA Guidance of waste and recovered substances**

The *ECHA Guidance of waste and recovered substances* states that, if one can unambiguously conclude that the shape, surface or design of an object is more relevant for its function than the chemical composition, the object is an article.¹⁵ Furthermore, if a recovered material is supposed to undergo further chemical reaction during the production process, this indicates that the material is a substance or a mixture, rather than an article.¹⁶ Therefore, by a reading *a contrario*, if shape/surface and design appear more relevant than the chemical composition and the object does not undergo further chemical process, it can be considered an article.

¹¹ *Ibid.*

¹² In that respect, 'shape' means "*the three-dimensional form of an object, like depth, width and height*"; 'surface' means "*the outermost layer of an object*"; 'design' means "*the arrangement or combination of the "elements of design" in such a way as to best accomplish a particular purpose of the object, taking into account amongst others the safety, utility/convenience, durability, and quality*"

¹³ *Ibid.*

¹⁴ *Ibid.*, page 17

¹⁵ *ECHA Guidance of waste and recovered substances*, p. 6

¹⁶ *Ibid.*

In the case of Recovered Aggregates, their shape and their surface and design play a major role and there is no chemical reaction during the manufacturing process. Hence, they meet the criteria for being an article.

- **SCIP Guidance**

The individual particles of Recovered Aggregates can be considered as "*fully identical articles*" because they meet the three requirements indicated in the SCIP Guidance, i.e., they have the same (i) function or use, (ii) chemical composition and (iii) physical form (as per the last two requirements, the SCIP Guidance clarifies that "*very small variations in the physical form and chemical composition can exist due to common differences resulting from the production process*").¹⁷

- **EN standards**

The overall bulk of aggregates have to fulfil precise requirements, specifications and properties for each specified use as detailed by CEN/TC 154, e.g. EN 13242 (unbound and hydraulically bound materials), EN 12620 (concrete), EN 13043 (bituminous mixtures). In that respect, it should be noted that REACH Regulation does not define the concept of shape, surface or design and that the SiA Guidance gives a general definition of shape, design and surface¹⁸ without making any distinction between particles and an object made of several particles such as Recovered Aggregates.

(ii) The shape and surface and design determine the function of the Recovered Aggregates to a greater degree than their chemical composition

- **Slight differences are intended to achieve the (interlocking) function**

Recovered Aggregates are manufactured with very slight differences in their form and shape (for example, the angularity¹⁹ of each individual particle). It is precisely these differences that play a key role in their further use and function, since it allows them to interlock with one another, thereby achieving the required stability and resistance. If each particle had the same shape (e.g., all perfect cubes), the interlocking function technically would not be achieved.

On the contrary, features such as density, porosity, crushing strength and toughness, stiffness, permeability, water absorption/retention, freeze-thaw resistance and soundness are primarily influenced by the shape, surface, and design of Recovered Aggregates rather than their chemical composition. For example, the density of Recovered Aggregates is given by the staking of each individual particle which is achieved by interlocking them.

- **SiA Guidance (Step 3 and 6)**

Recovered Aggregates meet the definition of articles following Step 3 and Step 6 in the SiA Guidance. As they do not contain a substance/mixture that can be physically separated from them by any physical or mechanical mean (e.g. by pouring or wringing out). The substance/mixture in question is not even enclosed in the object nor carried on its surface but is part of the Recovered Aggregates (Step 3).

Step 6 lists the following questions and specifies that "*predominantly answering with yes to the questions indicates that the object is an article [...]*":

¹⁷ ECHA, Requirements for SCIP notifications (2020), p. 38

¹⁸ SiA Guidance, p. 18

¹⁹ As precisely explained in the position paper: "*Angularity, as demanded by CEN/TC 154 harmonized aggregate standards, reflects the angle at which individual particles stack. It is a measure of the ability to form a stable construction. The more angular particles in an aggregate product, the greater stability that can be achieved*"

- Question 6a: Does Recovered Aggregates have a function other than being further processed?

Yes, Recovered Aggregates exert specific functions within bound and unbound applications.

- Question 6b: Does the seller place Recovered Aggregates on the market and/or is the customer mainly interested in acquiring it because of its shape/surface/design (and less because of its chemical composition)?

Yes, Recovered Aggregates are sold and purchased for their functions which is due to their shape/surface/design rather than the chemical composition. Indeed, Recovered Aggregates exert their function via the interlocking of the single particles.

- Question 6c: When further processed, does Recovered Aggregate undergo only "light processing", i.e. no gross changes in shape?

Yes, Recovered Aggregates do not undergo any processing when used in bound and unbound applications. Indeed, it is their shape that allows Recovered Aggregates to exert their function via the interlocking of the single particles.

- Question 6d: When further processed, does the chemical composition of the recovered aggregate remain the same?

Yes, the chemical composition of Recovered Aggregates does not change when they are manufactured or used in bound or unbound applications.

Therefore, by answering yes to most of the indicative questions, it is possible to conclude that Recovered Aggregates meet the definition of an *article* under REACH.

(B) Applicability of the exemptions in Article 2(7)(b) and Article 2(7)(d) REACH Regulation

Even if Recovered Aggregates were not considered as articles within the conditions described above, *quod non*, they may potentially benefit from the exemptions laid down in Articles 2(7)(b) and Article 2(7)(d) REACH Regulation, even though their application is unrealistic in practice.

- **Article 2(7)(b)**

This provision exempts from registration "*substances covered by Annex V, as registration is deemed inappropriate or unnecessary for these substances and their exemption from these Titles does not prejudice the objectives of this Regulation*". In turn, Annex V of REACH Regulation lists 13 categories of substances.

Among these categories, some of the entries could in principle apply to some of the components of the Recovered Aggregates, i.e. Entry 7 "*the following substances which occur in nature, if they are not chemically modified: Minerals, ores, ore concentrates, raw and processed natural gas, crude oil, coal may*"; Entry 8 "*substances which occur in nature other than those listed under paragraph 7, if they are not chemically modified, unless they meet the criteria for classification as dangerous according to Regulation (EC) No 1272/2008 or unless they are persistent, bioaccumulative and toxic or very persistent and very bioaccumulative in accordance with the criteria set out in Annex XIII or unless they were identified in accordance with Article 59(1) at least two years previously as substances giving rise to an equivalent level of concern as set out in Article 57(f)*"; Entry 10 "*The following substances if they are not chemically modified: Liquefied petroleum gas, natural gas condensate, process gases and components thereof, coke, cement clinker, magnesia*"; and Entry 11 "*The following substances unless they meet the criteria for classification as dangerous according to Directive 67/548/EEC18 and provided*

that they do not contain constituents meeting the criteria as dangerous in accordance with Directive 67/548/EEC present in concentrations above the lowest of the applicable concentration limits set out in Directive 1999/45/EC19 or concentration limit set out in Annex I to Directive 67/548/EEC, unless conclusive scientific experimental data show that these constituents are not available throughout the life-cycle of the substance and those data have been ascertained to be adequate and reliable: Glass, ceramic frits".

The application of this exception results unrealistic in practice due to the very nature of Recovered Aggregates.

As explained above, Recovered Aggregates result from the mechanical processing of a mixture of mineral based demolition waste and waste from the production of mineral construction products and, specially, selected demolition materials such as concrete, aggregates brick, asphalt and other minor materials. As a consequence, Recovered Aggregates contain nearly all the substances included in the Input Materials.

This means that the applicability of this exception depends on the specific content of Recovered Aggregates. For example, Recovered Aggregates do not contain exclusively glass and/or ceramic frits (i.e., entry 11), but a series of additional Input Materials that may not fall within this exception so making it inapplicable in practice (as explained below, the Input Materials that do not benefit of this exception would likely not benefit even of the one under Article 2(7)(d)). The (possible) exception due to Article 2(7)(b) would have to be verified time and again during operation by analysing incoming waste, which is an unrealistic scenario.

In conclusion, the nature (i.e., composition) of Recovered Aggregates makes the exception under Article 2(7)(b) of REACH Regulation inapplicable in practice.

- **Article 2(7)(d)**

This provision exempts from registration "*substances, on their own, in mixtures or in articles, which have been registered in accordance with Title II and which are recovered in the Community if: (i) the substance that results from the recovery process is the same as the substance that has been registered in accordance with Title II; and (ii) the information required by Articles 31 or 32 relating to the substance that has been registered in accordance with Title II is available to the establishment undertaking the recovery*".

This exception could in principle apply to Recovered Aggregates in that their production can be considered as the manufacture of new substances (i.e., each substance contained in the Recovered Aggregates).

However, the identification of these substances is a burdensome exercise, as it essentially requires an analysis of all the Input Materials in order to identify their chemical composition in line with the principles established in the ECHA Guidance for identification and naming of substances under REACH and CLP.²⁰

Therefore, the application of this exception is unrealistic in practice.

- **The impracticability/disproportionality of these exemptions**

The applicability of the exceptions under Articles 2(7)(b) and (d) is cumbersome and entails a disproportionate assessment which renders them economically unviable from a practical point of view.

²⁰ Since UVCB substances are variable in nature, they need not match the exact chemical composition, but some variation is possible, depending on their components – ECHA Guidance for identification and naming of substances under REACH and CLP (2023), p. 4; ECHA Guidance on registration (2021), p. 55

Specifically, the exact composition of the Recovered Aggregates purchased by recovering companies can vary due to the nature of the Input Materials. In other words, the composition of Recovered Aggregates cannot be always consistent, but it varies on the basis of the Input Materials.

Due to the above, producers of Recovered Aggregates would have to conduct extensive testing on each particle and batch of Recovered Aggregate manufactured in order to determine their composition, and, in turn, whether one of the exceptions under Article 2(7)(b) or (d) applies.

However, this exercise is impractical and disproportionately burdensome in terms of time and resources, as it requires companies manufacturing Recovered Aggregates to initiate an activity (i.e., the assessment of their products) for which they are neither equipped nor prepared, and which would entail significant additional production costs.

In practical terms, manufacturers of Recovered Aggregates would have to bear significant investments, such as hiring experts or appointing laboratories to assess the macro composition of each batch of Recovered Aggregates they manufacture.

This would result in additional costs which would render the business essentially unprofitable. By way of example, assuming the following conditions:

- The margin for selling Recovered Aggregates is € 1 to € 1,50 per tonne;
- Testing cost around € 500;
- Every day circa 80 trucks arrive at the manufacturing facilities approximately 25 tonnes each of Input Materials coming from many different sources.

This would result in 30 tests per day for a cost of € 15.000 Euro per 2.000 tonnes which would bring the cost for Recovered Aggregates from € 1 / 1,50 to € 7,50 Euro per tonne.

It is self-evident from these figures that the business will become financially unsustainable.

Finally, this approach contradicts the principle of proportionality enshrined in EU law,²¹ whereby measures should not be excessive or go beyond what is necessary to achieve their objectives.

Requiring companies to conduct extensive and exhaustive tests on Recovered Aggregates would place an excessive burden on businesses, potentially stifling innovation and progress in the construction industry.

(C) Policy considerations: the European Green Deal and the Circular Economy

The Green Deal²² is a comprehensive plan aimed at addressing climate change and economic inequality. It seeks to achieve net-zero greenhouse gas emissions by 2050, create high-quality jobs, and ensure a just transition for communities and workers affected by the shift to a green economy. It includes measures to boost the efficient use of resources, restore biodiversity, and cut pollution.

The Circular Economy Initiative is a key component of the European Green Deal, which aims at making Europe cleaner and more competitive. Amongst others, it focuses on encouraging processes that keep resources in use as long as possible, reducing waste generation and ensuring that resources are kept within the EU economy and sector-specific action aimed at targeting sectors with high resource use and potential for circularity, such as construction.

Recovered Aggregates are in line with the above objectives and different sectors have already made significant efforts to increase their circularity. For example, according to the production [figures](#) published by EAPA over the latest years, the amount of available reclaimed asphalt

²¹ Judgments of 8 July 2010, *Afton Chemical*, C 343/09, EU:C:2010:419, paragraph 45; of 21 July 2011, *Etimine*, C 15/10, EU:C:2011:504, paragraph 124; and of 1 February 2013, *Polyelectrolyte Producers Group and Others v Commission*, T 368/11, not published, EU:T:2013:53, paragraph 75

²² [COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS The European Green Deal](#)

in Europe is around 50 Mt. Out of this amount, the asphalt industry re-uses around 65-75% in the manufacturing of new asphalt mixes and recycles 25-35% extra as a granular material for unbound road layers and other civil Engineering applications. As a result, only around 5% is put to landfill.

Requiring Recovered Aggregates to be registered under REACH Regulation would be an impediment to their use since it would make their production cumbersome and disproportionately costly thus discouraging operators from producing these products. In turn, this would jeopardize the objectives of the circular economy, undermine the market for recycled materials and slow down the transition to a circular and greener economy. If materials are not recycled into aggregates they could end up in landfill creating another unintended massive burden to the environment.

In practical terms, the lack of Recovered Aggregates will cause a sudden increase in the demand for primary raw materials which will raise supply challenges.

Overall, while the intention behind mandatory registration might be to ensure safety and compliance, it could inadvertently create barriers that hinder the progress towards the objectives of the European Green Deal and the Circular Economy.

Also, relying on the exceptions laid down in Articles 2(7)(b) and Article 2(7)(d) REACH Regulation would be unpractical and overall disproportionate with the aims pursued and the environmental benefits brought by Recovered Aggregates.

* * *

Annex I



Aggregates Europe – UEPG represents the European Aggregates Industry since 1987, with Members in 25 countries. It is by far the largest non-energy extractive industry, covering a demand of 3 billion tonnes of primary and secondary aggregates per year, produced on 26,000 sites by 15,000 companies (mostly SMEs) across Europe. Our industry produces natural aggregates from quarries, sand & gravel extraction sites and from marine aggregates, it produces recycled aggregates from construction & demolition waste and manufactured aggregates from industrial processes such as steel slags or incinerated bottom ash.

Members of Aggregates Europe – UEPG are:

FVSK - Fachverband der Stein und keramischen Industrie Österreich (Austria)

FEDIEX - Fédération de l'Industrie Extractive (Belgium)

CAPA - Cyprus Aggregates Producers Association (Cyprus)

Danske Råstoffer - Danish Aggregates Association (Denmark)

Heidelberg Materials Kunda AS - HeidelbergCement Group (Estonia)

INFRA ry - Infra Contractors Association in Finland (Finland)

UNPG - Union Nationale des Producteurs de Granulats (France)

MIRO – Bundesverband Mineralische Rohstoffe e. V. (Germany)

GME - Greek Mining Enterprises Association (Greece)

Magyar Bányászati Szövetség - Hungarian Mining Association (Hungary)

ICF - Irish Concrete Federation (Ireland)

Lime and Stone Production Company Ltd - Associate Company with Readymix Industries (Israel)

ANEPLA – Associazione Nazionale Estrattori Produttori Lapidei ed Affini (Italy)

CLOOS (Luxembourg)

Cascade - Vereniging Zand en Grindproducenten (Netherlands)

Norsk Bergindustri - Norwegian Mineral Industry (Norway)

ANIET - National Association of Extractive and Manufacturing Industry (Portugal)

PPAM - Patronatul Producatorilor de Agregate Minerale din Romania (Romania)

SZVK - Slovak Association of Aggregates Producers (Slovakia)

FdA - Federación de Áridos (Spain)

SBMI - Swedish Aggregates Producers Association (Sweden)

Baustoff Kreislauf Schweiz (Switzerland)

E-MAK (Turkey)

TBG - Technobud Group (Ukraine)

MPA - Mineral Products Association (UK)



Concrete Europe is the umbrella organisation of six associations representing the concrete sector and its value chain in Europe. These associations consist of BIBM (the Federation of the European Precast Concrete Industry), CEMBUREAU (the European Cement Association), EFCA (the European Federation of Concrete Admixtures Associations), and ERMCO (the European Ready Mixed Concrete Organization), alongside two associate members: Aggregates Europe – UEPG and EUPAVE (the European Concrete Paving Association). It aims at promoting concrete as the backbone of sustainable construction and to better communicate to EU stakeholders and those within the construction value chain the concrete sector's role in attaining the objectives of the EU Green Deal. Founded in 2023, the new entity is the successor to The European Concrete Platform and The Concrete Initiative.

Members of Concrete Europe are:

CEMBUREAU – The European Cement Association

BIBM – The Federation of the Precast Concrete Industry

EFCA – Partnership of National Admixture Associations

ERMCO – European Ready Mixed Concrete Organization

Aggregates Europe – UEPG

EUPAVE – The European Concrete Paving Association



The European Asphalt Pavement Association (EAPA) is the voice of the Asphalt Paving Industry in Europe, with 16 national associations and 23 equipment and material suppliers as members. It works to ensure that the use of asphalt, as the optimum choice for the construction and maintenance of the vital European road infrastructure, is fully appreciated, promoted and implemented. The primary objective of EAPA is to build a sound evidence base for promoting the economic, technical, and societal benefits of asphalt paving in road construction and maintenance. Further, to create the future for an innovative and modern asphalt industry in Europe that cares for health and safety as well as for protection of the environment and sustainability.

Members of EAPA are:

Asefma – Spanish Asphalt Producers Association

Asfaltindustrien – Danish Asphalt Producers Associations

ASMUD – Turkish Asphalt Contractors Association

Bouwend Nederland – vakgroep bitumineuze werken (VBW)

Croatian Asphalt Association

DAV – Deutscher Asphalt Verband e.V. – German Asphalt Association

EBA – Norwegian Contractors Association

ESTICA - Estonian Infra Construction Association

HAPA – Hungarian Asphalt Pavement Association

IAPA – Irish Asphalt Pavement Association

Finnish Infra Contractors' Association

MPA – Mineral Products Association Ltd (UK)

NCC AB (Sweden)

Peab Asphalt AB (Sweden)

Routes de France

Sdružení pro výstavbu silnic - Czech Road Construction Association

ZAS – Združenje asfalterjev Slovenije – Slovenian Asphalt Producers Association

Associate Members of EAPA are:

Ammann

Arkema

Benninghoven

BASF

Cargill N.V.

Caterpillar Paving Products Inc.

CFF GmbH & Co. KG

CRH plc.

Dow Europe GmbH

Evonik Resource Efficiency GmbH

Fliegl Bau- und Kommunaltechnik GmbH

GBS

Hywax GmbH

infraTest

Ingevity Holdings sprl

Iterchimica S.p.A.

J. Rettenmaier & Söhne GmbH & Co.

Kraton Polymers B.V.

Marini

Q Point

Ravago

Ruthmann GmbH

Sasol Chemicals

Sripath Technologies, LLC

Smart Site Solutions GmbH

Volvo Construction Equipment



The European Recycling Industries' Confederation (EuRIC) is the umbrella organisation for the recycling industries in Europe. Through its 75 members from 23 European countries, EuRIC represents more than 5,500 large companies and SMEs involved in the recycling and trade of various resource streams. They represent a contribution of 95 billion EUR to the EU economy and 300,000 green and local jobs. By turning waste into resources, recycling reintroduces valuable materials into value chains over and over again. By bridging circularity and climate neutrality, recyclers are pioneers in leading Europe's industrial transition.

Members of EURIC are:

AIRA – Associazione Industriale Riciclatori Auto

Anamet

ANAREVI A - Agrupación Nacional de Reciclado de Vidrio

ANSDS - Association of independent secondary raw material Processors

ARETEX – Romanian Association for Textile, Reuse and Recycling

ASSOFERMET

ASSORECUPERI

ÅTERVINNINGSSINDUSTRIERNA – SRI - Swedish Recycling Industries' Association

BACT - Bulgarian Association Circular Textile

BAR - Bulgarian Association of Recycling

BDE - Bundesverband der Deutschen Entsorgungs-, Wasser- und Kreislaufwirtschaft e. V.

BDSV - Bundesvereinigung Deutscher Stahlrecycling- und Entsorgungsunternehmen

BMRA - British Metals Recycling Association

BVSE - Bundesverband Sekundärrohstoffe und Entsorgung e.V.

Conradi+ Kaiser GmbH

Contec

Denuo

DWMA - Dutch Waste Management Association

ECORESET S.A.

ESTATO Umweltservice GmbH

FEDEREC – Fédération Professionnelle des Entreprises du Recyclage

FER - Federación Española de la Recuperación y el Reciclaje

Finnish Scrapdealers Association

FISE UNICIRCULAR

FNOI - Fed. Nederlandse Oudpapier Industrie

GENAN Holding A/S

Granuband BV GRANUBAND

GreenGroup

HJ Hansen Recycling Industry LTD A/S

HOSZ - Hungarian Waste Management Federation

IGMNiR - The Economic Chamber of Non Ferrous Metals and Recycling

IPHGZ - Scrap Economy Chamber of Industry and Commerce

Kargro Recycling BV

Kierrätysteollisuus - Recycling Industries of Finland

Kovosrot

KRAIBURG Relastec GmbH & Co.KG

Kuusakoski Oy

MRF - Metal Recycling Federation

Murfitts Industries Ltd.

Norsk Returmetallforening

NRK Recycling

O.P.P. Remat

PSRO - Polish Tyre Recyclers Association - Polskie Stowarzyszenie Recyklerów Opon

PVP Triptis GmbH

Ragn-Sells Tyre Recycling AB

REGUPOL BSW GmbH

REPACAR - Asociación Española de Recicladores Recuperadores de Papel y Cartón

SEPAN - Federation of Recycling and Energy Recovery Industries and Enterprises

Steel Impex DOO

Szoprot - Slovakian Association for reuse and recycling of clothing and textile

TEXAID

Textrade

Texval

The Recycling Association

TRA

Trasborg

UNIRIMA

VDM - Verband Deutscher Metallhändler

VHT

VIVE Textile Recycling

VSMR - Verband Stahl-, Metall- und Papier-Recycling Schweiz (VSMR)

WKÖ - Bundesgremium Maschinenhandel Fachausschuss Sekundärrohstoffhandel, Recycling und Entsorgung "

WKO - Austrian waste and Resource management Entsorgungs- und Ressourcenmanagement



European Waste Management Association (FEAD) represents the private waste and resource management industry across Europe, including 19 national waste management federations and 3,000 waste management companies. Private waste management companies operate in 60% of municipal waste markets in Europe and in 75% of industrial and commercial waste. This means more than 320,000 local jobs, fuelling €5 billion of investments into the economy every year.

FEAD members are (full members only):

ASEGRE

Assoambiente

BDE

BRRA

CAObH

CÍRCULO

DENUO

DWMA

ECEIA

ESA

FLEA

FNADE

IWMA

LASUA

Norsk Industri

PASEPPE



FIR represents the recycling industry of Construction & Demolition Waste (C&DW) and of Incinerator Bottom Ash (IBA). Those member states where FIR has representation cover 60% of the EU population. Besides that we have members in the UK and in Mexico. It is the aim of FIR to achieve high quality recycling in the EU. FIR provides a platform for those interested in recycling and we actively share our common knowledge.

Members of FIR are:

ANPAR	Associazione Nazionale Produttori Aggregati Riciclati
AMRCD	Asociación Mexicana de Reciclaje de Residuos de Construcción y Demolición
BRB	Bundesvereinigung Recycling Baustoffe E.V.
BRBS	Recycling Branchevereniging Recycling Breken en Sorteren
IGAM	Interessegemeinschaft der Aufbereiter und Verwerter
NVPG Grondbewerkingsbedrijven	Nederlandse Vereniging van Procesmatige
RCD Asociacion	Asociacion Espanola de Reciclaje de Residuos de Construcción y Demolición
SEDDRe	Syndicat de Enterprises de Déconstruction, Dépollution et Recyclage
VSOR	Vereniging van Sloop-, Ontmantelings- en Recyclingbedrijven
Blue Phoenix Group	
Day Group	
Fives FCB	
Goval BVBA	
Holcim	
Integrated Materials Solutions Limited Partnership	
Ragn Sells AB	
Strabag AG	