Dialogkonferanse kunstgress

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Re-Match Turf Recycling

re-think · re-cycle · re-match

Re-Match

- Idea conceived in 2012
- Company established in 2013
- Patented technology in 56 countries
- First facility in Herning, Denmark
- Capacity: 200 full size pitches/year
- Staff of 30 people
- Expansion in EU and USA commenced
- Large Danish Growth Fund on board

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The Vision

- ♻ To create a circular solution for the turf industry which is better, cheaper and simpler
- ♻ To assume “category leadership” within circular economy for synthetic sports facility surfaces.

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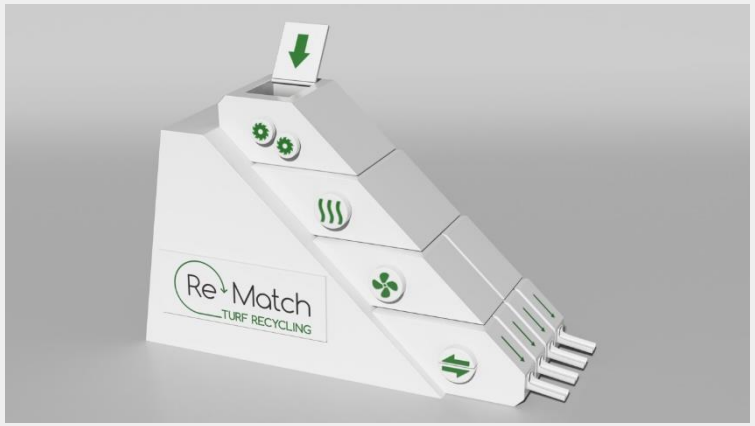
How does Re-Match recycle turf?

Intake & Inbound Quality Control → Downsizing → Drying → Separation → Cleaning → Product Quality Control

Turf input



Separation · Drying · Down-sizing

sand · rubber · backing · grass fibers

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Production is running smoothly
- with 140 fields recycled in 2018

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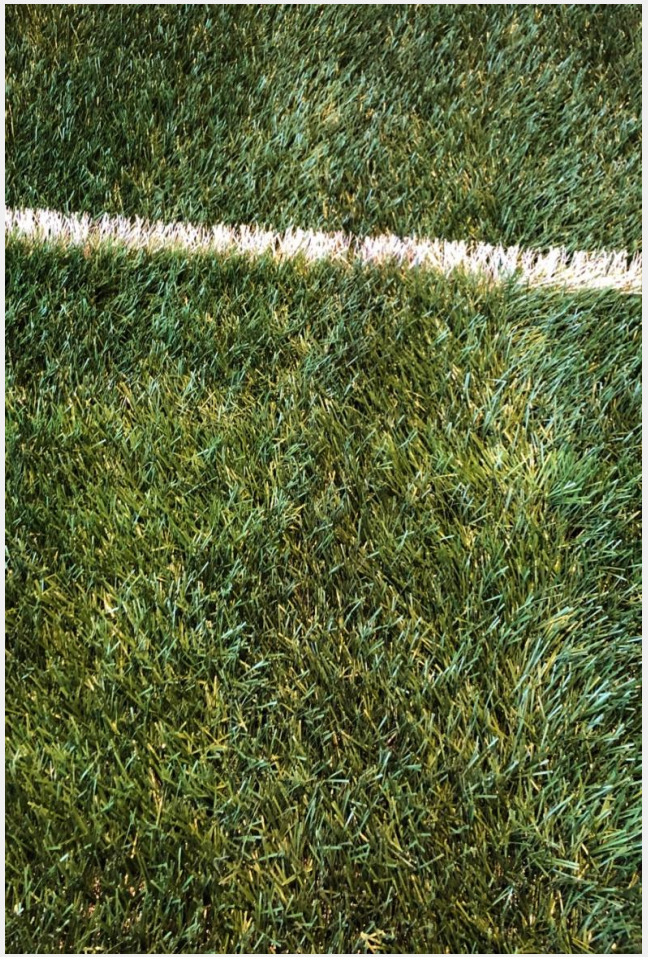
End products and their usage

- Sand
- Rubber granulate
- Secondary backing
- Primary backing
- Plastic fibre

The Circular Turf Yarn

- The Circular Turf Yarn Development Project is funded by the Danish government under "Innobooster" and EU Horizon 2020
- Combination & Integration of 2 innovative patented technologies CreaSolv and Re-Match
- Re-Match has since 2017 had an exclusive partnership with the German based Fraunhofer Institute
- World-class specialists & scientist involved
- Aim is to create the first fields purely made of End-Of-Life (EOL) Turf
- Several pilot fields around the world are in planning for 2019



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 854977

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From problem to circular economy

The problem with replacing synthetic turf pitches (today):

- Storage results in seepage of heavy metals, etc.
- Burning emits approx. 400 tonnes of CO2
- Resale is illegal / amoral
- It is a great waste of resources/valuable material
- True recycling and recycling have so far not been possible.

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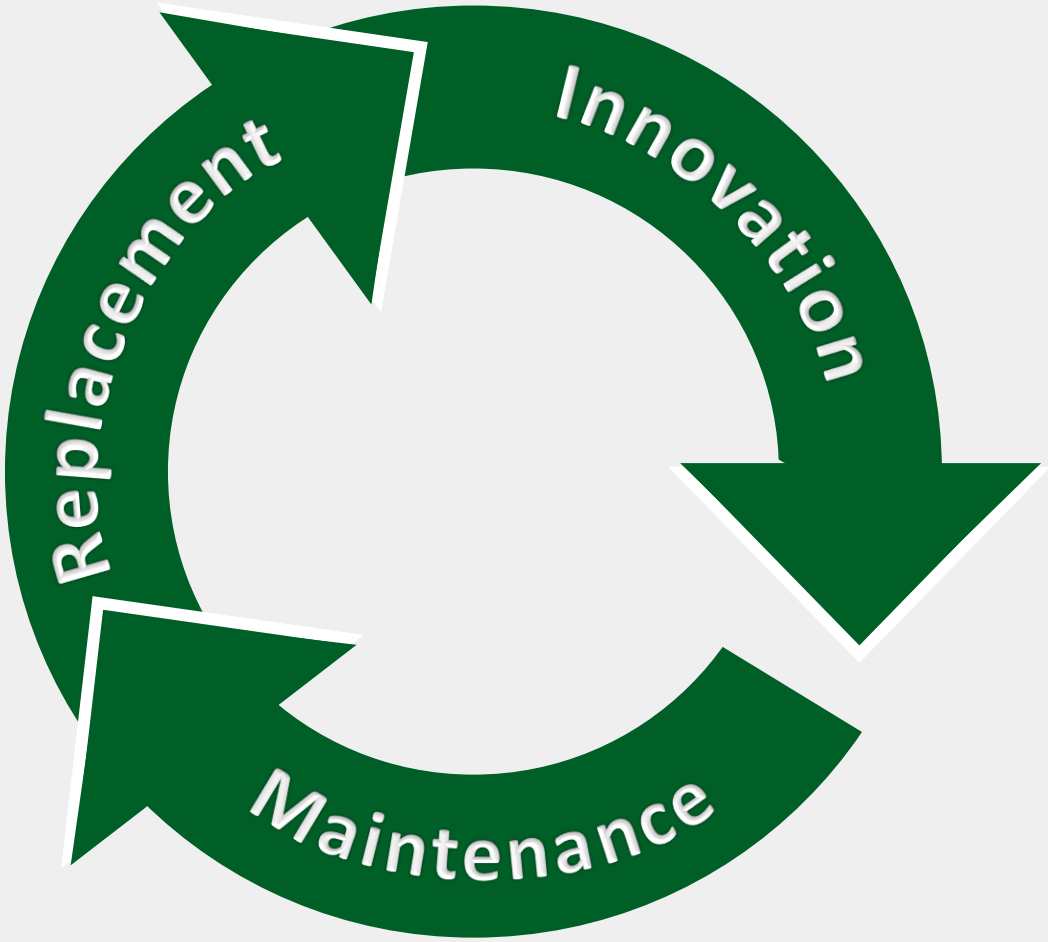
From problem to circular economy



However, help is at hand:

Today it is possible to reduce and almost eliminate the synthetic turf's negative impact on the environment by using new opportunities and harvesting low-hanging fruits within:

- Maintenance
- Replacement
- Innovation

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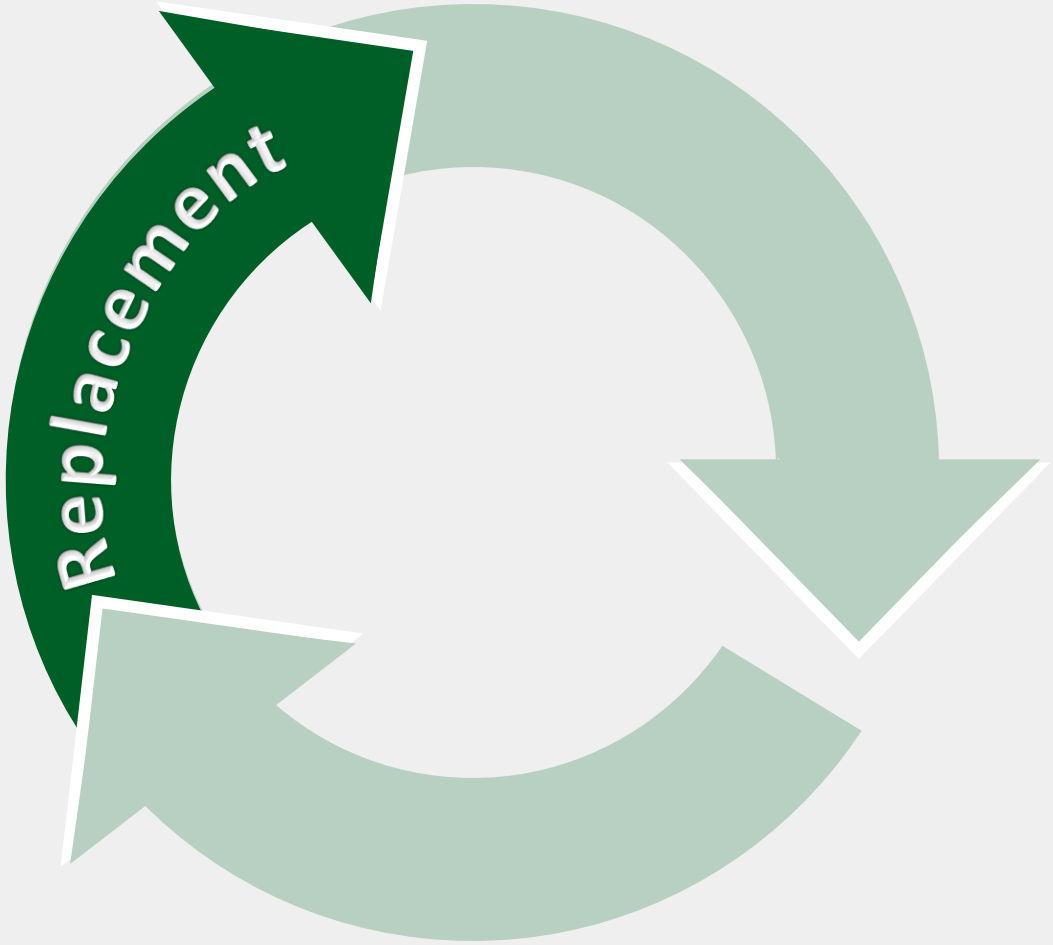
From problem to circular economy

Maintenance

There is a great deal of maintenance on synthetic turf pitches – and environmentally responsible purchasing and action can make a difference:

- Use recycled rubber for infill (it is cleaner after years of use, it has no microplastic and is easier to lay out)
- Use recycled sand (it is cleaner and just as good)
- Put up sideboards (of recycled material) to keep the infill within the pitch area.
- Clear snow consciously - avoid removing rubber infill.

From problem to circular economy

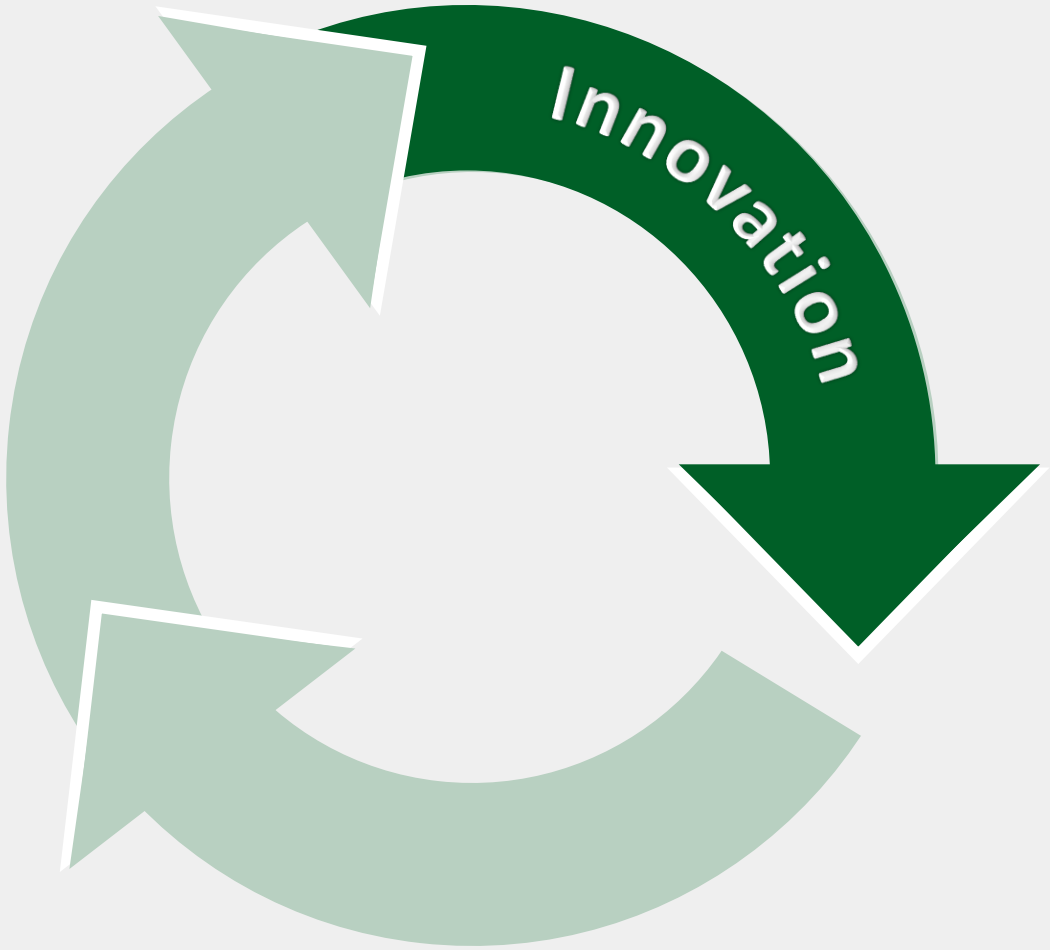


Replacement

At some point material needs to be added to synthetic turf pitches – and eventually a new pitch needs to be laid. Here are important decisions that one can make - with great environmental impact:

- Top up with recycled sand and recycled infill
- Make sure the worn-out turf is recycled with an ETV-approved supplier (specify it)
- Put an E-layer of recycled material under the turf to reduce the need for rubber infill

From problem to circular economy



Innovation

The recycling of synthetic turf is in its infancy - and it is likely that- in a not too distant future - you will be able to buy synthetic turf consisting of recycled grass fibre which:

- Looks exactly like virgin fibre
- Has the same (or better) wear resistance
- Fulfils FIFA playability requirements
- Costs less

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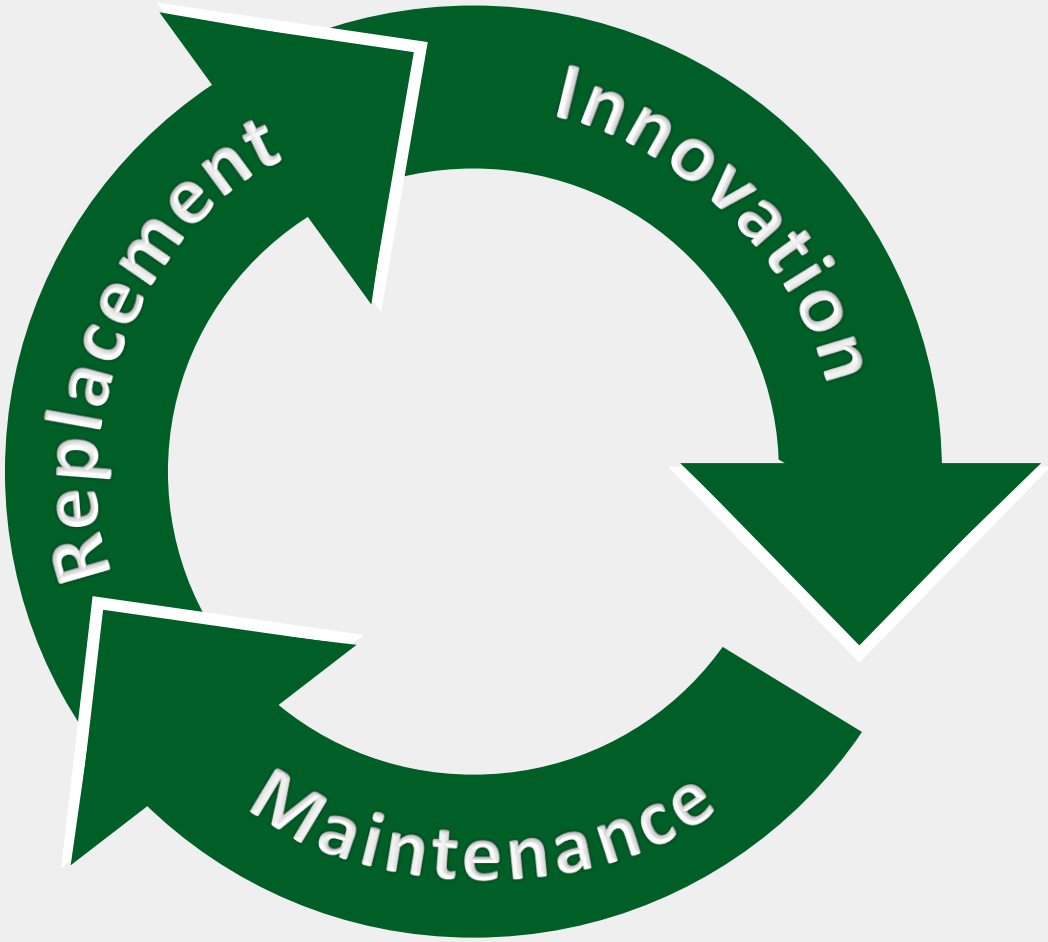
From problem to circular economy



Coming full circle:

With proper maintenance, attention to recycling when specifying replacement of synthetic turf pitches, and with the use of new sustainable technologies and their end products – we can harvest both environmental and economic benefits by introducing this circular thinking.

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Thank you for your attention!