

# The story of True Turf Recycling





# The Turf Challenge

**SYNTHETIC TURF PITCHES** are becoming increasingly popular all over the world. This is good for people's health because it enables sports to be played more often, for longer and in regions where it would otherwise not be possible. From an environmental perspective there are also gains as synthetic pitches do not need fertilizers or watering. But it does also present a problem.

When synthetic turf is worn out after 8-10 years it becomes time to making an important choice – not only of which new turf should be installed – but even more importantly; what to do with the old turf.

In 2020 alone  
**14.000 pitches**  
were disposed of

**THE SYNTHETIC TURF INDUSTRY** and their customers are generally committed to handling end-of-life turf in a sustainable manner. This entails avoiding incineration and landfilling – and instead ensuring that pitches are recycled.

When opting to have their pitch recycled, turf owners are faced with an array of alternatives – and it is not easy to choose the option which matches the owner's environmental profile while also being competitively priced.

In 2030, the  
number of pitches  
that will be up for  
disposal is **52.000**

In the attempt to provide more clarity, we have introduced the concept 'true turf recycling' – and are committed to providing this to our customers and consequently contribute to reducing the environmental impact of turf disposal (see page 6).

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By June 30, 2021  
Re-Match has  
recycled 633 pitches.  
This corresponds to:



~10.000  
truck loads



~111.000 tons  
of waste



~495 mill.  
plastic bags

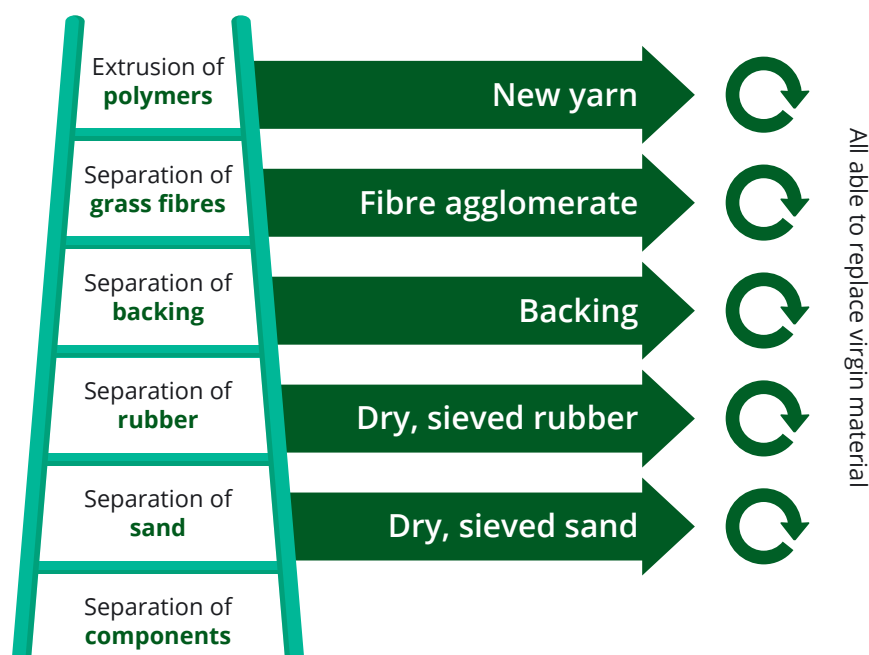




# The Turf Solution

**WE BELIEVE** that we, at Re-Match have achieved a fully circular solution to turf recycling. We have done so by ensuring that our processes can recycle the end-of-life turf back into the original components and taking the necessary steps to provide real circularity.

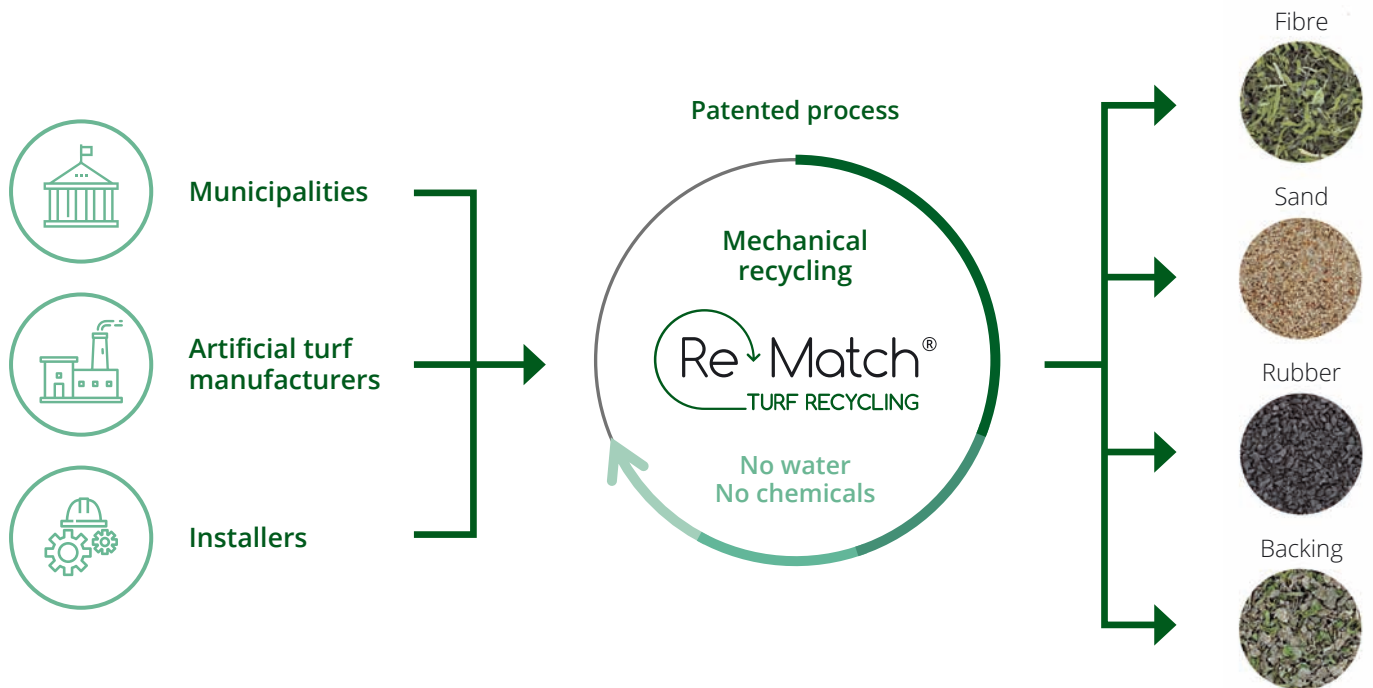
## THE TURF RECYCLING LADDER



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The figure shows the increasing complexity of the recycling process and its outcome. While sand is easy to separate, the grass fibres are not – but it is the fibres that present pitch owners with the biggest environmental challenge and responsibility. The last step on the ladder represents the making of new yarn from end-of-life turf. This, Re-Match is seeking to achieve in corporation EU Horizon 2020 and the Fraunhofer Institute.

# The Turf Flow



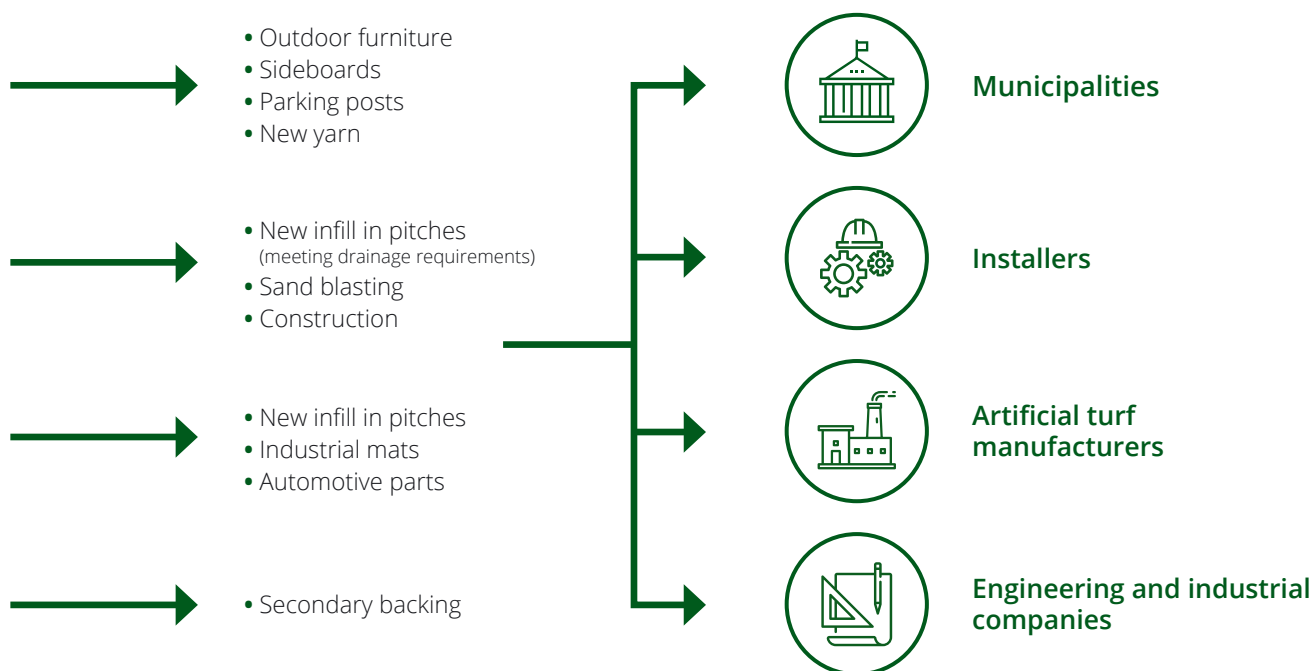
**THE INPUT** to the Re-Match recycling process is end-of-life artificial turf and it most frequently comes from municipalities and sports clubs. Prior to recycling a pitch, the incoming material is analysed and identified by batch numbers for transparency and avoidance of cross contamination. The material is mechanically recycled using a patented process where neither water nor chemicals are added.

**THE CUSTOMER** receives a Field Overview and a Diploma of Recycling when the material has been recycled. These documents state the composition of the pitch and provides confirmation of processing.

Also, Re-Match provides advice to cities, architects, contractors, and manufacturers about the circular possibilities for turf and the most sustainable way to recycle and reuse the materials. In support of EU's 2050-strategy a popular option for pitch owners is to use their own recycled rubber and sand as infill in their new pitch and for municipalities to buy back customer facing products such as green roof panels or park benches.

**PRIOR TO COLLECTING A TURF PITCH**, Re-Match takes samples in order to assess the composition and quality of materials





**THE OUTPUT** consists of dry and sieved materials that are 99% clean and ready to be used again. The larger sand and the rubber granules can return to the sportsfield as infill, while the remaining sand is used e.g. in construction industry and the rubber in the production of industrial mats or automotive parts.

The fibre (polymer) is often used for consumer facing products such as outdoor furniture, sideboards, etc. The goal, however, is for the fibre to be made into turf again, and as our yarns-to-yarns concept already proved successful in the laboratory, Re-Match has received an EU grant of EUR 2,5 million to further develop this program.

**THE CUSTOMER** who wants to act responsibly and use recycled material gets the necessary reassurance of the process via our certifications (ETV, ISO 9001 and EuCertPlast) The origin of the back-end products is documented and the customer also receives all laboratory analysis, a Technical Data Sheet as well as Re-Match's quality assurance.

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## RE-MATCH HAS INTRODUCED SLEEVING

to avoid spillage of infill and microplastics during loading, transport and off-loading





# Keeping recycling real ...

**MAKING THE RIGHT CHOICE**, can be difficult when it comes to recycling of end-of-life turf pitches. Today, the responsibility for the disposal of the turf reaches beyond seeing rolled-up turf leave the premises, and to help assess alternatives, we propose to use the below scorecard.

## TRUE TURF RECYCLING SCORECARD

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<b>Full Transparency</b> Process information, recycling certificate, etc.	<input type="checkbox"/>
<b>Certifications</b> ISO 9001, ETV (EU environmental technology verification) and EuCertPlast	<input type="checkbox"/>
<b>Product Circularity</b> Worn-out turf is turned back into its original components	<input type="checkbox"/>
<b>Product Purity</b> End products from recycled infill are 99% clean and ready for new usage	<input type="checkbox"/>
<b>No Additional Waste Creation</b> Recycling process uses no chemicals or other substances (incl. water)	<input type="checkbox"/>
<b>Sustainable Procurement</b> 100% Green energy used for production, sleeves made from recycled plastic, etc.	<input type="checkbox"/>

If these criteria are met – then the assessed recycling process does not only provide the turf owner with the most thorough documentation, certification and transparency – it also contributes to saving the environment from a significant negative impact.

Needless to say, the process offered by Re-Match ticks of all the boxes.



## ... and reaping the benefits

**THE UPSIDE** by choosing true turf recycling is, that it not only provides pitch owners with the confidence that they have selected the most advanced recycling method available – it is also competitive compared to incineration and landfilling. In addition, they also know that the material from their worn-out turf help replace virgin material in new production cycles.



Due to Re-Match's advanced recycling process, we are able to offer prices that are lower than disposal through incineration or landfilling. Also, our end products are able to compete with and replace virgin material.



Our processes have been ISO 9001 and EuCertPlast certified, and we have received EU's Environmental Technology Verification (ETV). This means that Re-Match is held to the highest standards available.



We offer full transparency of the recycling flow and our customers receive full documentation when their worn-out turf has been recycled. This gives our customers peace of mind that their turf is being recycled as agreed.



Each pitch recycled with Re-Match saves the environment from ~400 tons of CO<sub>2</sub> – or the equivalent of 1,4 mill. plastic bags. All of the end products can either replace virgin material in new turf pitches or enter into alternative production cycles.

**REACH OUT TO RE-MATCH** and find out about the wide array of services that we offer – including advise on how to responsibly recycle your end-of-life synthetic grass pitch and buy back recycled circular products (EU 2050 goal).



## Get in touch

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Re-Match also has representation in Norway, Sweden, The Netherlands, Belgium, Luxembourg, Germany, Austria, Switzerland, UK, Australia and USA.

**Contact the office nearest to you.**

