ANNUAL REPORT 2022



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ADMINISTRATIVE INFORMATION

Registered office

In 2022, the address and telephone number of EUPAVE remained: Boulevard du Souverain, 68 B13 1170 Brussels Tel.: +32 (0)2 645 52 31

As of June 1st 2023, the address and phone number will be: Avenue des Arts 20 - 1000 Brussels Tel: +32 2 645 52 10

Bylaws

The bylaws of the association were modified at the Extraordinary General Assembly held on 3 December 2015.

The revised version is available in French and English. In case of differences between the two versions, the French version shall prevail.

President and Vice-President

EUPAVE's President remains Mr. Stéphane Nicoud from Holcim

EUPAVE's Vice-President remains Mr. Rory Keogh from GOMACO.

Managing Director

Mr. Luc Rens, Consulting Engineer at FEBELCEM, is Managing Director of EUPAVE since the Board meeting of 23 March 2009.

Communications and Office Manager

Ms. Elise Carabédian is Communications and Office Manager since 2 November 2016.

Resignation and Nomination of Pirectons

The mandates renewed as of 29 June 2022:

- César Bartolomé (Oficemen)
- Hervé Camerlynck (Febelcem)
- Koen Coppenholle (Cembureau)
- Rory Keogh (Gomaco)
- Stéphane Nicoud (Holcim)
- Sebastian Spaun (VÖZ)
- Edwin Vermeulen (Cement&Beton Centrum)

The Board of Director is composed of the following members as of 29 June 2022:

- César Bartolomé (Oficemen)
- Hervé Camerlynck (Febelcem)
- Koen Coppenholle (Cembureau)
- Jan Deja (Polish Cement Association)
- Rory Keogh (Gomaco)
- Ulrich Nolting (InformationsBeton Centrum)
- Stéphane Nicoud (Holcim)
- Sebastian Spaun (VÖZ)
- Edwin Vermeulen (Cement&Beton Centrum)

Π

MEMBERSHIP & PARTNERSHIP SITUATION (JULY 2023)

Members and Partners

EUPAVE has 20 members (9 Full Members and 11 Associate Members) from 11 countries and 15 Partners from 8 countries.

full Members

- CEMBUREAU (European Cement Association)
- Cement&Beton Centrum (Dutch Cement & Concrete Centre)
- FEBELCEM (Federation of the Cement Belgian Industry)
- GOMACO
- Holcim
- InformationsZentrum Beton GmbH
- Oficemen (Spanish Cement Association)
- Polski Cement (Polish Cement Association)
- VÖZ (Association of the Austrian Cement Industry)

Associate Members

- Betonsuisse Marketing AG
- Britpave
- Deltabloc International GmbH
- ERMCO (European Ready Mix Concrete Organisation)
- Givasa
- Gütegemeinschaft Betonschutzwand & Gleitformbau e.V.
- Norm Cement
- Power Curbers Inc.
- Somero
- Turkcimento (Turkish Cement Manufacturers' Association)
- WIRTGEN GmbH

Pantnens

- AB-Roads
- Chem-Crete
- Christian Paglia
- KWS Infra B.v.
- MIT Dresden

• PERC - Mark Snyder

• Otto Alte-Teigeler GmbH

- Otto Brentzel
- Robuco
- Roos Groep

- Sepehr Ghafari
- SPECBEA
- TRBA
- Zeta Industry
- ZBS



III INTERNAL ORGANISATION

Following the sanitary crisis, EUPAVE had to slightly modify its internal organisation and held online meetings. However, EUPAVE bodies maintained the meetings in order to continue the work and progress, to set out the strategy and decide on different forms of promotion, events and seminars.

One ordinary General Assembly was held online on 29 June 2022.

Three Board meetings were organised on:

- 17 February 2022
- 9 June 2022
- 20 October 2022

Working Groups

- The Environmental Strategy WG (Env Strat WG) to promote the sustainable benefits of concrete pavements;
- The EU Advocacy WG (EU Adv WG) to advocate at EU level the use of cement and concrete in European transportation infrastucture;
- The Best Practices WG (BP WG) to exchange know-how and best practices amongst our Members and Partners;

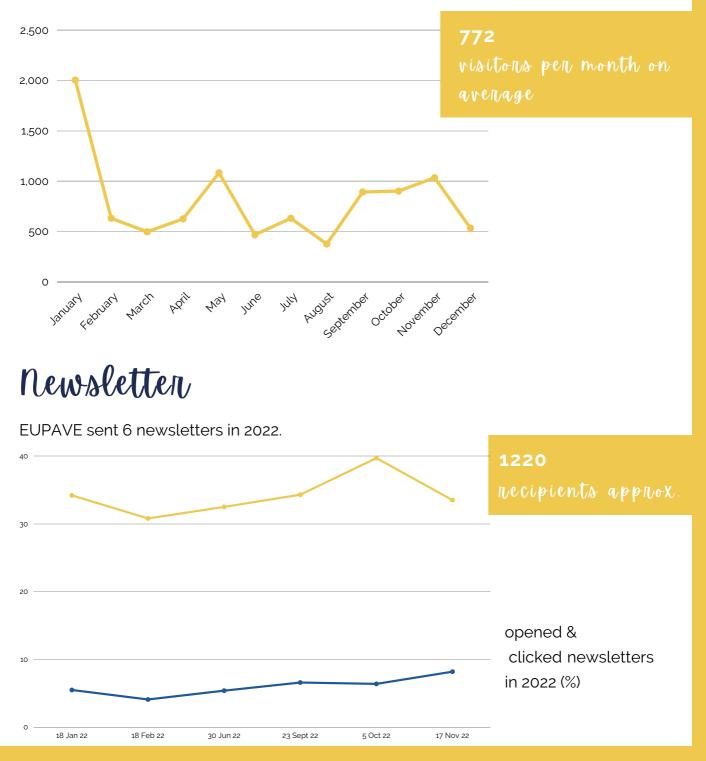
- Three Technical and Promotion Committee meetings were held on:
- 17 February 2022
- 9 June 2022
- 20 October 2022
- The Concrete Safety Barriers WG (CSB WG) to follow the standardisation activities, monitor developments, and undertake promotion actions on road restraint systems;
- The **Concrete Pavement Statistics WG** (CPS WG) to gather statistical data on the use of concrete in transportation infrastructure;
- The **Communications Tools WG** (CT WG) to develop EUPAVE's website, newsletter and other tools.

January	18: EU Adv WG 31: Env Strat WG	June	10: CPS WG
February	2: EU Adv WG 16: CPS WG CSB WG 24: EU Adv WG 25: CSB WG	July	6: EU Adv WG 14: Env Strat WG
		September	1: CSB WG 7: EU Adv WG 16: BP WG 23: CPS WG 29: Env Strat WG
March	14: Env Strat WG 25: EU Adv WG		
April	8: CSB WG 11: EU Adv WG 16: Env Strat WG	October	7: EU Adv WG
May		November	g: CSB WG 24: EU Adv 28: Env Strat

Website

The website was renewed in 2017.

15 articles were published in 2022 as well as 1 publication "Guide for Design of Concrete Overlays" and 1 fact sheet "100% reyclable".



Twitten

in 2022 519 FOLLOWERS (+34) APPROX. 1525 IMPRESSIONS PER MONTH

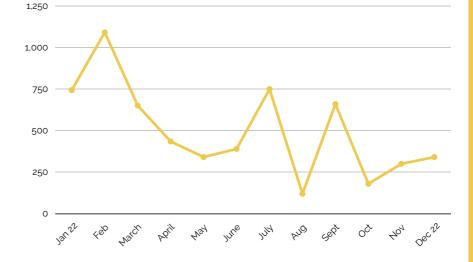


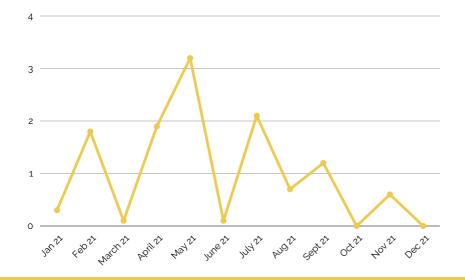
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EUPAVE, the European Concrete Paving Association @EUPAVE

Implessions per month

An **impression** is the number of times users saw the tweet on Twitter.

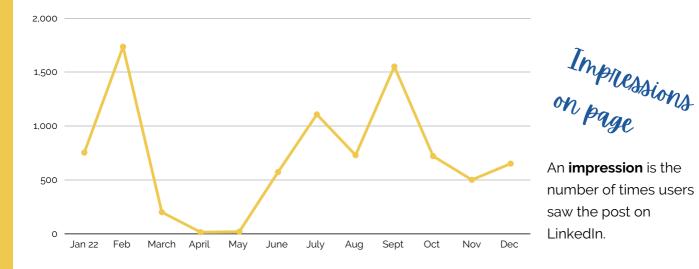




Engagement rate

The **engagement rate (%)** is the number of engagements (clicks, retweets, replies, follows and likes) divided by the total number of impressions.

IV**ACTIVITIES** LinkedIn EUPAVE in 2022 EUPAVE, the European Concrete Paving Ass... We advocate and enable wider use of cement and concrete applications in European transport infrastructure · eupave.eu 622 Construction · Watermael-Boitsfort, Bruxelles · 498 abonnés **SUBSCRIBERS** (+125) 60 views on page 40 Total number of views of 20 the page on all tabs



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Jan 22

Feb

March

April

May

June

July

Aug

Oct

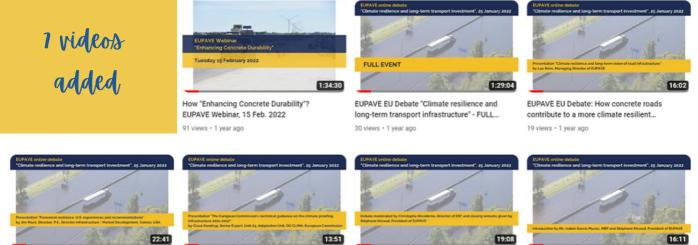
Sept

Nov

Dec

Videos

In 2022, EUPAVE added recordings of its webinars on YouTube.







EUPAVE EU Debate: How concrete roads contribute to a more climate resilient... 8 views • 1 year ago





Full webinar

EU Debate "Climate resilience and long-term transport infrastructure", 25 January 2022

And divided into 5 videos

EU Debate "Climate resilience and long-term transport infrastructure", 25 January 2022

Full webinar

EUPAVE webinar "Enhancing Concrete Durability", 15 February 2022

Publications



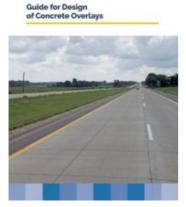
Following the release of EUPAVE's infographic "Concrete Pavements make roads more sustainable", EUPAVE's working group on Environmental Strategy released fact sheets focusing on the following items;

- "High Albedo" in June 2020,
- "Less fuel consumption" in October 2020,
- "100% Recycling" in December 2020 and
- "Climate Resilience" in September 2021.

The fact sheet "Long Service Life" was released in August 2022.

September 2022 - Publication "Guide for Design of Concrete Overlays"





This publication, written by Mark Snyder (PERC, LLC), provides an overview of the basic principles of concrete overlay design and construction on concrete and asphalt-surfaced pavements. It discusses the importance of many deisgn parameters, including overlay bond (or separation), joint layout and design, material selection, overlay thickness, and other details. This document also describes recommended practices for overlay construction and construction staging. Performance histories and expectations are also discussed.

Events

EUPAVE online debate - 25 January 2022 "Climate resilience and long-term transport instructure"

On Wednesday 25 January, EUPAVE and Ms. Isabel García Muñoz, MEP held an online EU Debate on "Climate resilience and longterm transport infrastructure". It gathered representatives of the public and private sector and of the European Commission. Mr. Christophe Nicodème, Director General of the European Union Road Federation (ERF) opened and moderated the event. After a quick introduction, the floor was given to Ms. García Muñoz, MEP and Mr. Stéphane Nicoud, President of EUPAVE for a few words of welcome.

Views from MEP Isabel García Muñoz

Ms. García Muñoz, MEP, thanked the participants and EUPAVE for organising the event and for giving her the privilege of participating in such an important debate. She also thanked Mr. Claus Kondrup, from DG CLIMA, for his availability to discuss one of the main challenges the EU is facing and for presenting the climate proofing infrastructure guidance. Finally, Ms. Garcia, thanked Mr. Jim Mack, from Cemex, USA and Mr. Christophe Nicodème, from European Road Federation, for moderating the event.

Ms. Garcia came back on the importance of the fight against climate change. The EU is taking actions, from the European Green Deal to the recent proposal Fit for 55 Package. The goal being to make Europe climate-neutral by 2050, in line with the Paris Agreement.

The EU should remain open-minded to the various technical solutions and find the ones that are both viable and beneficial for the safety of people and the environment, capable of adapting to new challenges.

Further information

 The EU established the European Programme for Critical Infrastructure Protection (EPCIP) in 2006 and adopted the European Critical Infrastructure (ECI) Directive in 2008, which applies to the energy and transport sectors.

– On 16 December 2020, the Commission published its proposal for a directive on the resilience of critical entities. The proposed Critical Entities Resilience (CER) directive expands the scope of the 2008 directive to cover ten sectors.

Events

EUPAVE online debate - 25 January 2022 "Climate resilience and long-term transport instructure"

Welcome from Mr. Nicoud

Mr. Nicoud started by thanking MEP Garcia for hosting EUPAVE's annual event in such special circumstances. He also thanked the speakers, especially Mr. Kondrup, whose contributions are highly appreciated in a moment where climate proofing infrastructure, adaptation and climate mainstreaming is affecting the whole European industry. Mr. Nicoud briefly introduced EUPAVE and its missions and activities - especially related to climate change. Indeed, global warming consequences will have an impact on transport infrastructures and roads. Entities providing essential services must be able to resist to the increase of temperature and precipitation. Investing in resilient infrastructure is essential. The societal benefits of a robust and resilient road network are numerous: for people's lives, as well as for economies. In this regard, the European Commission adopted its new EU strategy on adaptation to climate change on 24 February 2021. The new strategy sets out how the European Union can adapt to the unavoidable impacts of climate change and become climate resilient by 2050. It has four principal objectives: to make adaptation smarter, swifter and more systemic, and to step up international action on adaptation to climate change.

Mr. Nicoud also reminded the numerous benefits of concrete . Amongst other advantages, concrete roads are less susceptible to the swelling or shrinking of the subgrade compared to asphalt pavements and show better resilience to climate change and extreme meteorological events. Concerning this topic, EUPAVE has published a factsheet on "Climate Resilience" that was shared after the event.

Mr. Nicoud concluded saying that "EUPAVE is ready and would like to fully participate in the debate for a better future for all and a better resilient transport infrastructure and roads". Interventions from speakers Mr. Luc Rens, Managing Director of EUPAVE, talked about "Climate resilience and longterm vision of road infrastructure". Mr. Rens started by presenting EUPAVE's latest fact sheet on climate resilience and gave a definition of what resilience is. He came back on the consequences of climate change and the importance of a long-term vision in transport investment policy.

Events

EUPAVE online debate - 25 January 2022 "Climate resilience and long-term transport instructure"

Mr. Jim Mack, Director, P.E., Director Infrastructure – Market Development from Cemex USA discussed pavement resilience based upon the many experiences with floodings in the U.S. He presented technical backgrounds, research results and gave valuable recommendations.

Finally, Mr. Claus Kondrup, Senior Expert, Unit A3, Adaptation Unit, DG CLIMA, European Commission presented "The European Commission's technical guidance on the climate proofing infrastructure 2021-2027 ".

Questions from the attendance were asked at the end of each presentation. A lively debate took place at the end of the event.

Mr. Nicoud closed the event by thanking Ms. Garcia, all speakers and the participant



Link to the article with presentations and video



Events

EUPAVE Webinar, 15 February 2022 "Enhancing Concrete Durability"

On Tuesday 15th February 2022 EUPAVE heldMrs. Sylvie Smets, Researcher anda technical webinar entitled "EnhancingTechnology Advisor at the BelgianConcrete Durability", which focused on
different types of protection systems for
concrete surfaces.Research Centre explained the "Infl
hydrophobic impregnation on resist
road concrete to de-icing salt". She

Mr. Luc Rens, Managing-Director of EUPAVE, opened the event by welcoming the participants and presenting EUPAVE and its activities. Luc also outlined the context of surface protection products, both in Europe with the EN 1504-2 standard and on the basis of an American classification of "penetrating sealers".

Mr. Michael E. Ayers, President of Global Pavement Consultants, Inc. and Mr. Radi Al-Rashed, President & CEO of International Chem-Crete Co. started by presenting Chem-Crete and its waterproofing technologies. They specifically focused on two of their products: the topically applied PAVIX CCC-100, a dual crystalline "sealer", and MCE, an intermixed multi-crystalline enhancer. A large amount of information from laboratory testing and field trials was presented.

Mr. Oleg Tataru, Head of Aerodrome Service, Moldova presented the work done at the Chisinau International Airport. Mrs. Sylvie Smets, Researcher and Technology Advisor at the Belgian Road Research Centre explained the "Influence of hydrophobic impregnation on resistance of road concrete to de-icing salt". She started with a quick introduction and presented laboratory results, results from on-site samples and the effect of curing and ageing of the concrete on the scaling resistance of the surface.

The event closed with a Q&A and conclusion remarks by **Luc Rens**: "In specific situations, e.g. concrete with no air entrainer, and for specific applications e.g. airfields, the use of surface protection systems are definitely recommended. They are able to significantly improve the quality of the concrete surface and to extend the service-life of the pavement. However, the use of a penetrating sealer should never be a pretext for a lesser quality concrete!"

> Link to the article with presentations and video

Events

EUPAVE Workshop, 19 October 2022 "Concrete Overlays"

On **Wednesday 19th October 2022**, EUPAVE held at Hôtel Le Châtelain in Brussels its 7th workshop on Best Practices in Concrete Paving. The theme for this year was "Concrete Overlays". It was organised as a hybrid event, using a professional sound and video-system from the Dutch "Betonhuis" ("Concrete House").

Mr. Luc Rens, Managing-Director of EUPAVE,

opened the workshop and welcomed the participants.

He introduced EUPAVE, its mission and gave an overview of the previous workshops on Best Practices. He briefly introduced the EUPAVE's latest publication "**Guide for Design of Concrete Overlays**" drafted by Mark Snyder.

Then, **Mr. Snyder, Ph.D., P.E., Pavement Engineering and Research Consultant, LLC**, presented the Guide to the participants. The publication includes a description of the different type of concrete overlays, an explanation of concrete overlay design and construction, amongst other topics. The second presentation was on "Spanish experiences: a concrete overlay for a quarry road and a roundabout" by **Sergio Carrascón, former Director North Est, IECA**. Sergio showed different projects realised in Spain including the work done at La Jonquera (Girona, Spain) and the structural rehabilitation of pavement in 4 roundabouts and the rehabilitation of pavement done at Morata de Jalón (Zaragoza, Spain).

Jeroen de Vrieze, Advisor Promotion and Market Statistics at Betonhuis gave a presentation on the "Dutch experiences: overlays of cycle paths with fibre reinforced concrete by contractor Schagen Infra".

After the coffee break, **Lukas Eberhardsteiner**, **Assistant Professor at TU Wien**, presented the "Austrian design method and catalogue for bonded concrete overlays".

Ozgur Yaman, Professor at the Middle East Technical University of Ankara gave a wellillustrated presentation of "Overlay applications in the bus rapid transit lanes of Istanbul". Mr. Yaman explained the biggest challenge they encountered was related to the construction issues.

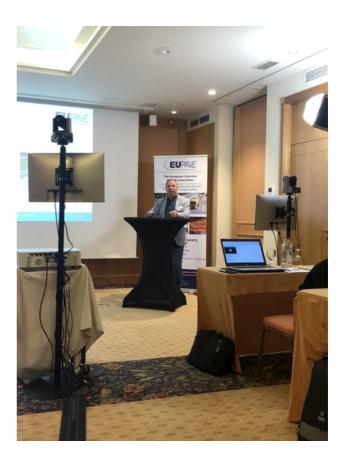
Events

EUPAVE Workshop, 19 October 2022
"Concrete Overlays"

Finally, **Luc Rens, Managing Director of EUPAVE**, concluded with the "Belgian experiences – thin and conventional inlays and overlays".

The presentations were followed by a Q&A from both the live audience and the on-line participants. For the in-person participants, the afternoon ended with a pleasant networking cocktail.

The recording and presentations of the workshop were made available for registered participants.



Link to the article with presentations and video

Events

EUPAVE at Bauma, 24-30 October (Munich)

After 3.5 challenging years, **bauma 2022** was once again the centre of the construction machinery industry. The world's leading trade fair for construction machinery, building material machines, mining machines, construction vehicles and construction equipment was held from 24 to 30 October 2022 in Munich.

In 2022; bauma was all about digitalisation and sustainability. This was also reflected in the key topics :

- Construction methods and materials of tomorrow
- The way to autonomous machines
- Mining sustainable, efficient, reliable
- Digital construction site
- The way to Zero Emission

EUPAVE was also present through its members GOMACO – POWER CURBERS – SOMERO – WIRTGEN.





14th International Symposium on Concrete Roads

In 2022, EUPAVE continued the preparation of the Symposium.

The last deadline to submit an abstract was 10 April 2022.

Participants had the possibility to submit an abstract of 300 words with one of the themes proposed:

- 1. Concrete roads and the green deal
- 2. Concrete roads and the circular economy
- 3. Concrete roads and economic aspects
- 4. Concrete roads and society
- 5. Innovative concepts for concrete roads
- 6. Materials and pavement design
- 7. Highways
- 8. High axle-load areas
- 9. Urban applications
- 10. Maintenance and preservation strategies and

techniques

11. Case studies

It was also possibile to submit an abstract within one of 2 special sessions:

- S-1. Baselayers
- S-2. Concrete block paving

Around 100 abstracts were submitted.

After assessment of each abstract by the International Technical Programme Committee, authors received their acceptance letters including their reviews.

The deadline to submit their papers was 28 February 2023.

For further information on the Symposium, please visit www.concreteroads2023.com



REPRESENTATION

EUPAVE in the last edition of the EUopserver magazine!

June 2022

V

EUPAVE published on the back cover of the EUobserver magazine, "War, Peace and the Green Economy" an advertisement highlighting the few most important environmental benefits of concrete roads.

You can consult the magazine here.

The EUobserver is an online not-for-profit newspaper reporting on the European Union.



V **REPRESENTATION**

Events Meetings

Month	Day	Activity
January	27	ASCP meeting
February	9	WeThink
	15	the European TRWP Platform meeting
	17	ISCP Board meeting
March	1	ASCP Forum
	28	Expert meeting UNECE on resilience
	30	Intertraffic Amsterdam
April	6	2nd meeting HLCF
	27	ASCP meeting
May	4-6	PIARC TC4.1 meeting
	11	Meeting DG Env "Pervious pavements"
	30	workshop DG GROW
July	27	ASCP meeting
September	12-14	PIARC/SURF Conference Milano
October	21	Polish Road Conference
	25	weTHINK panel discussion
	26	ASCP meeting
November	16-17	Turkcimento Symposium

V

REPRESENTATION

Collaboration with stakeholders

ISCP (International Society for Concrete Pavements)

Mr. Luc Rens continued in 2022 his position as a Director of the Board in ISCP and participated in the conference calls of the Board Meeting.

PIARC (World Road Association)

In 2022, Luc Rens participated as corresponding member in the Technical Committee 4.1 Road Pavements.

ERF (European Road Federation)

EUPAVE continued its membership of the European Union Road Federation and participated in in the ERF working groups as well as other activities:

 \rightarrow ERF Plenary Assembly

 \rightarrow ERF WG on Road Restraint Systems

ERTRAC (European Road Transport Research Advisory Council)

EUPAVE remained a member of ERTRAC in 2022.

Australian Society for Concrete Pavements (ASCP)

Following the signature of the MoA in 2021, EUPAVE maintained regular contacts with ASCP by exchanging information on technical and environmental data on concrete pavements, on pavement statistics, events and resources.

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WORLD ROAD

MONDIALE DE LA ROUTE







