



GREENMATTER

RESOURCE

RESOURCE

RESOURCE

RESOURCE

RESOURCE

RESOURCE

RESOURCE

RESOURCE

RESOURCE

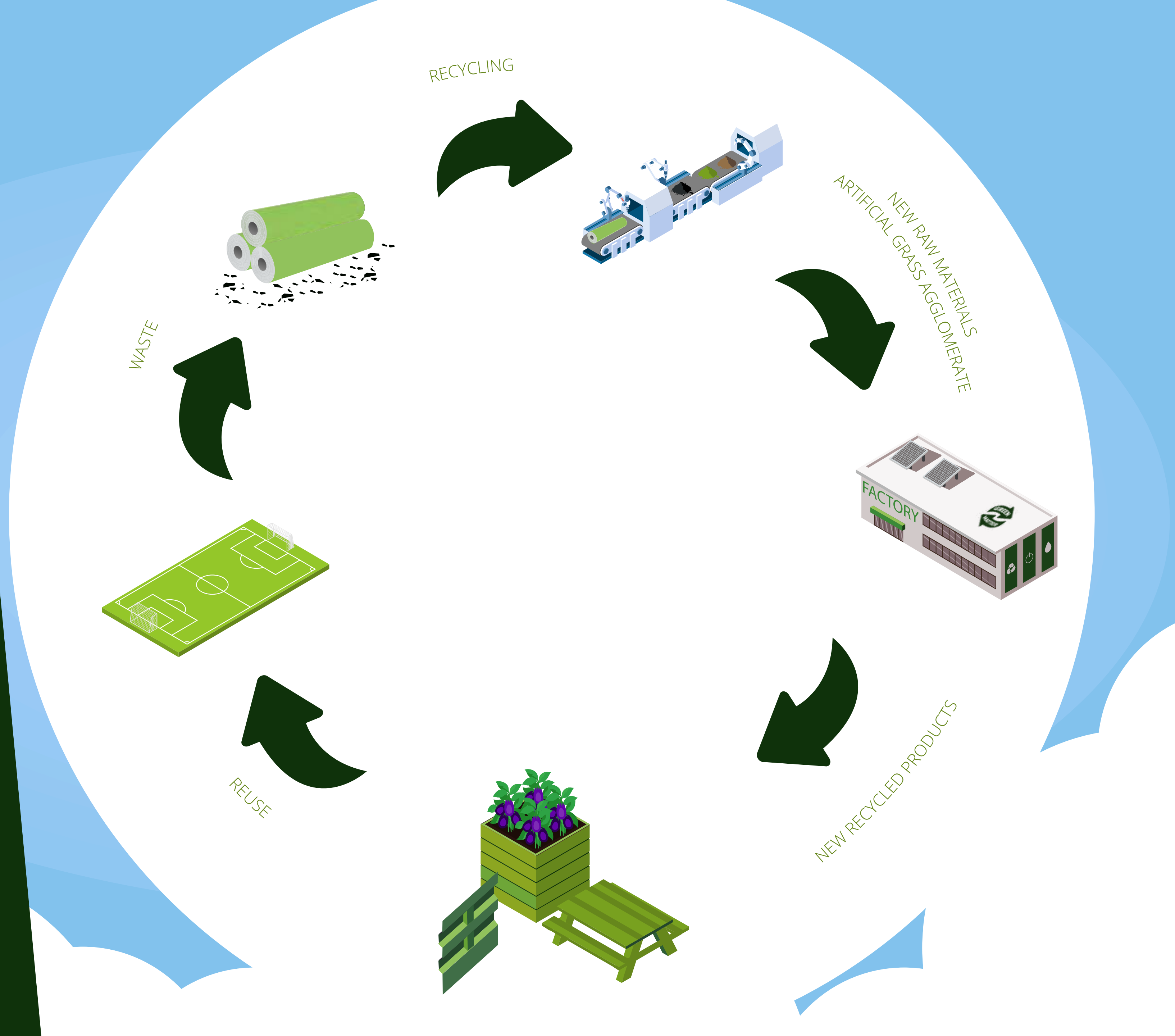
RECYCLE THE PRESENT
SAVE THE FUTURE



GREENMATTERS

ROAD TO A GREENER PLANET

HOW DO WE GET TO A GREEN AND CIRCULAR ECONOMY TOGETHER?



OVER GREENMATTER

Since 1975, Lankhorst Engineered Products has been active in making innovative products based on recycled plastics. These products contribute to a cleaner environment because they are made of recycled plastics, are not impregnated and therefore do not release toxic substances into the environment. At the end of their lifecycle, the products can always be recycled again. Plastic waste thus finds a new and long-lasting lifecycle, for example as a bridge, fishing pier or shoring.



OCCUPATIONAL HEALTH AND SAFETY
MANAGEMENT SYSTEM ISO 45001:2018



QUALITY MANAGEMENT SYSTEM
ISO 9001:2015



ENVIRONMENTAL MANAGEMENT SYSTEM
ISO 14001:2015



ABOUT GREENMATTER

RECYCLE THE PRESENT, SAVE THE FUTURE!

GreenMatter is a joint venture between W&H Sports and Lankhorst Engineered Products and has set itself the goal of tackling the waste mountain of artificial grass pitches by developing and producing products from recycled artificial grass from worn-out artificial pitches. When artificial grass pitches are replaced, waste is created and we try to make this a circular process with an extensive delivery programme.

LABEL:
MONITORING RECYCLATES FOR EUROPE



MEMBER OF..
EMEA SYNTHETIC TURF COUNCIL



WINNER PLASTICS RECYCLING AWARD EUROPE 2020

GreenMatter has received the award in the category Building & Construction Product of the Year'. This award strengthens us in our mission to reduce the growing mountain of artificial grass waste. Plenty of challenges ahead!



EMPATEC

For any processing and assembly of our GreenMatter products, we use the services of Empatec. Empatec is a social work company for people with a distance to the labour market.



PROCESSES STARTED ALREADY

PROCESS HAS YET TO GET OFF THE GROUND



WASTE

ARTIFICIAL TURF PITCHES ARE BEING PROCESSED

RECYCLE

SETTING IN MOTION THE REUSE RAW MATERIALS

RE-USE

APPLY CIRCULAR PRODUCTS

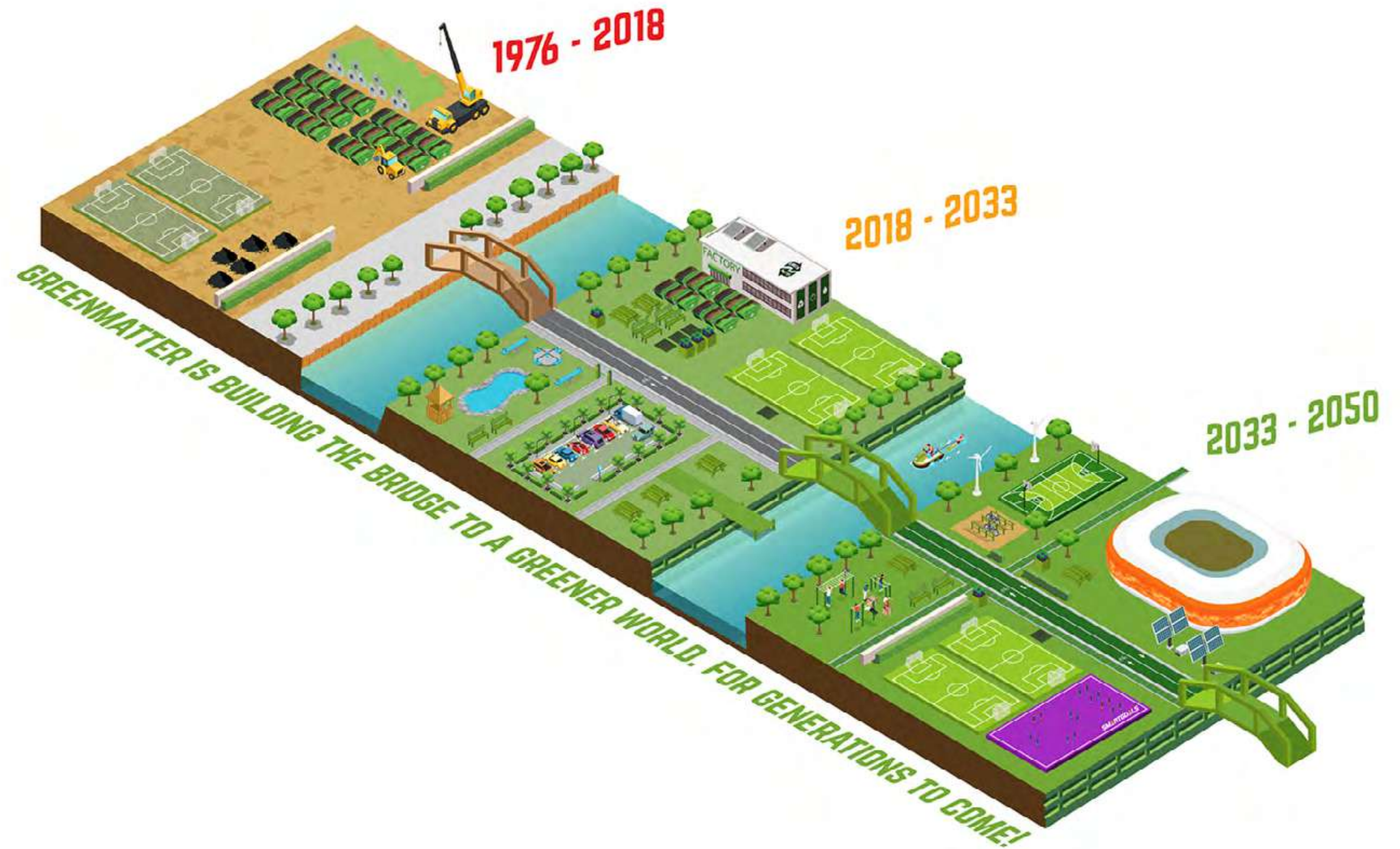
ROADMAP GREENMATTER

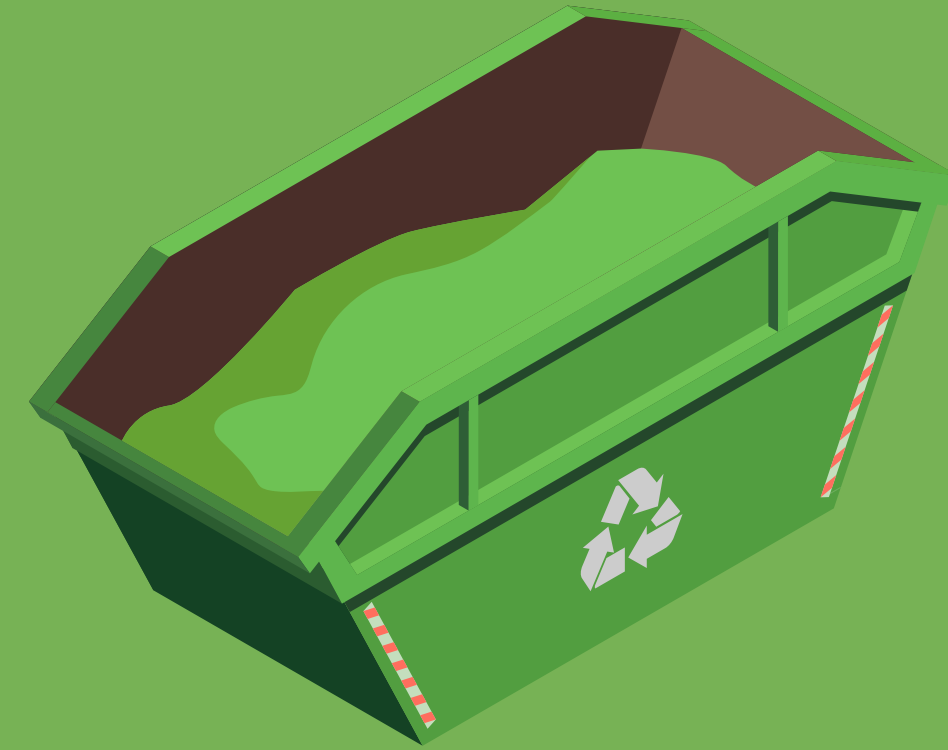
MISSION

Converting waste from artificial grass pitches into a circular raw material flow by manufacturing recycled products.

VISION

We would like to give substance to the circular issues surrounding the waste from artificial grass pitches in order to make a lasting difference as a provider of circular solutions.





ARTIFICIAL GRASS

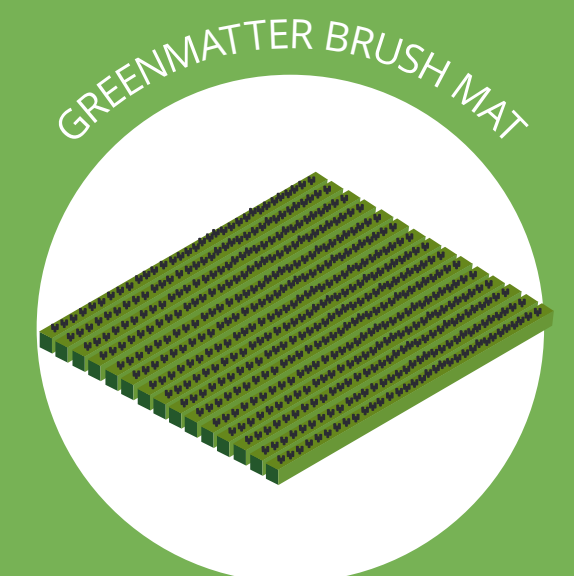
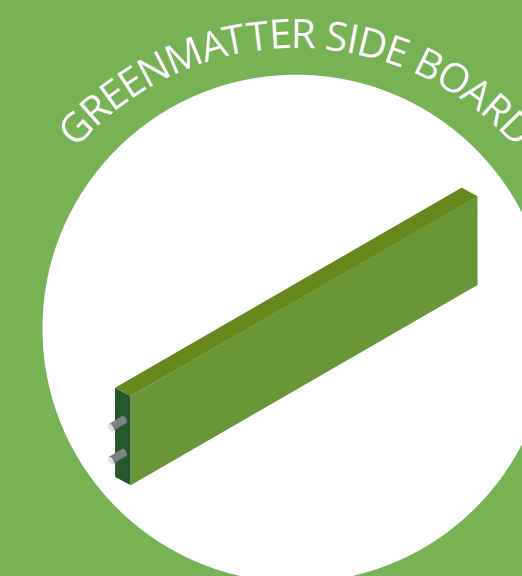
CIVIL CONSTRUCTION



OUTDOOR FURNITURE



PREVENTATIVE MEASURES INFILL & MICROPLASTICS



THE ARTIFICIAL GRASS WASTE CALCULATOR

NUMBER OF FIELDS

SUSTAINABLE MENU CARD

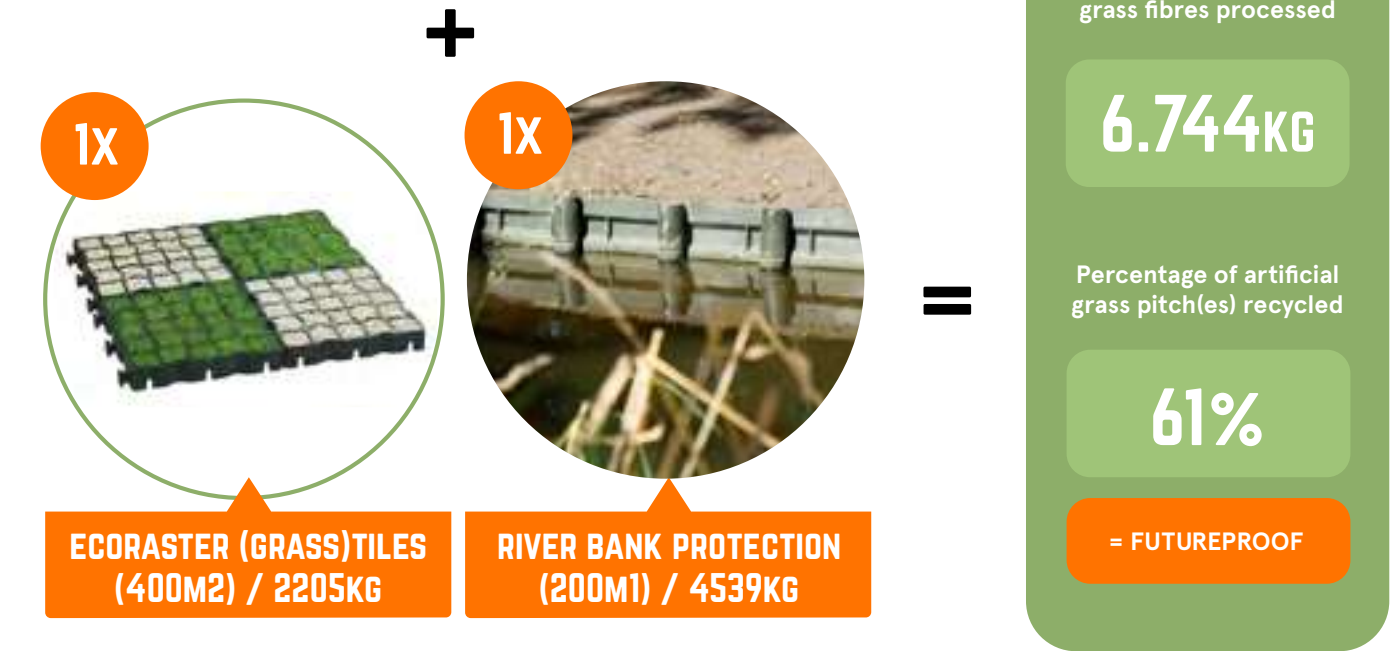


400M2 ECORASTER (GRASS)TILES	2.205 KG
200M1 RIVER BANK PROTECTION	4.539 KG
93 SIDE BOARDS	2.599 KG
400M2 GREENMATTER SOLAR	2.335 KG
2 PICKNICKTABLES	1.290 KG
200M2 MODULAR SPORTS FLOOR	1.080 KG
1 FISHING PIER	670 KG
10 PLANTERS	1.005 KG
10 BOLLARDS	357 KG
10 WALK PLANKS BRIDGE	671 KG
10 TABLES	...

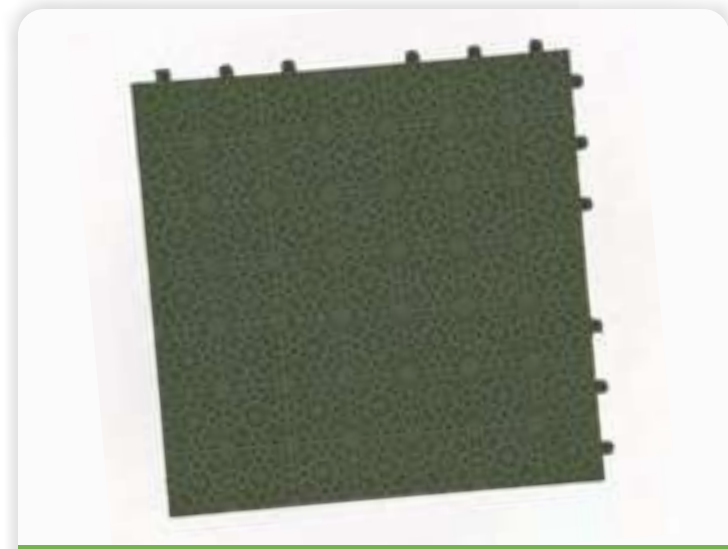
HEY MUNICIPALITY,
 HOW CIRCULAR
 ARE YOU IN
 THE DISPOSAL
 OF YOUR ARTIFICIAL
 GRASS PITCHES?

TRY IT!

VARIOUS CALCULATION EXAMPLES



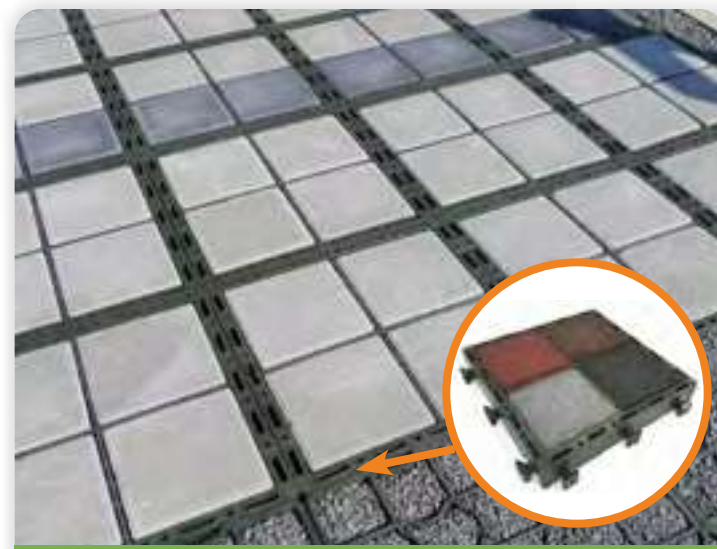
PRODUCT RANGE



MODULAR SPORTSFLOORING



ECORASTER (GRASS) TILE



ECORASTER BLOXX



SOLAR



GREEN ROOF FRAME



RIVER BANK PROTECTION



COMBI PILE PLANKING



PICNIC SET (2 BENCHES)



PICNIC SET (4 BENCHES)



PARK BENCH



MOBILE BENCH



MOBILE BENCH



BENCH WITHOUT BACKREST



RAISED BENCH



DRESSING ROOM BENCH



TEAM TABLE



FLOWER BOXES



SIDE BOARDS

DELIVERY PROGRAM



DECK PLANK GRIP STRIP



FACADE CLADDING



BRIDGE PARTS



FISHING PIER



POLE



BOARDING



HOCKEY BOARDS



TREE BENCH



BENCH SLATS



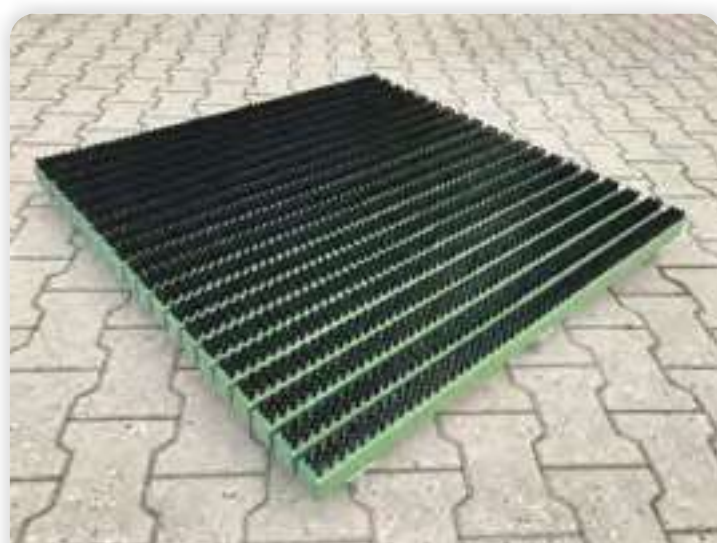
STADIUM SEATING



TRIBUNE



STAND BOARDS



BRUSH MAT



BRUSH MAT



FITNESS PLATFORM



FITNESSPARK BASIC



FITNESSPARK ATHLETIC



QR-FIT-BANK

DELIVERY PROGRAM



BOLLARD



REFLECTOR POST



EDGING BOARDS



NAILER BOARDS



DECK PLANKS



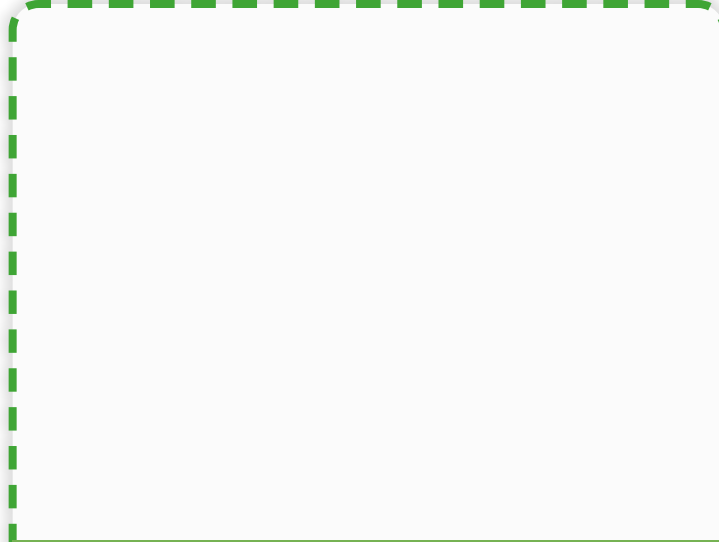
**WHEELCHAIR FRIENDLY
PICNIC TABLE**



STAND TABLE



KERB CLAMPING SYSTEM



MORE PRODUCTS TO COME..

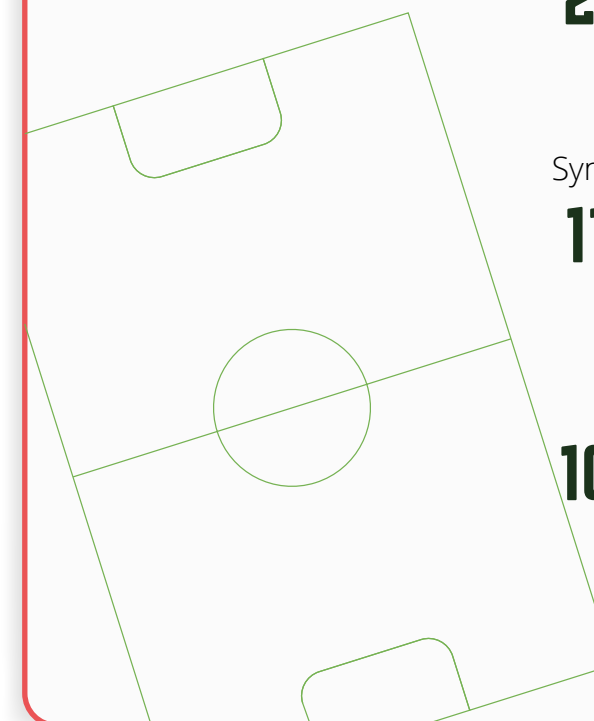
PRACTICAL EXAMPLE

NUMBERS

- Old artificial grass fields with infill; > 35,000 fields worldwide.
- 9,000 old artificial grass fields must be replaced before 2022.
- An average artificial grass football pitch is 7,600 m² and weighs 250 to 350 tons.
- An average artificial grass field contains 60% sand, 30% performance (rubber) infill, 5% backing and 5% artificial grass fiber.
- The most common performance infill is SBR infill; granulated car tires.

PROBLEM

Many artificial turf fields have been installed since the beginning of this century, but too little thought has been given to how to deal with them when they need replacement



Waste per field
21.000 KG

Synthetic turf fibers
11.000 KG

Backing
10.000 KG

SOLUTION (EXAMPLE)



GREENMATTERS SOLUTIONS





**GREENMATTERS
SOLUTIONS**



**GREENMATTERS
SOLUTIONS**





Re-Match



GBN-AGR



Purus



QR-FIT



Daplast



Bergo Flooring



SolarWoodle



KUCK FITNESS



Sam Gre



Empatec



DOWN- OR UPCYCLING?



**AVERAGE LIFESPAN OF AN
ARTIFICIAL TURF PITCH**
10 YEARS

**LIFESPAN OF AN
ARTIFICIAL TURF PITCH**



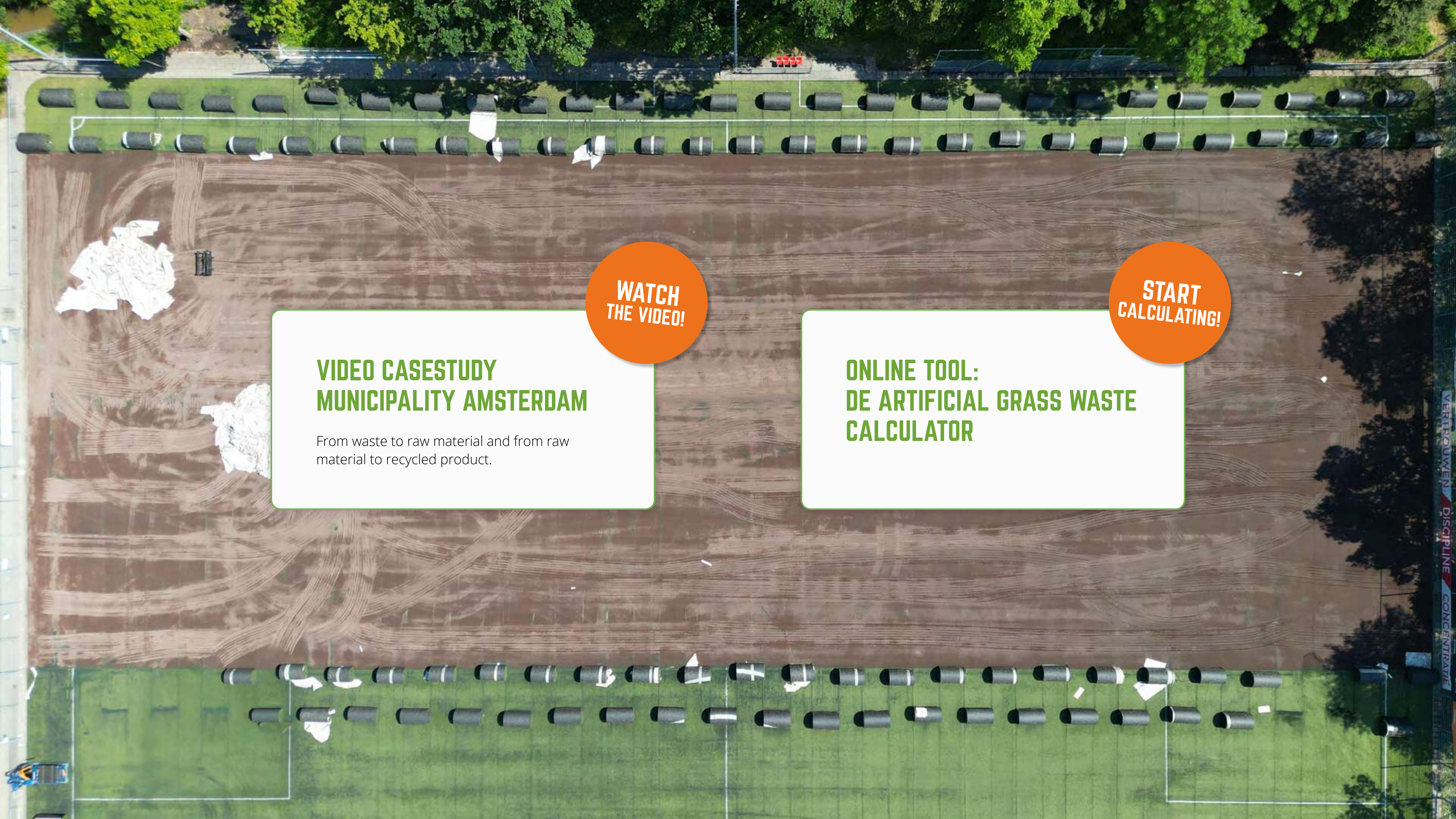
**AFTER 10 YEARS OF USE,
WASTE IS CREATED**

**LIFESPAN OF
GREENMATTER
PRODUCTS**



**EXPECTED LIFETIME OF
GREENMATTER PRODUCTS IS**
50 YEARS

**GREENMATTER PRODUCTS
CAN BE 100% RECYCLED
AFTER LIFESPAN**



**WATCH
THE VIDEO!**

**VIDEO CASESTUDY
MUNICIPALITY AMSTERDAM**

From waste to raw material and from raw material to recycled product.

**START
CALCULATING!**

**ONLINE TOOL:
DE ARTIFICIAL GRASS WASTE
CALCULATOR**

THE EARTH
100% CIRCULAR

