



1. **SDG-STRIKER a project focused on testing best practices and assessing their replicability to make sports greener.**

SDG Striker is a European co-funded project under the Erasmus+ programme that aims to **implement and communicate the Sustainable Development Goals** (SDG) through ad hoc action at local level. The project consists of developing a joint understanding about best practices before, during, and after being **tested in 3 pilot countries**, Norway, Scotland, and Portugal. Each of the pilots will be focusing on a different area, incorporating concrete SDGs as part of their Corporate Social Responsibility (CSR) programs for improving good governance in grassroots sports clubs and organizations, being:

- Norway focused on **greener alternatives to microplastics** to be used as infill material for artificial football pitches, tackling *SDG 9, 11, 12, and 13*.
- Portugal focused on evaluating the costs, return, and other **social and economic impacts for installing PV panels** in sports' facilities, tackling *SDG 7, 11, 12 and 13*.
- Scotland focused on **increasing energy efficiency** in sports' facilities and raising awareness on energy poverty, tackling *SDG 1, 7, 10, 12, 13, and 17*.

It is worth noting that the project covers 8 out of the 17 SDGs and that all three project pilots aim to tackle SDG 12 and 13, **being responsible consumption and production and climate action** core to the project objectives and to its further replication.

The SDG STRIKER project consortium counts with partners from six different European countries, being, on the one hand three national football federations; **Norway (NFF), Scotland (SFA) and Portugal (FPF)**, and on the other hand three technical partners; the **Energieinstitut an der Johannes Kepler Universität Linz**, Austria; the **European football for Development Network**, The Netherlands; and **Ecoserveis**, Spain.

Taking advantage of the [EU sports week](#), the project consortium had its first face to face meeting in Barcelona, hosted by the project Coordinator Ecoserveis, on the 29th and 30th of September 2021.

If you want to learn more about our project, click [here](#).

2. **European football needs a greener alternative to microplastics**

The “SDG Striker” project aims (among other things) to design and implement a pilot with new infill solutions for artificial pitches, including a Life Cycle Assessment and a comparative environmental impact analysis of new technologies. The objective: produce a product perceived by players at least as good as rubber/plastic granules infill.

To solve this, **The Norwegian Football Association (NFF)**, in partnership with the company GEO-production, Kristiansand municipality, and the football club Randesund IL, are testing out a brand-new infill on their new training ground.

The infill is made from Norwegian birch

GEO-production has spent the last couple of years developing an infill made from the trunk of Norwegian birch. In August, the world's **first artificial pitch with birch** as infill material was installed at Sukkevann, the home of Randesund IL.

Currently **4 7-a side pitches are part of the pilot**. One has the new infill, one has pure sand infill, and the last two have crumb rubber infill, the most common infill in Norway. This way we will see the comparisons between the different materials during the season.

User experiences used in product development

So far, the **users are positive**; it doesn't stick to hair, clothes or shoes, the bounce is good, and the ball follows the pitch better than the ones with crumb rubber. Some also report a few characteristics that can be improved. The manufacturer has received this information and is now using it for further product development. An **improved version will be produced** and installed this year (or early next year - 2022) on the pitch currently filled with sand.

Football is also a below-zero activity

Football is a year-round activity in Norway, and by that artificial grass pitches are often used more than 2,500 hours a year. The pitch at Sukkevann will be kept open all winter, giving us useful experience on **how the artificial turf appears in the winter season**. Thus, we also get to experience if heavy machinery and plowing wet snow damages the turf.

Another objective of the project is **players' interaction**. Soon we will have an app up and running where players through 20 questions will give feedback on the new pitch. The results will be used to further improve the product. We will also use the same app on other types of courses to be able to compare.

Which is really the key: *Never stop looking for improvements, whether it is to improve the user experience or reduce the environmental footprint.*

3. **How PV installations are key in football**

There are several projects focused on PV installations in different sectors, allowing a change to greener energy sources, reducing the environmental impact, and also reducing costs. This way, through the SDG-Striker project the **Portuguese Football Federation** will incorporate this perspective to the football spectrum by developing a pilot focused on PV installation in the Training Centre of the football club Sport Lisboa e Benfica and proving its effectiveness.

The pilot will be the training centre “BENFICA CAMPUS”, which has an annual energy consumption of 3.290 MWh, implying an annual energy consumption of 307.915 €.

Considering the above-mentioned amount and the worldwide awareness and **growing commitment to sustainability**, this project foresees the installation of 650 units (340 Wp), which translates into an annual production of 315 MWh, mostly (99%) for self-consumption.

The project results will not only be reflected by the environmental benefits generated, but also through **financial** ones, a first estimation suggests that the investment will have a payback of 5.5 years, which will allow annual savings of around €35,300 €.

Regarding the **environmental issues**, which is the main focus of the project, to tackle the different SDGs, the installation of photovoltaic panels, allows us to perceive that **84 ton of CO2 emissions** will be avoided per year, corresponding to:

- The CO2 emissions released by a car, for a covered distance of 596.976 km. Equivalent to 130 times the distance of Lisbon to Moscow
- Planting 3.880 trees.

4. **Football facilities moving towards energy efficiency**

The **Scottish Football Association** is delighted to be involved in the innovative SDG Striker programme and as part of the project we want to create a campaign to **increase the efficiency of football (and sports) facilities and raise-awareness on energy poverty**, help reduce energy bills and improve knowledge in this space, to help support clubs and their wider community.

The network of **Football across Scotland is huge**, there are over 2,500 clubs, in communities all over the country. The reach of these clubs is significant – currently there are over 150,000 registered players, with a further 50,000 coaches and volunteers. If we also include the number of parents, fans, and influencers in the local community we estimate that our **football clubs’ impact on more than 750,000 people** on a weekly basis in this country. A recent Social Return on Investment model, created by UEFA – demonstrates that community football in Scotland is worth £728 million pounds per annum and has significant Health, Social and Economic outcomes – from this report it’s clear that Community Football Clubs are key to the fabric of our culture here in Scotland.

Alongside the partners outlined in the SDG Striker project, in 2019, the Scottish FA established a partnership with the key government agency for energy efficiency – **Zero Waste Scotland** to support football clubs in Scotland in addressing climate change in their community by reducing carbon emissions from all aspects of their operations including **reducing energy, water, food waste, and material use**. The Scottish Government regards Zero Waste Scotland as a vital part of its success in accelerating progress and delivering results from policies on the circular economy, business resource efficiency and low carbon heating. They play a key role in connecting communities, businesses, and public bodies, from councils to health authorities and national government. With this project, the SFA seeks to reinforce the current work on **producing specific advice to clubs on environmental sustainability** mainly focusing on energy efficiency and how this can build on raising awareness to **fight energy poverty in Scotland**.