Environmental friendly artificial turf pitches

Municipality of Bergen

- Department of Schools, kindergartens and sports affairs.
- Idrettsservice.
- 140 employees.
- Sport halls, Public swimming pools, ice hockey arenas, football pitches, athletic track and fields and cross country tracks.
- 78 artificial turf pitches.



Why?

- Artificial turf and environment.
- Rubber infill and toxics.
- Rubber infill as a health issue.
- Microplastic.
- Artificial turf as a waste problem.



Before microplastics.

- 2012 Network for artificial turf. 6 cities and NFF.
- 2013 Old turf to be recycled.
- 2013 No SBR rubber in new pitches.



Microplastic

- 2016/2017 increased focus on microplastics.
- Artificial turf pitches named as a big contributor.
- Politicians and media.
- City Council in Bergen orders an action plan.











Action plan for more environmental friendly pitches.

- Consists of 3 parts.
- Maintenance.
- Construction.
- Clubs and player guidelines.



Main goal.

 Bergen municipality must be at the forefront with regard to environmental measures when establishing, rehabilitating and operating artificial turf pitches, while at the same time facilitating a high level of activity by offering good and functional football facilities.



Operating and maintenance.

- Annual effort in cooperation with the clubs.
- Logging.
- Collection of granules sent for recycling.
- Plowing No snow outside the artificial turf surface.
- Only priority pitches are plowed.



Operating and maintenance.

- No winter maintenance on pitches that are in close proximity to water.
- Cleaning of maintenance equipment before leaving the pitch.
- Follow-up of any future regulations from the climate and environmental departments.



Structural measures

- Environmentally friendly infill in new fields and in the rehabilitation of pitches.
- All new fields must be established with e-layer/ shock absorbing layer.
- Establishment of grids and granule traps.
- Establishment of filter in sand trap sump.



Structural measures

- Walls of concrete, granite or other solutions 30 cm high around the pitch.
- On new pitches.
- On existing pitches in close proximity to water.
- Two new pitches without rubber.
- Pilot project.



















Clubs and player guidelines.

- Awareness raising and attitude-building in collaboration with clubs and NFF Hordaland.
- Development of user instructions in collaboration with NFF Hordaland.
- User Meetings.
- Prize for the best club.



Research Study.

- Research on existing pitches.
- Performed by Norce research company.
- Pilot study finished.



The future?

- Non infill systems that meets the requirements of the players.
- Infill systems that are environmental friendly and meets the requirements of the players and the official test requirements.
- No rubber.



The future?

- Completely recyclable system with low impact on the environment.
- Better and cheaper systems for keeping control of the microplastics on existing pitches.



Tenders to come.

- 1 2 new pitches each year.
- 2 4 rehabilitations every year.
- 20-25 mill. Nok. investment every year.
 Sometimes more.
- This year or next Large non infill pitch.
- For existing pitches systems to keep the microplastics under control.



Thank you!

