

GUARD

Protecting Home and Health

An Advanced System for Protecting Buildings against Moisture and Mold Damage

Problem = Moisture in Construction Wood







Structural water damage

Water damage to wooden structural elements can be fatal, but in every case require very expensive replacement repairs. Water damage is almost always invisible and typically discovered too late.

Non-structural water damage

Water typically damages not only structural elements but impacts drywalling, furnishings, and other building elements.

Toxic mold formation

High moisture in warm places is a perfect hotbed for toxic mold formation. This mold is usually discovered late and after toxic mold spores have formed and become airborne.

Solution = Continuous Monitoring of Critical Areas

Proprietary system for the continual monitoring of moisture and flooding. Focus on preventing water and moisture damage in buildings.



What It Looks Like

MOISTUREGUARD = ADDING LONGEVITY TO SUSTAINABILITY



On-site central unit collects data, creates backup, and

Data processed in real time using proprietary algorithms =realtime notifications and reports. sends to Cloud.

Range of proprietary sensors collect data on critical values.

+

Sensors are located in critical areas in the house or building.



Case Study I.



(Obvious case)



Shortly after completion, on two consecutive days, our sensors detected a leak in the shower. An inspection showed a faulty drain connection. This was repaired and MoistureGuard thus prevented extensive water damage.



Case Study II.

(Not so obvious case)



This is example of a situation that no other monitoring system will detect.

After completion of the house, moisture from the foundation slab accumulated in the wall of the bathroom. MoistureGuard identified the problem, and the wall was opened to dry for about 2 weeks, and then closed and replastered.

Shortly after, however, MoistureGuard indicated high humidity again. The wall was reopened and ventilated for several months before closing again. By this time the slab had dried out sufficiently, and wood rot and mold formation was prevented.



MOISTU

Market Segments

We are at the overlap of these market areas:



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Unique Selling Propositions



No other system offers the complexity of moisture monitoring nor comes close to our ability to identify and prevent problems in real time. Most cost-effective solution in the market.



Sales Model

Hardware System Sales

Residential Housing = € 1.200+ (excl. VAT)

- Average price for 150m2 home
- Complete system (1 CPU, 7 sensors)
- Initial focus on B2B sales (construction co's)
- Second focus on B2C sales using social media marketing (currently in Czech 40%+ of sales)

Commercial Building = € 30.000+ (excl. VAT)

- Average price for 150+ sensor installation
- Complete system (CPU, sensors)
- Quarterly analysis reports to Property Manager



Software as a Service (SaaS)

€ 150 (excl. VAT) – paid yearly

- 60 % of all installations wish to sign up for monitoring service
- SaaS rollout to start once automated monthly reporting completed – need Seed Round to complete.



Target Markets

Annual Wood* House Construction

Scandinavia – 53.000 p.a. ·

Germany – 19.678 p.a. ·

Czech Republic – 2.948 p.a.

Austria – 4.187 p.a.

TOTAL 80.000 New Build Wood* Houses Annually

* Wood = wood-frame, wood prefab, or engineered wood construction solutions



Opportunity I – Moisture damage prevention

Water damage one of **three top insurance claims** in the EU.

Paid insurance **claims are only a fraction** of true total costs.

Over EUR 2.0 bill in insurance claims for water damage and mold issues in the USA alone. Initial Target Markets

For initial growth in Europe: Czech, Austria, Germany, Denmark, Sweden, Norway, Finland.

€ 96 mil Revenue Potential

If MoistureGuard becomes an installation standard, then this is our revenue potential. 80 000 New Residential per Year

Share of wood-frame to total newbuild residential units p.a.: Czech (4%), Austria (5%), Germany (25%), Scandinavia (66%)

€ 4.8 mil Target Revenues in 2023

We are targeting a 5% average market share in our 7 target markets.



Opportunity II – Commercial/Public Buildings

RESIDENTIAL BUILDINGS ARE JUST THE FIRST CHAPTER!

<u>Commercial/Public Segments</u>:

We have started to move beyond newbuild residential into commercial buildings
In 2021, we installed 64 sensors into the new multi-story wooden 3000m2
InnoRenew EU research facility in Isola,
Slovenia. Frauenhofer Institute is a partner in the project.

• In 2022, we installed 400 sensors into the iconic wooden7700m2 "The Cradle" commercial building now being completed in the old harbour of Dusseldorf.

• We have several other project leads in ground-breaking commercial and multistory wooden buildings across Germany, Austria, and elsewhere.

Slovenia Installation Complete

64 Sensors to monitor moisture façade issues and other critical areas – project led by Fraunhofer Institute. (Building pictured in background photo)

Multiple Projects Under Way

We are currently negotiating several large installations, working on several research project initiatives, and our sensors are currently being tested in Japan by a market leading Smart Building systems integrator.

Strong Trend in Structural use of Wood

In France, this year all new public buildings must have >50% wood content. Sustainability, recyclability, reusability, and carbon sequestering are strong drivers of wood construction.

This Segment will Double Sales by 2025

We are starting to map and target this segment, and estimate it will grow very strongly in the next 5 years and contribute significantly to sales.

Opportunity III – Moisture damage prevention

OUR R&D PIPELINE INCLUDES SOLUTIONS FOR MONITORING OTHER CRITICAL VALUES

New Market Segments:

We are working on leveraging our core competencies to include new sensors and new applications:

- Moisture **sensors for porous materials**
- Special **flat roof sensors** for logistic warehouses
- Vibration/deflection sensors

MOISTURE

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- Acoustic sensors for wood-boring insects
- Heat sensors for fireplace proximity

Concrete and Brick Segment

With these sensors we open a whole new segment in monitoring moisture problems in facades, basements, and roofs, and especially in the concrete pre-fab business to monitor drying.

Multi-story Woodframe

As wood-frame buildings grow taller and spans wider, assessing their health for financing, insurance, investment, and tenant reasons will drive very strong demand for technology that can monitor overall building health.

Historical Building Segment

30 million buildings in Europe are more than 100 years old. These buildings have moisture, mold and structural issues that need monitoring. Also, moisture severely impacts the insulation properties of brick and concrete.

New Segments will Multiply Sales Potential by x10

We expect that these additional segments will at least double sales, but probably increase them by a factor of 10x by 2025.

Traction in Czech Republic

<u>Czech market – Timber buildings (2021)</u>

- 3.000 units
- Average installation price 1.073 EUR
- 3.219.000 EUR market volume

<u>MoistureGuard – Timber buildings (2021)</u>

- 201 units
- 6,7% market share
- Actual sales 215.000 EUR

<u>Czech market – timber buildings (FC 2022)</u>

- 2.800 units (-6,7% to PY)
- Average installation price 1.200 EUR (+ 11,8% to PY)
- 3.360. 000 EUR market volume (+4,3% to PY)

<u>MoistureGuard – timber buildings (FC 2022)</u>

- 269 units (growth +34% unit sales)
- 8% market share (+ 1,3%)
- Project MG sales 269.000 EUR



MoistureGuard expansion in detail

Example Germany

- 1 local CEO active in sales
- 3 sales reps
- 2 installations support
- 1 Sales support
- 1 local marketing
- 8 people in total
- Total costs 400.000 500.000 EUR/year

Example Scandinavia region

- 1 CEO active in sales
- 4 sales reps
- 3 installations support
- 1 Sales support
- 1 local marketing
- 10 people in total
- Total costs 500.000 600.000 EUR/year

<u>TOTAL</u>

- Czech republic, Austria, Germany, Switzerland, Scandinavia (35 people in total)
- HQ in Prague global CEO, marketing, research & development, finance (10 people)
- Target turnover 4.800.000 EUR year (end of 2024)
- Cost of personnel 1.900.000 EUR/year
- Development & production cost 1.900.000 EUR
- Pre-tax margin 1.000.000 EUR (21%)



Business Plan

	CZ/SK	cz/sk	CZ/SK/DE	CZ/SK/DE	CZ/SK/DE/A	CZ/SK/DE/A/S*
	Actual 2020	Actual 2021	Act. YTD 07/22	Target 2022	Target 2023	Target 2024
Forecast (Jan)	€ 89 000	€ 215 000		€ 629 000	€1326000	€ 2 533 000
Forecast (Aug)	€ 89 000	€ 215 000	€ 145 000	€ 323 000	€ 775 000	€1800000
% change				50%	140%	132%
Avg price/unit	€ 998	€1073	€1082	€1200	€1300	€1400
Units sold	102	201	134	269	596	1286
Gross margin %	60%	66%	70%	67%	67%	67%
Gross margin	€ 53 400	€ 141 900	€ 130 000	€ 216 410	€ 519 250	€1206000
SG & A costs	€ 44 000	€ 107 000	€ 97 000	€ 200 000	€ 500 000	€ 700 000
Marketing	€ 6 000	€ 40 000	€ 31 000	€ 55 000	€ 134 000	€ 160 000
EBITDA	€ 3 400	-€ 5 100	€2000	-€ 38 590	-€ 1 14 750	€ 346 000
					*S=Scandinavia	FinPlan(220818)

Reasons for Revised Business Plan

External Factors

- Construction market constricted (labour/materials)
- Supply of electronics lead to product shortages

Internal Factors

- Fundraising 12 months deferred
- Replaced Head of CR Sales
- Supply issues due to change of supplier



Use of Funds

FIRST TRANCHE OF EUR 250.000 FINANCING:

- EUR 114.750 Product development over 6
 months
- EUR 61.500 Working capital (primarily into components given supply chain uncertainty and to a lesser degree finished goods)
- EUR 73.750 Expanding team, market entry, marketing & PR

Funding gives MoistureGuard a 6 - month runway.

Expecting to raise another EUR 250.000 with Danube Angels in parallel process.





Our Team



Petr Skria Cofounder, investor 30 years in mgmt. & VC



Mira Veselý *CEO* 20 years in mgmt. & sales & marketing



František Novák Installations & monitoring



new person B2B sales experience in corporate sales



marketing

senior marketing

manager



Ivana Pickova Sales Support 30 years in corporate



Jan Včelák, PhD HW & Cofounder Senior researcher in UCEEB* 10 years in wood preservation



Aleš Vodička HW & Cofounder 8 years as researcher with UCEEB* Institute



Marek Maška Sensors/Systems & Cofounder – 8 years as research with UCEEB*



Frantíšek Svoboda Full Stack Engineer 10 years in frontend backend projects



František Vyčítal

Production & finance student, bachelor's degree



new person Office manager



*UCEEB = University Center for Energy Efficient Buildings (Czech Technical University in Prague), member of the InnoRenew.eu program mentored by the Fraunhofer Institute in Germany.

Thank you!

