

GTURF GAMECHANGER

INVESTOR PRESENTATION 2024



REVOLUTIONARY METHOD FOR MAINTAINING SPORTS TURF

**Better quality at a lower cost, while also protecting the
environment**

MARKET

- ▶ More than **USD 25 billion** is spent annually on golf course maintenance
 - ▶ There are 33,161 golf facilities in the world (Research: National Golf Foundation)
- ▶ Golf course maintenance represents about 35% of the entire turf maintenance market
 - ▶ 78% of golf courses are in the top 10 golfing countries: USA, Canada, Japan, England, Australia, Germany, France, Scotland, Sweden and South Africa
 - ▶ In the USA, there are approximately 2,000 golf courses in need of renovation currently or soon
- ▶ Other sports turfs (football, cricket, baseball, field hockey, etc.) amount to about 65% of the market
- ▶ The market size for machines and equipment used in basic maintenance that are directly replaceable by the TGC method is approximately **USD 3 billion**
- ▶ The market size for sports turf maintenance equipment is about **USD 4 billion**

PROBLEM

The cost of course maintenance is high, and the work is manual, causing an unnecessarily negative impact on the environment

- ▶ the current method involves a lot of resources, increases the cost of course maintenance and negatively impacts the environment
- ▶ quality in relation to costs is too low

Course maintenance work delays playing the game and impacts the business of golf course companies

- ▶ maintenance of sports turf is performed with machines and equipment developed specifically for each work stage
- ▶ consecutive maintenance activities reduce quality as the next machine interferes with the results of the previous work stage
- ▶ consecutive work stages result in game playing delays, lower customer satisfaction and lower revenues

Golf course renovation will hinder the business for years, with costs reaching millions

- ▶ the current maintenance methods are not enough to prevent renovation
- ▶ in the case of a renovation, the course will be rebuilt (soil will be removed and replaced with new soil)

Employees, equipment and the premises require large amounts of capital

- ▶ the total utilization rate of turf maintenance machines is low, yet they take up a lot of space, require their own maintenance, and involve capital

Traditional operations and maintenance models are firmly rooted in the golf course culture

- ▶ for decades, there have been no developments in methodology within in the golf industry that have significantly improved course maintenance quality and efficiency

SOLUTION

The Turf Gamechanger method **consists of two machines operating together**, replacing 8 separate machines and 2-3 logistics machines

- ▶ **Maintain** performs all 8 stages of maintenance work in one run (mowing, aeration, waste collection, over seeding, top-dressing, fertilizing, brushing, and rolling)
- ▶ **Transfer** transports new material to the work site and takes the resulting waste away as a return load for composting
 - ▶ Transfer is equipped with a loader, so there is no need for a separate machine
 - ▶ Changing loads is quick thanks to the patented load-changing and hopper solutions
 - ▶ Maintain unloads the collected waste to the back of Transfer's hopper, while Transfer simultaneously transports the new top-dressing sand to Maintain's hopper
- ▶ At the heart of the patented method is the machines' load-switching system, the data collection* (IoT) based on GNSS positioning, and the machine automation solution, as well as the back-end precision maintenance software
 - ▶ The overall package will significantly improve the impact of maintenance activities and the logistics of course maintenance
 - ▶ This solution will also increase playability and customer satisfaction while reducing costs and environmental emissions

* In addition to data on growth and maintenance, which are included in GNSS, the software and machines using the TGC method collect data on the turf surface. This information is used to compile, for example, a 3D surface model of a golf course. With the help of a precision maintenance program, this provides a solid basis from which to start working toward the desired shape and structure of the surface to prevent the need for renovation.

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SOLUTION

The TGC method reduces or eliminates the need for renovation

- ▶ The reasons why a golf course needs to be repaired include dents in the playing areas, defects in the irrigation and drainage systems, excessive fiber layer thickness or a soil layer that's too thin. A complete renovation costs millions of euros and can take years.

The active maintenance program of the TGC method allows you to avoid the need for renovation completely!

- ▶ By combining different technologies (IoT, machine automation, GNSS, course maintenance management and advanced logistics), changes in the turf surfaces of the fairways and other problems can be corrected with normal maintenance activities, without inconveniencing the players or disrupting the use of course.



TEAM

- ▶ **Ilkka Kaivosoja**, CTO, Member of the Board
 - ▶ Agrolgist, golf course superintendent, inventor of the TGC method, has 30 years of experience in the maintenance, design, building and renovation of golf courses. Also has wide networks within international golf organizations.
- ▶ **Ilkka Kankkunen**, CEO, Member of the Board
 - ▶ M.Sc. (Tech), Automotive Engineering, more than 25 years of experience in international business development, sales and marketing, the implementation of development projects, and the development and management of companies.
- ▶ **Pasi Kristiansson**, COO, Member of the Board
 - ▶ Over 33 years of entrepreneurial experience, over 25 years of experience in managing and building golf courses. Board member of golf organizations.
- ▶ **Pentti Haapla**, Chairman of the Board. Long experience in international construction business
- ▶ **Mikko Asonen**, Member of the board. Long experience in golf business
- ▶ **Lassi Kiviniemi**, Member of the board. Long experience in golf business
- ▶ Design partner **Comatec Oy**, Contract manufacturer **Toijala Works Oy**

COMPETITORS

- ▶ The market for sports turf maintenance machines is dominated by **Toro, John Deere** and **Textron/Jacobsen**
- ▶ Smaller manufacturers have developed individual machines for basic maintenance but do not offer machines for all tasks: Redexim, Wiedenmann, Smithco, Turfco, Ryan, Turflux
- ▶ The market size for machines and equipment used in basic maintenance that are directly replaceable by the TGC method is approximately **USD 3 billion**
- ▶ Autonomous mowers are coming to the market, but they only partially reduce the need for labor, rather than offering a new solutions

Note! The current manufacturers do not supply machines that can perform all 8 work stages. They also haven't solved the problems in the whole basic maintenance work cycle or built integration between different machines, nor have they improved the logistics of maintenance work.

It is not possible to develop the current machines that can operate with three-point hitch-attached equipment to perform combined work stages or to make significant use of automation.

COMPETITIVE ADVANTAGE

Turf Gamechanger has developed an **innovative and patented solution** for sports turf maintenance (FI 128005 B).

For **IPR protection**, international patents in USA, Canada, EU, UK, Japan, South Korea, Australia, and South Africa are currently in patent pending status.

Turf Gamechanger method offers a solution that will produce much higher quality results with lower costs and is much more environmentally friendly

- ▶ TGC Machines can save more than 30% of the annual maintenance budget by:
 - ▶ replacing up to 11 machines currently needed and performing tasks up to 3 times quicker compared to current methods
 - ▶ requiring just 25% of the existing personnel and consuming 35% less fuel to do the same maintenance work and achieve even better results
- ▶ TGC method is a combination of purpose-built patented machines, machine automation, IoT solutions for data collection and data analysis combined seamlessly with a precision maintenance software platform where all the collected data is analyzed



TARGET MARKETS

- ▶ For the first target market, we are looking for sales and after-sales partners with existing customer relationships and support organizations
 - ▶ **Nordic Countries** (1130 golf courses), **Germany** (1050), France (800), The Netherlands (280), **Spain** (400) and Portugal (150)
 - ▶ All together 3810 golf courses
- ▶ In the next stage we are looking for the **UK** (3070), **Ireland** (494) and Middle East (50) golf courses
- ▶ In the third stage we are looking for the **US** (15 500) and **Canada** (2363) golf courses
- ▶ Golf is representing 35% of the total sports turf maintenance market and when traction is achieved in the golf course market, expansion to the other sports turf maintenance markets will be done.
 - ▶ Football/Soccer
 - ▶ Baseball/softball/Cricket
 - ▶ Sports fields and parks

FINANCIAL HIGHLIGHTS

- ▶ **27x** Revenue increase to **733 648€** due to increased product offering and testing in 5 golf courses;
- ▶ Porvoo Golf **multi-year project** amounting to **9 250€** per round on 8 maintenance rounds per year;
- ▶ **EBITDA** of -150 602€ and -500 281€ at the end of 2022 and 2023;
- ▶ Fully developed and automated POC and patented solution on the balance sheet worth **3 279 368€**;
- ▶ **Positive equity** of **527 199€** at the end of 2023;
- ▶ Finnish government development loan of **1 802 900€** and other credit loans of **660 000€** in 2023;
- ▶ **Hard commitments** from several other golf courses to purchase maintenance work later this year.
- ▶ Attracted investments of more than **4 000 000€** to develop the TGC prototype and scale equipment for mass production of which **1 732 600€** is strongly backed by **12 investors** internationally.



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FINANCIAL FORECAST

		2024	2025	2026	2027	2028
Income	<i>Machines delivered</i>	3	6	12	24	40
	Revenue machines	1,140,000	2,280,000	4,560,000	9,000,000	14,520,000
	Revenue contracting	470,000	640,000	640,000	640,000	640,000
	Software and services	-	60,000	186,000	612,000	1,176,000
Total Income		1,610,000	2,980,000	5,386,000	10,252,000	16,336,000
Expenses						
	Cost of machine production	705,000	1,415,000	3,127,200	5,400,000	8,292,000
	Contracting expenses	176,250	240,000	240,000	240,000	240,000
	R&D expenses	420,000	480,000	300,000	600,000	900,000
Other Expenses						
	Salaries	426,880	631,800	673,920	1,010,880	1,446,120
	Rent	6,000	18,000	60,000	90,000	120,000
	Legal and accounting	12,000	24,000	72,000	168,000	210,000
	Marketing and sales	280,000	480,000	300,000	600,000	900,000
	Other	30,000	45,000	108,000	312,000	390,000
Total Expenses		2,056,130	3,333,800	4,881,120	8,420,880	12,498,120
Profit(Loss) /Year		(446,130)	(353,800)	504,880	1,831,120	3,837,880
Cumulative Profit/Loss		(446,130)	(799,930)	(295,050)	1,536,070	5,373,950

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FINANCING

In cooperation with **CrowdedHero** crowdfunding platform, we are **seeking 1,5 M€** in exchange for **23% equity**:

- ▶ **750k€** to effectively use sales and marketing channels in the targeted countries (Sweden, Germany, France, The Netherlands, Spain, Portugal, UK, US) and develop the organization internally
- ▶ **250k€** to develop the capability for mass production **and** optimization of designs, jig development, sourcing development
- ▶ **500k€** to further advance the TGC IoT and machine automation solution and course maintenance back-end software and finalize new work attachments on the platform
 - ▶ We already have been granted **238k€** R&D loan by Business Finland for IoT and machine automation solution development

To date, **€4,0M has been invested** to develop the TGC prototype tested under course conditions by course maintenance professionals during the 2021-2023 season. The equipment is ready for mass production.

- ▶ The first two machines of the 0 series were delivered in summer 2023
- ▶ TGC machines are doing contract work in several golf courses introducing the TGC method to customers and collecting usage data
- ▶ Porvoo Golf is a pilot course for a golf course renovation initiative where shapes of the fairways and greens are modified using the TGC method in a multi-year project
- ▶ Contract maintenance with more than 30 courses in Finland and Northern Europe during the next season
- ▶ All contract work sites are also sales and marketing opportunities for a rapid expansion plan



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Ilkka Kankkunen CEO

+358 40 558 5002

ilkka.kankkunen@turfgamechanger.com

Sampsa Auvinen Advisor

+371 2 8631100

sampsa.auvinen@auvinencapital.com

Janis Blazevids Co-Founder & CEO

+371 29 377 488

janis.blazevids@crowdedhero.com

www.turfgamechanger.com

Turf GameChanger Oy Business ID: 2838266-1

Suupantie 2, 33960 Pirkkala

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