



ENVIROMENTAL MANAGEMENT

THE RIGHT BUSINESS CARD FOR OUR FUTURE

Introducing ourselves to the World with a specific TARGETED COMMUNICATION in this sense _ starting from the international events, where indeed the communication has to be intended also as televisive level _ it's really decisive, and nowadays essential against the problems that today plague a lot of sport structures.

I strongly believe that a greater attention to a policy more and more GREEN can contribute to enhance and strengthen the general consideration and the HIGH VALUES of the Shooting Sports.

We have the duty to TRANSFORM OUR WASTE PRODUCTS INTO NEW RESOURCES by using more and more ATTENTIVELY, PRODUCTS that can be EXPLOITED IN CHAINS OF CIRCULAR VALUE FOR THE RECOVERY AND REUSAL OF POST-USE COMPONENTS IN THE SPORTS SHOOTING SECTOR
The following presentation has the main aim of describing the modalities by which to treat the post-use materials regarding the Shotgun Sports activity regularly applied at Lonato Shooting Range, and to highlight the possibility of a «GREEN MANAGEMENT» of our work and actions, meaning the only possibility to ENSURE THE FUTURE to our Sport.

LEAD SPHERICAL SHOTS

European Code CER [200140] - non hazardousness

The waste may be collected and recovered to confer it to authorized subjects to :

- a) Washing and screening for removing the extraneous contaminants for recovery for the original purpose
- b) Recovery in the metallurgical industry by chemical-physical washing
- c) Storage



Collection and conferring of lead spherical shots takes place in a simple manner without any particular regulations to be followed for the handling, other than to use the proper individual protection equipment;

to date, it's not mandatory to refer to specialized Companies since that we're talking about unburnt dust-free open collection, but it will surely become more difficult and less profitable as soon as this task will be also included, depending on the decisions of the European Environmental Agency ECHA.

The embankment of a medium height of 20 MTS, positioned at about 100 MTS from the firing line, entirely covered by an ecologic membrane (Regenerated Polyethylene) heat-sealed of 1 MM thickness allows to intercept and isolate from the soil the lead spheres that are yearly collected in the trench at its feet, and enables the recovery of the small percentage of the dispersed lead shots, and this is ensured by a five-yearly-basis screening through the removal and sieving of 15/20 CMS of superficial soil in the interested areas in front and behind the barrier. By the system of intercepting and collection adopted, it's possible to prevent the soil and groundwater contamination.

The rainwater is not contaminated because the contact timing is very brief, so as lead-shots are not dragged to the discharge points.

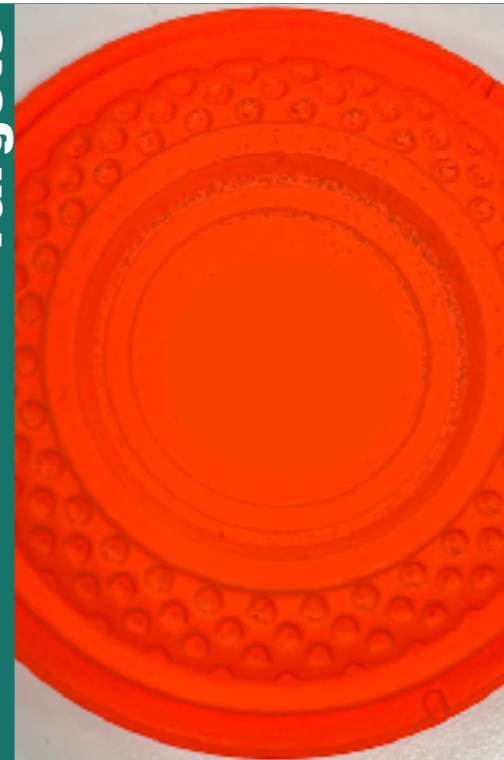
PIECES OF CLAY-TARGET FOR SHOTGUN

European Code - CER [200301] or [170302] non hazardousness

Targets

COMPOSITION :

- . CALCIUM CARBONATE 70% – 80%
- . PINE RESIN – 19%- 29,5%
- . COLOPHONY NON-TOXIC
- . ORGANIC PIGMENTS 0,5% – 1%



The evolution - recently implemented - constitutes of a target composed by 80% of calcium carbonate and the rest of pine resin.

In this way, besides having a very performing product to the shot - and because of that, well appreciated by the Athletes - the chemical components have been zeroed out.

To date, the eco-compatible target (IPA-free) also targets with chemical resin, is NOT DANGEROUS, and after having properly cleaned it up, it can be recovered and allocated for production of new targets, or of new bituminous conglomerate, or to make road sub-grades.

The total usage of targets with PINE-RESIN gave us the possibility to DISPOSE THE WASTE, which - thanks to its composition - allowed us to assimilate itself together with other materials that have a disposal cost significantly lower than what is required for the traditional product, meaning TO LOWER THE FINAL DISPOSAL COSTS BY 50%.



One of the huge volume of waste we deal with are PLASTIC WADS and PLASTIC TUBES, in addition to the SHOT-SHELL METAIL BACK-CASE. Plastic Tubes are conferred in big bags for being addressed to their separation, that up today is made by mills that fully grind the case. Through magnets, the metal part is taken out. Plastic (high density polyethylene) has a high quality in terms of material, but being multi-colored and containing combustion residues, this not allow a proper exploitation of the product.

WADS & SHOTSHELLS
European Cod - CER [200139] or [020104]

**RECOVERY PERCENTAGE of PLASTIC
and IRON MATERIALS :**

1 SHOTSHELL: 15 Grs
1 METAL BACK CASE: 8 Grs
1 PLASTIC TUBE: 4 Grs
1 PLASTIC WADS: 3 Grs (100kg=1m3)

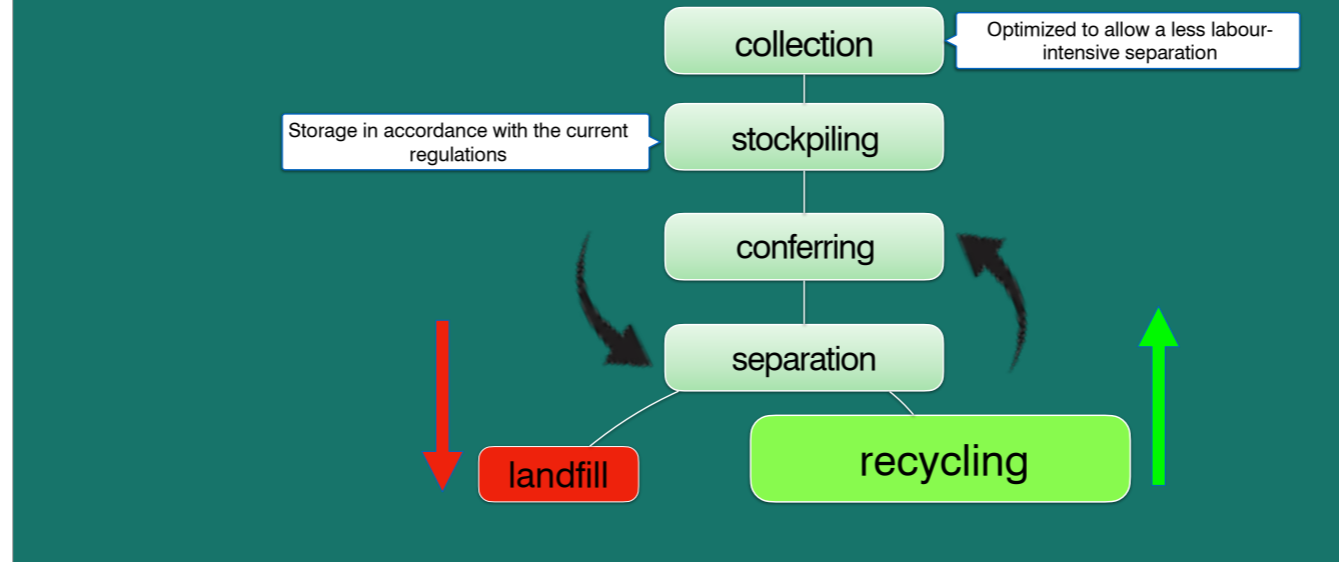
Example :
2 MLN of CLAY TARGET
=
3MLN of PLASTIC TUBES
=
24 TONS of IRON
21 TONS of PLASTIC

Wads & Shotshells



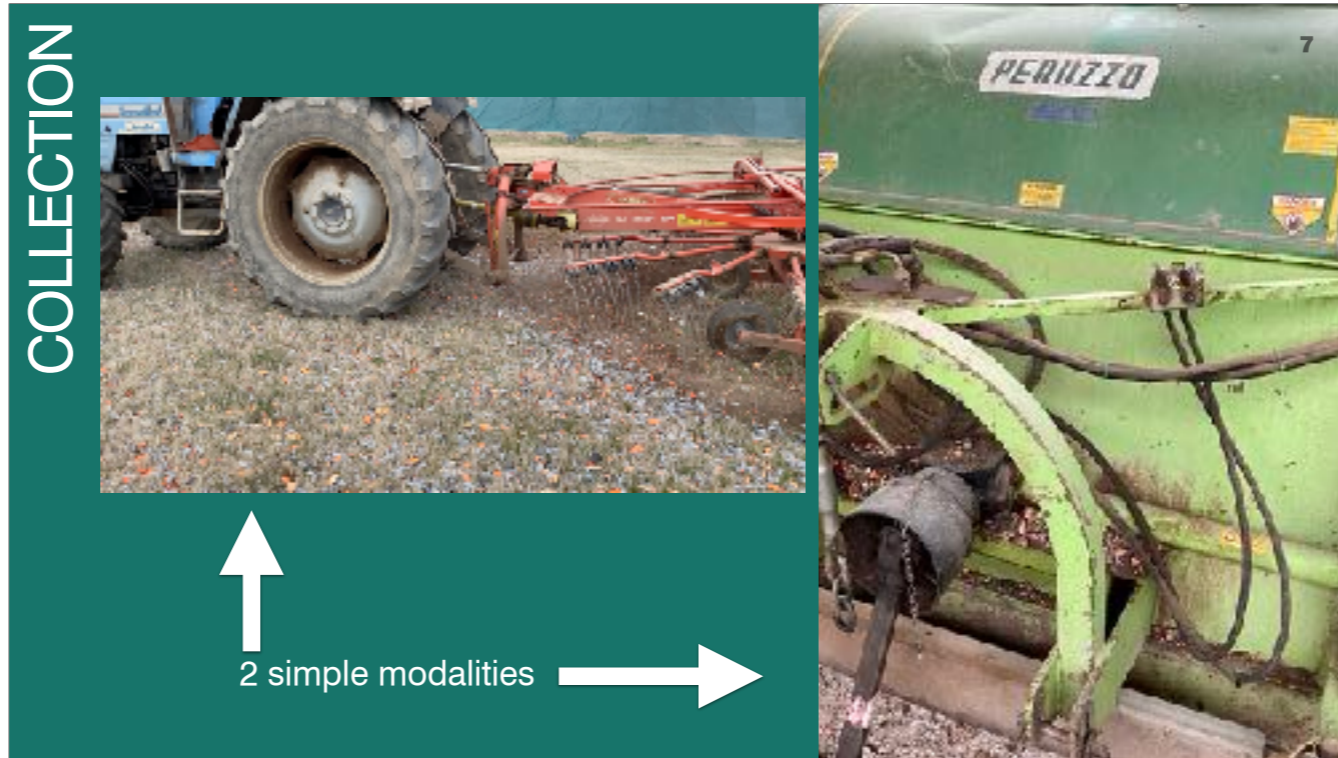
It's a fact that VOLUMES and WEIGHTS of the materials that enable a convenient processing must be CONSISTENT, and that's why it's fundamental " TO SYSTEMIZE " , becoming able to transport and deliver to specialized Companies a final aggregate product that has the same level of cleaning and storage, creating ONE SINGLE WASTE regardless of where it is produced.

OUTLINE OF THE OPERATIONS PERFORMED



This slide shows how the process was until 2021.

Since 2022 we inverted this order, making the separation of the waste directly on the range, so as to confer an overall material ready to be recycled, and by this way avoiding to confer huge quantities of clean soil that doesn't need of any treatment.



In general, collection is mainly made by 2 simple modalities :
the first by sweeping the ground and vacuuming the waste with an especially-created machine (many Shooting Ranges have this) ,
or more thoroughly by rakeing the soil with agricultural equipments.

COLLECTION



- Until 25 MTS from the pit = Only plastic
- From 25 to 40 MTS from the pit = Mix of Plastic and pieces of broken targets
- From 40 to 75 MTS from the pit = Only pieces of broken targets

As you can see in this slide : preparation to the collection takes place by sectors at different distances from the firing stations, in sight of optimizing the screening that will follows here after.

COLLECTION



26 MTS from the pit



This is the waste that we can find at 26 MTS from the launch pit;
as you can see, we can collect there WADS ONLY

COLLECTION



33 MTS from the pit



This is the waste that we can find at 33 MTS from the launch pit.
As you can see, there are some wads but also some target fragments there,
meaning that from this distance we have to make soil screening.



We can see the same at 40 MTS from the pit.



From 46 MTS we can find only some WADS



From 50 / 53 MTS from the pit, we can find TARGETS FRAGMENTS only



This is the situation that appears at 63 MTS from the pit: again, TARGETS FRAGMENTS only.

COLLECTION



71 MTS from the pit



Same scenario at 71 MTS from the pit

STOCKPILING

Collecting the materials in a TARGETED MANNER - according to the DISTANCES where they are deposited - facilitates the SEPARATION (screening), optimizing the operation TIMING



WHY did we do this test?

Because if collecting the materials in a TARGETED MANNER - according to the DISTANCES where they are deposited - this facilitates the separation (screening), and optimizes the operation timing.

SEPARATION OF MATERIALS



This is the SCREENING METHOD systematically used in Lonato Shooting Range.

The possibility to separate the materials DIRECTLY ON THE RANGE might be optimal in case there's a lot of soil and stones, because volumes and weights to be conferred would be greatly increased.

In this way, soil and stones can be then placed back on the ground itself, avoiding the need to dispose the cleaned soil.

SCREENING OF MATERIALS



What are the materials collected after the screening ?

1 - Cleaned pieces of BROKEN TARGETS (1120 kg=1m³)

2 - Plastic WADS (100 kg=1m³)

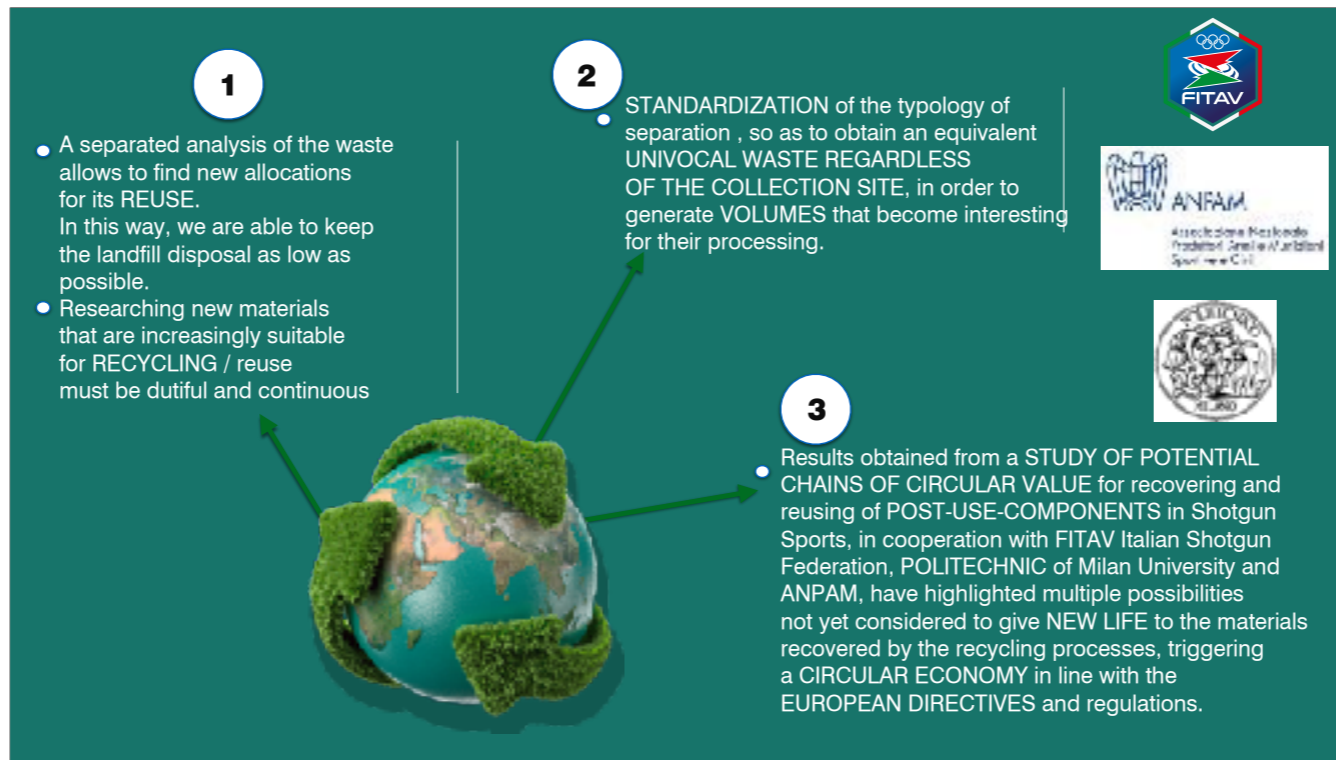
3 - GRASS and SOIL (for which should be necessary to apply a further screening to recover the LEAD as well)

4 - NOT-SCREENED material till 25 MTS from the pit

5 - NOT-SCREENED material from 25 MTS to 75 MTS to the pit (876 kg=1m³)



And here you are the FINAL RESULT

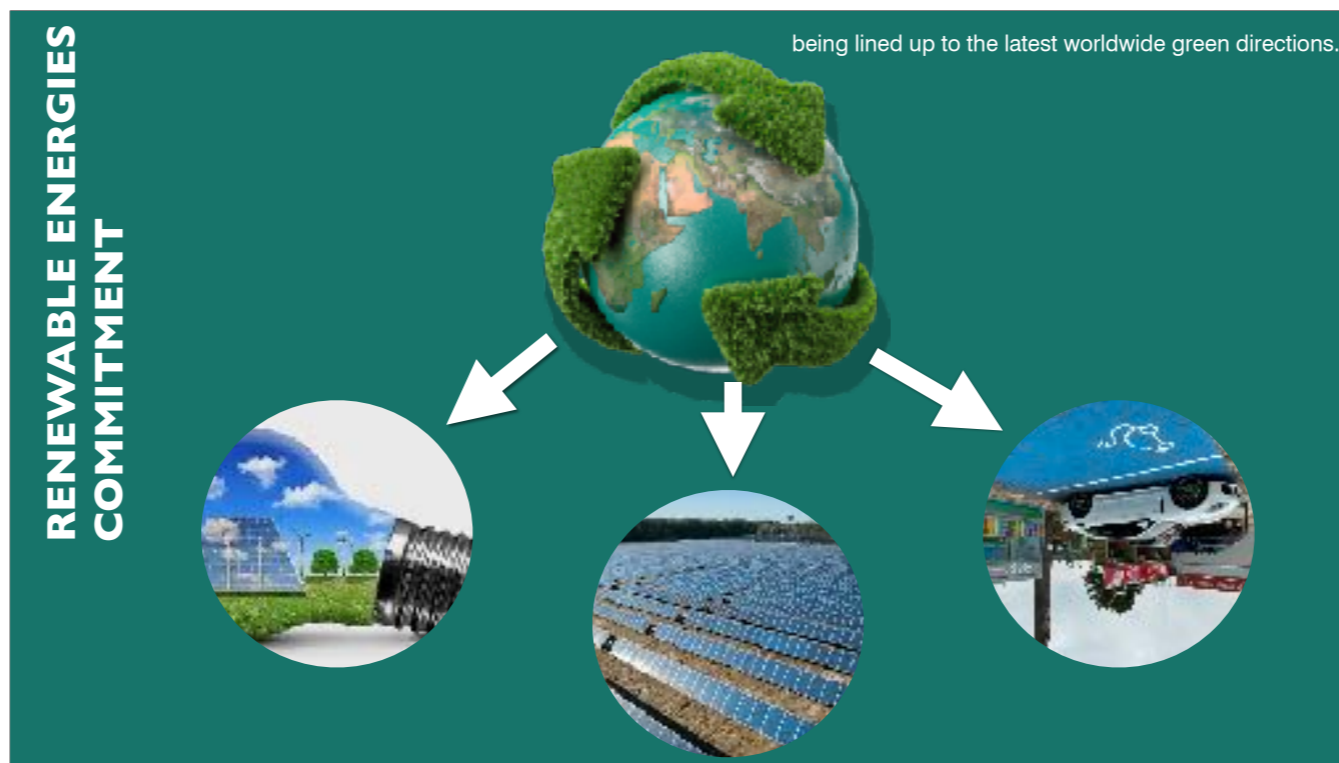


A separated analysis of the waste allows to find new allocations for its reuse. In this way, we are able to keep the landfill disposal as low as possible. Researching for new materials that are increasingly suitable for RECYCLING / REUSE must be indeed dutiful and continuous.

To STANDARDIZE the typology of separation enables to obtain an equivalent UNIVOCAL WASTE REGARDLESS THE COLLECTION SITE, and this allows to generate VOLUMES that become interesting for their processing.

The results obtained from a study of POTENTIAL CHAINS OF CIRCULAR VALUE FOR RECOVERING AND REUSING OF POST-USE COMPONENTS in Shotgun Sports - in cooperation with FITAV Italian Shotgun Federation, Politecnico di Milano University and ANPAM - have highlighted multiple possibilities not yet considered to give NEW LIFE TO THE MATERIALS RECOVERED by the recycling processes, triggering a CIRCULAR ECONOMY in line with the EUROPEAN DIRECTIVES and regulations.

The cooperation with ANPAM - Italian Association of Weapons and Ammunition Companies - FITAV Italian Shotgun Federation, and POLYTECHNIC University in Milan has enabled us to start a fundamental path that will allow to face and address the various issues TOWARDS A MORE OPTIMISTIC OUTLOOK FOR SOME SOLUTIONS that we definitely need to find TOGETHER.



BY 2023 the whole Lonato Sportive Structure will be 100% powered by RENEWABLE ENERGY.
Enhancement of the car recharge services is planned too, so as to give a further service to our clients,
and being lined up to the latest WORLDWIDE GREEN DIRECTIONS.

Besides, the ENERGY INDEPENDENCE FROM RENEWABLE SOURCES IS ALSO A PROJECT that is now nearing to the conclusion and that we strongly
wanted in order to OPTIMIZE OUR RESOURCES.

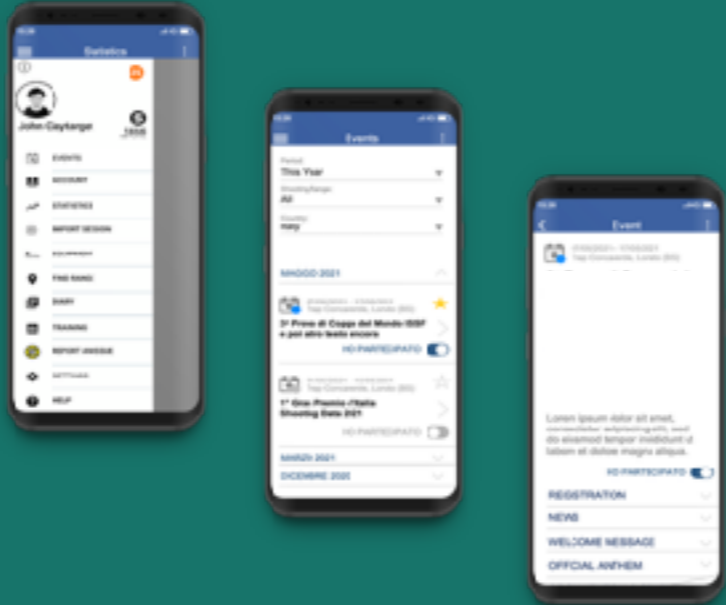
PLASTIC FREE FACILITIES




...to minimize the usage of plastic containers and bottles.

Our Sport Structure has been provided with PURIFIED WATER DISPENSERS, suitable to REFILL thermos and water-bottles in order to minimize the usage of plastic containers and bottles, fully becoming PLASTIC-FREE.

PAPERLESS



Since 2020 Concaverde relies on paperless communication regarding all our major sport events



SHOOTING DATA

Less incisive, but equally important, it's the EXPLOITING OF THE DIGITAL COMMUNICATION TECHNOLOGIES, which is not only a VERY CONTEMPORARY and VALUABLE MESSAGE, but also allows us TO REACH BY A CLICK all our Sport PASSIONATES and ATHLETES.

Since 2020 Concaverde relies on PAPERLESS COMMUNICATION regarding all our major sport EVENTS.

