

An aerial photograph of a city skyline, likely New York City, showing numerous skyscrapers and buildings. A thick, dark green wavy graphic element curves across the top and right side of the image, partially obscuring the city view. The text 'HELLO AND WELCOME' is overlaid on the left side of the image.

HELLO
AND
WELCOME



Who we are

- **CEYES** is one of the world's leading consultancy firms for research, products, design and management of tire recycling facilities through re-cycled and up-cycled rubber.
 - We offer **specialized independent advice**, knowledge and effective solutions for the production of re-cycled and up-cycled rubber for, inter alia, decision makers, starting entrepreneurs and companies.
-

FOUNDERS AND TEAM



Leo van Dongen
CEO & founder

Rubber recycling and product development expert with 20+ year experience. Experienced entrepreneur.



Ed de Koning
CEO & Co-founder

Waste truck tire expert with 30+ year experience. Experienced entrepreneur.



Johan Godschalk
CFO & Co-founder

30+ years in finances at multinational asset management and recycling companies. Experienced entrepreneur.





TIRE RECYCLING CONSULTANCY

- CEYES helps companies build successful tire recycling solutions
- With the focus on the Circular Economy
- Together with our great partners



20+ YEARS OF EXPERIENCE

With more than 20 years of experience and know-how.

We started **CEYES Circular Experts** in 2016, and is enable to offer our customers the best complete tire recycling solutions.

WE BUILT

Over the last 20 years together with our partner **MTB Recycling**, tire recycling facilities in Croatia, Romania, England, Israel, Tunisia, USA, Sweden, Kuwait, Latvia, Estonia





Tyrec 
tire recycling industries

Israël

MTB  RECYCLING
MANUFACTURING
ENGINEERING
- More Than Business -

ceyes 
Circular Experts



RAGN SELLS

Sweden

MTB RECYCLING[®]
MANUFACTURING
ENGINEERING
- More Than Business -

ceyes[®]
Circular Experts



TOGETHER WITH MTB WE DEVELOPED **NEW** SMALL SCALE SOLUTIONS

- This is a whole new approach, small-scale production in the Circular Economy. **BOX SYSTEMS** are circular, compact, mobile, efficient, economical and create less CO2 emissions compared to a factory building.
- **BOX SYSTEMS** are ideal in regions with a radius of 150 mile.
- In this day and age, it is no longer justified to cover large distances, together with its forthcoming **high CO2 emissions**.





TIRE BOX[®]
Plug'n'Run

COMPACT TIRE RECYCLING SOLUTION
FIRST MODULAR CONCEPT DEDICATED TO TIRE RECYCLING

GATOR BOX[®]



TIRE BOX[®]



CRUSHED TIRES



RUBBER GRANULATE



WIRE



TEXTILE

ADVANTAGES

- Compact, mobile, efficient and economical
- Designed to reach up to 1,5 metric tons per hour capacity, may vary upon the kind of tire's input
- User-friendly, just plug and start recycling
- Designed with a soundproof system and to perform with significant reduction of dust emissions
- The systems fits into containers and doesn't require any extra building



*The **circular economy** is a global aspiration that must be tackled **locally** by small scale **recycling***

MTB RECYCLING MANUFACTURING ENGINEERING
More Than Business

+33 474 928 768

Quartier de la Gare - 38460 Trept - FRANCE - www.mtb.fr - info@mtb.fr

ceyes[®]
Circular Experts



ADVANTAGES

Compact and Green

- Quick transportation and connection.
- Plug 'n' Run.
- GATOR box incorporates, in its 20-foot container, the RSX: a two-rotor shear.
- Quick access to cutting room.
- Quick exchange of the rotors .





ADVANTAGES

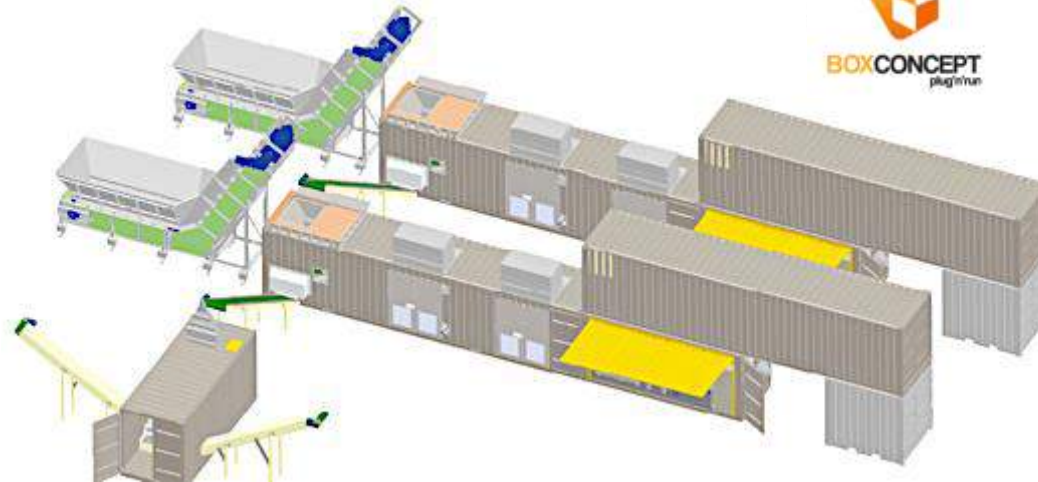
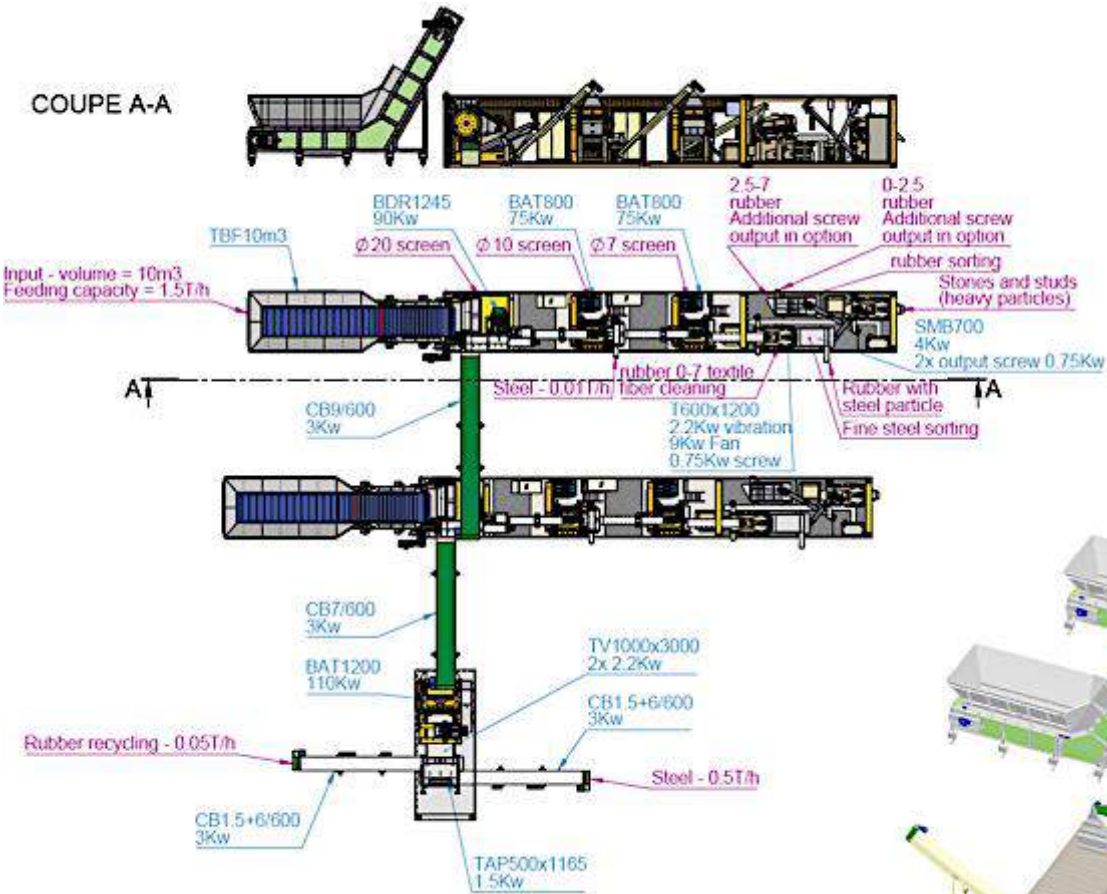
- 100% of MTB's expertise and performance in boxes.
 - Plug'n'Run Compact Tire Recycling Solution
-



MODULAR EXPANDABLE SYSTEM



COUPE A-A





Latvia

INTRODUCTION

REDUCING AND REUSING
rubber of **WASTE TIRES**

CEYES takes responsibility
of waste tires after the end of traditional use.

CEYES is already ahead and closed the loop on waste tires.



NOW IS TIME TO ACT

WASTE TIRE PROBLEM will increase dramatically in urban cities in the next coming decade

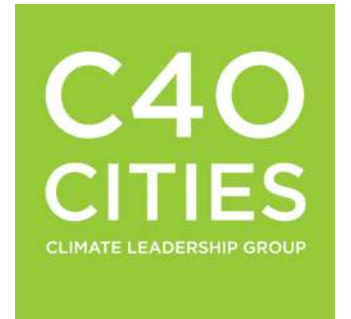


The C40
Mega cities
will grow
rapidly.



In the next
20 years more
than double
the
number of
middle class.

The Co₂
polution
needs to be
reduced.





CEYES is focused on C40 Mega cities

C40 Reinventing Cities

- A global network of mayors taking urgent action to confront the climate crisis and create a future where everyone can thrive.
- Cities will shape our future.



C40 is composed of **96 mega cities** members around the world

South America:

Argentina – Buenos Aires
Brazil – Curitiba
Brazil – Rio de Janeiro
Brazil – São Paulo
Brazil – Salvador
*Chile – Santiago
*Colombia – Bogotá
*Colombia – Medellín
Ecuador – Quito
Peru – Lima
Venezuela – Caracas

South east Asia & Oceania:

*Australia – Melbourne
Australia – Sydney
Indonesia – Jakarta
Malaysia – Kuala Lumpur
New Zealand – Auckland
Philippines – Quezon City
Singapore – Singapore
Thailand – Bangkok
Vietnam – Hanoi
Vietnam – Ho Chi Minh City



East Asia:

China – Beijing
China – Chengdu
China – Dalian
China – Guangzhou
China – Nanjing
China – Shanghai
China – Shenzhen
China – Wuhan
Hong Kong – Hong Kong
Japan – Tokyo
Japan – Yokohama
South Korea – Seoul

South and West Asia:

Bangladesh – Dhaka
India – Bengaluru
India – Chennai
India – Jaipur
India – Kolkata
India – Mumbai
Israel – Tel Aviv
India – New Delhi
Jordan – Amman
Pakistan – Karachi
United Arab Emirates – Dubai

* Cities where CEYES is today active
to develop new businesses

C40 is composed of **96 mega cities** members around the world

Europe:

Denmark – Copenhagen

*France – Paris

Germany – Berlin

Germany – Heidelberg

Greece – Athens

Italy – Milan

Italy – Rome

Italy – Venice

*Netherlands – Amsterdam

*Netherlands – Rotterdam

Norway – Oslo

Poland – Warsaw

*Russia – Moscow

Spain – Barcelona

Spain – Madrid

Sweden – Stockholm

Switzerland – Basel

Turkey – Istanbul

UK – London



Africa:

Egypt – Cairo

Ethiopia – Addis Ababa

Ghana – Accra

Kenya – Nairobi

Nigeria – Lagos

Senegal – Dakar

Sierra Leone – Freetown

South Africa – Cape Town

South Africa – Durban

South Africa – Johannesburg

South Africa – Tshwane

Tanzania – Dar es Salaam

North America:

Canada – Montreal

Canada – Toronto

Canada – Vancouver

United States – Austin

United States – Boston

United States – Chicago

United States – Houston

United States – Los Angeles

United States – New Orleans

United States – New York City

United States – Philadelphia

United States – Portland

United States – San Francisco

United States – Seattle

United States – Washington, DC

*Mexico - Guadalajara

*Mexico – Mexico City

* Cities where CEYES is today active
to develop new businesses

THE CIRCULAR ECONOMY

IS A GLOBAL
ASPIRATION THAT
MUST BE TACKLED
LOCALLY





SET UP
FIRST
SMALL SCALE
PRODUCTION HUB
VENLO NL 2021



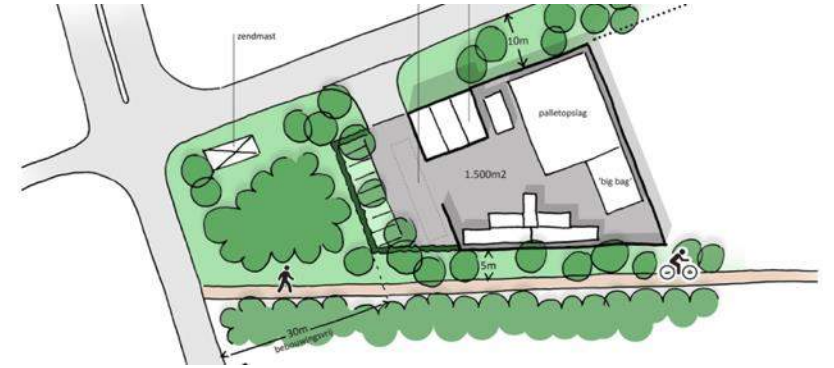


CEYES BOX by MTB

ceyes[®]
Circular Experts





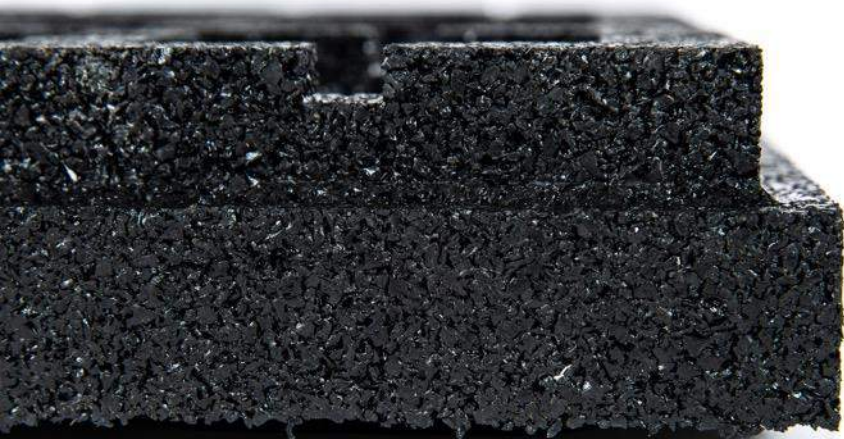


evolutionary wooden buildings



- CEYES HUB, development location landscape
- Plot size +/- 1.500 m2

We help you to deal with residual flows of **rubber** from your synthetic turf fields in a **circular way.....**



with water buffering solutions
in **your municipality**

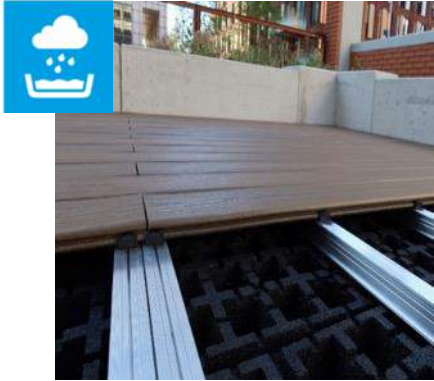


MULTI-FUNCTIONAL PANELS FROM RECYCLED TIRES

We turn rubber wastes into smart products to solve urban environmental problems: **floods**, **heat stress** and **noise**.

SOLUTIONS FOR ROOFTOPS

The biggest catalog of rooftops counts 130 variants. They are very important for stormwater management. Each color of roof has specific features. CE GREEN city panels can be used for:



Water retention

Blue roof provides initial temporary water storage. Water is stored until it either evaporates or is released downstream.



Biodiversity

Green roofs serve several purposes for a building: absorbing rainwater, providing insulation, creating a habitat for wildlife



Energy

Yellow roof is a Symbiosis between Biodiverse Green Roofs and Renewable Energy, i.e. integration of Solar PV Panels



Water detention

Purple-Roof is a green roof that incorporates high retention and detention capabilities.



Public areas

Red roof can replace the gardens or local parks at ground level offering different activities to house residents.



The liveability
of our cities
stands
under pressure.





The solution comes out
your artificial grass pitch

cegreen
City panels 



ceyes[®]
Circular Experts



After 10 years it's time
for a new field
- but sustainable

Re Match separates grass,
sand and rubber

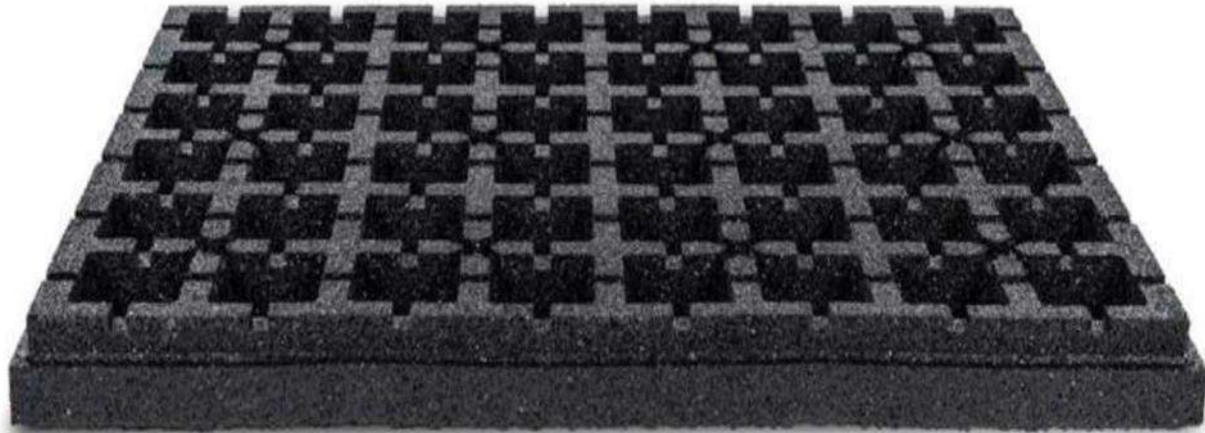


Your rubber goes
then to our
small-scale factory
in the region





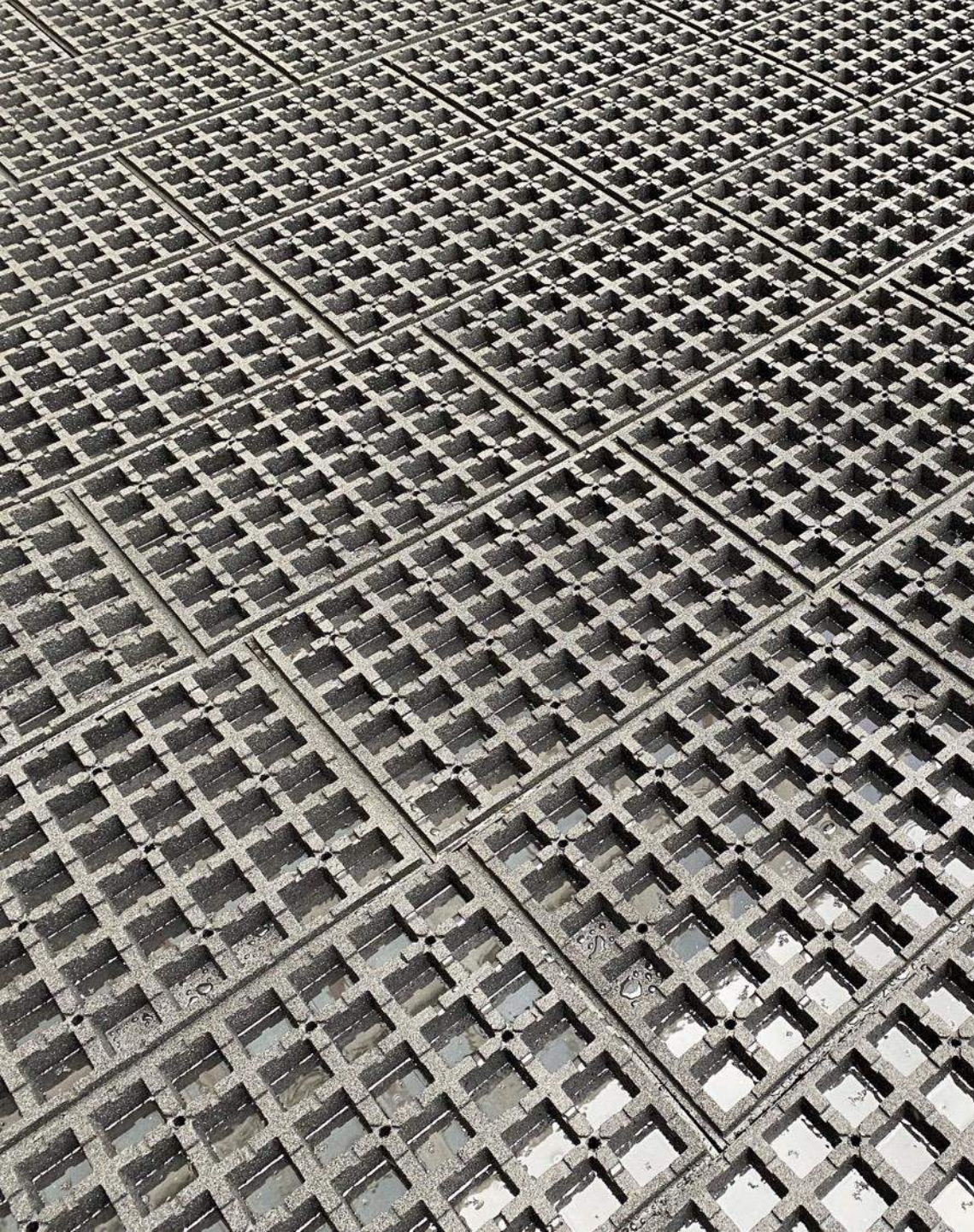
...to press your own water buffering panels.



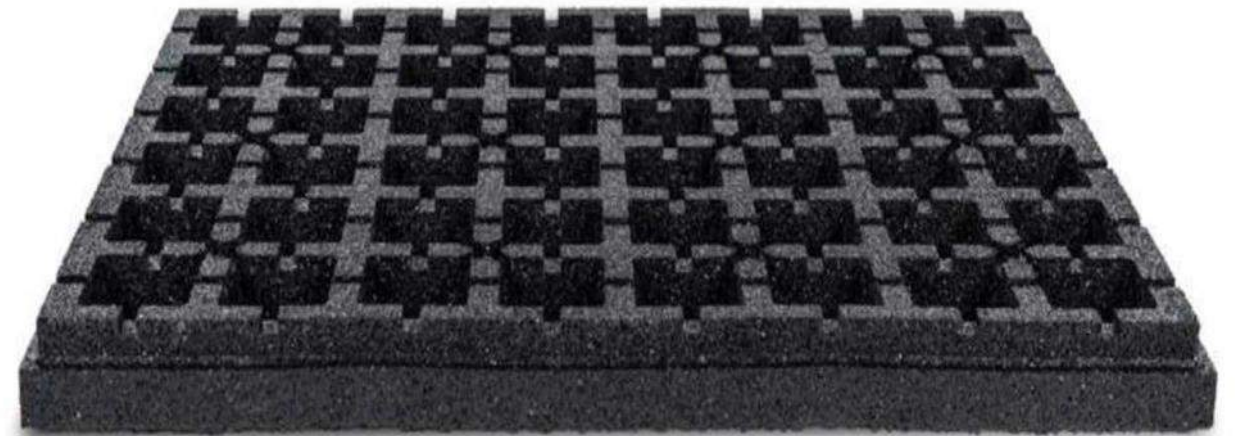
cegreen 
City panels



ceyes[®]
Circular Experts



The solution for **water buffering** from your own artificial grass pitches.



cegreen 
City panels

ceyes[®]
Circular Experts



The solution for
water buffering
under green roofs

cegreen
City panels 



ceyes[®]
Circular Experts



The solution for
water buffering under 'living
roofs' and terraces

cegreen 
City panels



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Circular Experts



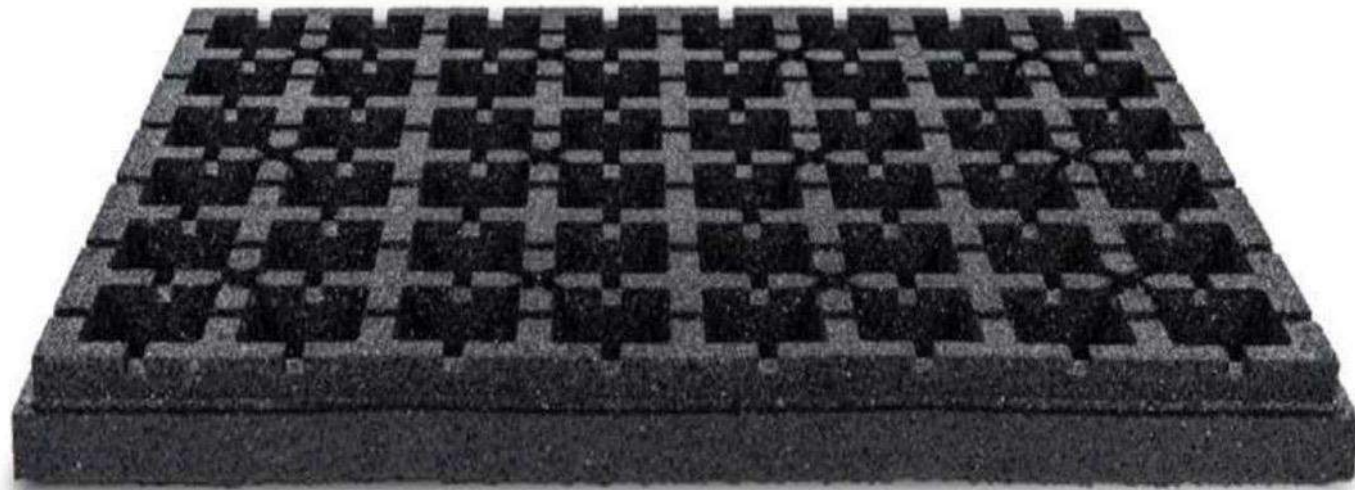
The solution for
water buffering under
cobblestone roads
and parking lots


cegreen
City panels 



ceyes[®]
Circular Experts

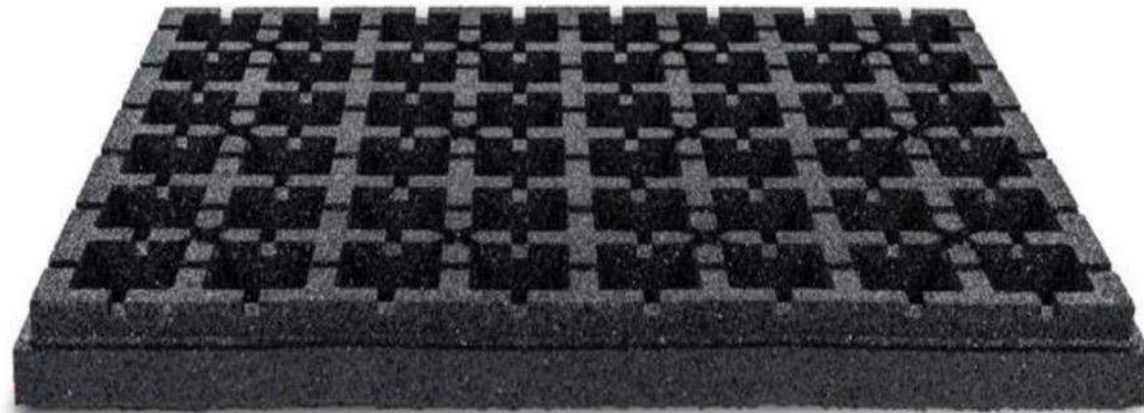
We recycle every football field through a subscription
to 4,500m²



The  helps to use them optimally
within your **municipality**

In a nutshell. **cegreen** 
City panels

A total solution for two challenges:
your rubber residual flows
and rain water management



for greening, cooling, noise and heat stress reduction in the
immediate living environment



01

MICHELIN Truck tire

> 100.000 waste truck tires at
Michelin Homburg annually



CLOSED LOOP CIRCULAR DESIGN



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02

Worn used tires

Worn carcasses are returned to the
factory for quality / reuse control





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Tire retreading

a high-quality retreaded tire requires only 30% of the oil and 70% less energy, so that up to 80% lower CO2 and other carbon emissions.





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Tire recycling

Recycling saves impressive amounts of energy, which ultimately reduces greenhouse gas emissions.



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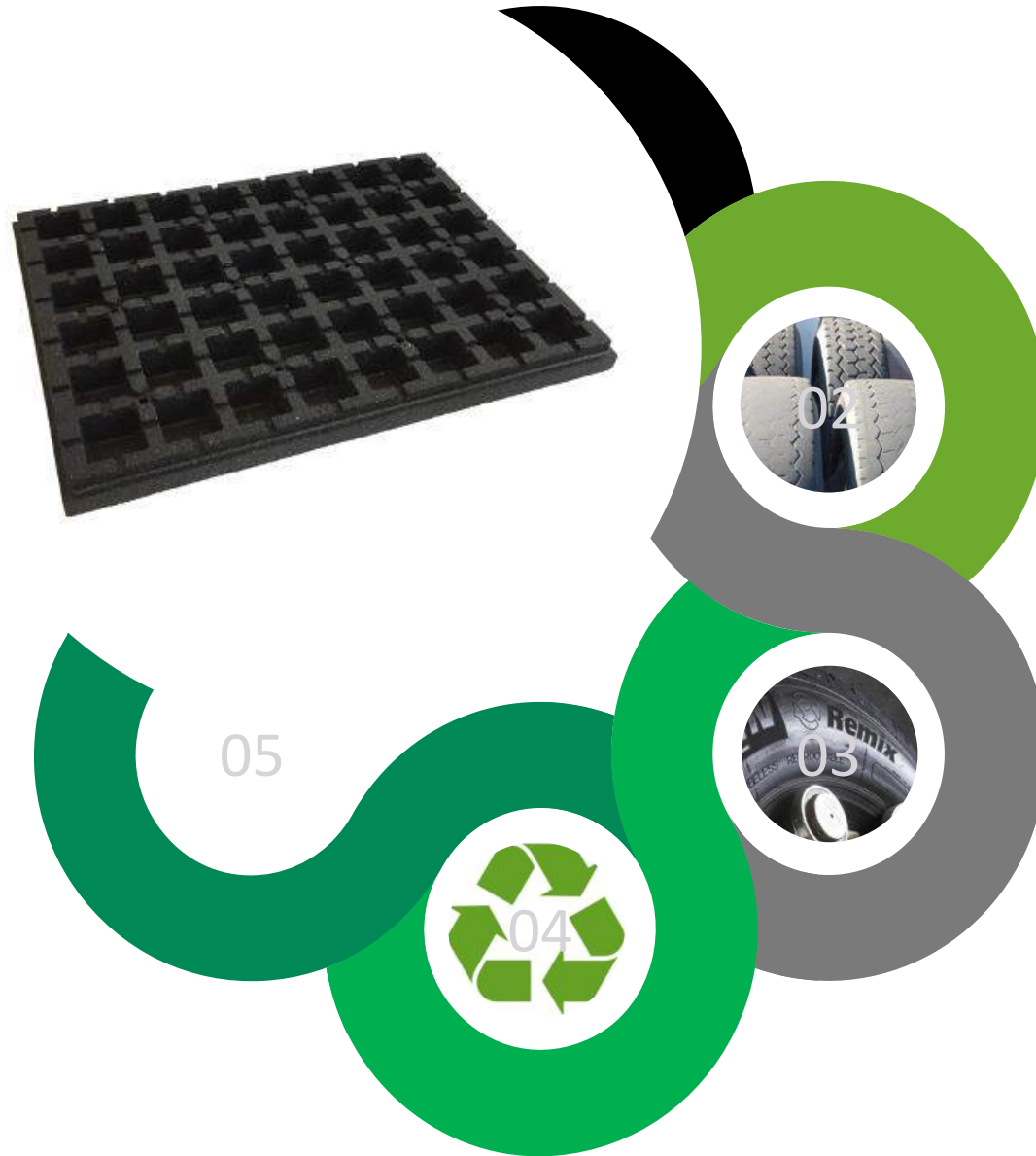
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CEYES CE Green City products

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Oil, gas and Carbon black

Enviro's recovered oil and carbon black is ISCC sustainability certificated and can be re-used in new tires.



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TOGETHER WE CLOSE THE LOOP



MICHELIN Recycling Solution in final numbers

The averages of a ELT has 27 kg rubber and CE Green City panel of 1m2 has about 27 kg
 We calculate with 1 ELT is 1m2

Tabel: CO2 emissions during the lifetime per (average) truck tire (kg CO2-eq / m2 / year)

	CO2 footprint (kg)
New Michelin truck tire	220
#1 Michelin Remix tire (retreaded tire)	39
#2 Michelin Remix tire (retreaded tire)	39
	298

	kg CO2-eq / m2 / year	Lifespan (yrs)	
Rubber CE Green City panel	-4,093	75	-307
Standard plastic green roof construction	-3,157	37,5	-118
Standard roof	0,464	25	12

A retreaded tire = -70% raw materials than a new tire



TECHNOLOGY



cegreen
City panels 

SECONDARY RUBBER INSTEAD OF PLASTIC

- Lifetime 100 years, life cycle analysis verified by SGS search
- 100% recyclable many times
- Strength, elasticity



ORGANIZATION OF PRODUCTION ACCORDING TO CIRCULAR ECONOMY PRINCIPALS

- Mobile, compact installation allows to transport closer to sources of waste (radius not more than 200 km)
- 100% recycling of materials (LCA provided by manufacturers)
- 2x reduction in CO₂ emissions compared to standard production
- Alignment with UN SDGs: 3, 9, 11, 12, 15, 17



LOWER CARBON FOOTPRINT

IMPROVED MOULDING TECHNOLOGY

- Increased heating temperature up to 120 °C
- Increased pressure up to 100 tons
- Accelerated crumb mixer
- Efficiency (non-stop production)
- Technology Readiness - TRL9

* The equipment is manufactured according to the CEYES technical specifications on the terms of confidentiality and exclusivity

ceyes®
Circular Experts

PEOPLE USING
BUSINESS
..... AS A
FORCE FOR GOOD



SOCIAL ENTREPRENEURSHIP in the **CEYES** COMMUNITY

- Benefit Corporations (**B Corps**) form a worldwide network of certified companies that, besides profit, also strive for a high standard for social and ecological impact, accountability and transparency.
- Globally there are over 2000 B Corps in 50 countries and 130 industries with one common goal:

“using business as a force for good”

CEYES COMMUNITY

- Individual CEYES entrepreneurs are part of the worldwide CEYES network.
- New product idea's will be studied by the CEYES R&D department before implement in the worldwide network.
- The involved individual CEYES partner will receive a product sales fee of the worldwide producers.
- Now more than ever we need to pull together. And that's exactly what we see happening in our global green community. Our number of participating countries has to grown. And with the support of all of our international partners we've been able to create a fully totally new product range of CEYES products.
- Together we create #globalgreenimpact

CEYES products contributes to the following UN sustainable development goals



Together
we
make the
difference



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