

Indoor Farming - 4S Aachen GmbH

The sustainable solution for
fresh and healthy plants

4S Aachen GmbH




Dr. Florian Köhler

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The Problem

Lack of space and control for plant cultivation

-  According to a survey conducted by Statista, 42% of Germans do not have access to a garden or vegetable patch.
-  Existing solutions, are predominantly made of plastic not environmentally friendly and lack sustainability.
-  These tend to be either prohibitively expensive, such as Agrilution, or lack volume efficiency, like SmartGrow.





The Solution

A sustainable system for indoor farming

Two versions are planned for series production:

01

Basic version:

Simple light and irrigation control incl. control unit (no sensors)

02

Extended version:

Adding (stepwise) sensors, fan, automatic movement and intelligence with recurring software updates



The Solution

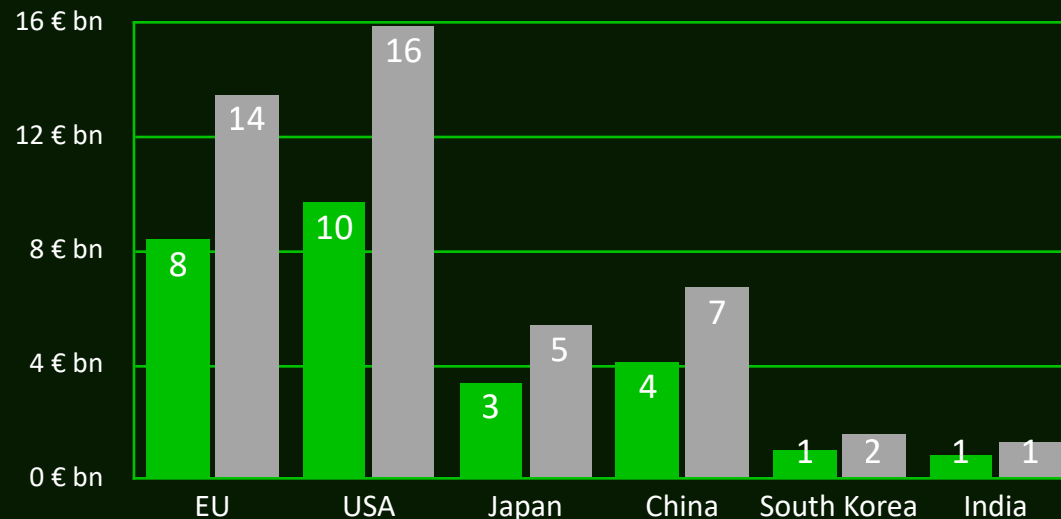
A sustainable system for indoor farming

- A system that addresses the drawbacks of existing solutions, such as lack of sustainability or volume efficiency
- Plastics are used only where absolutely necessary, minimizing their environmental impact.
- With its modular design and the omission of air conditioning and enclosure, we offer the market a space-efficient and sustainable solution for indoor farming.
- In a second phase of development, we aim to implement our patented technology by equipping the product with a control unit. The control unit analyzes various parameters and automatically adjusts the lighting, irrigation, and ventilation for optimal plant growth.

The Market

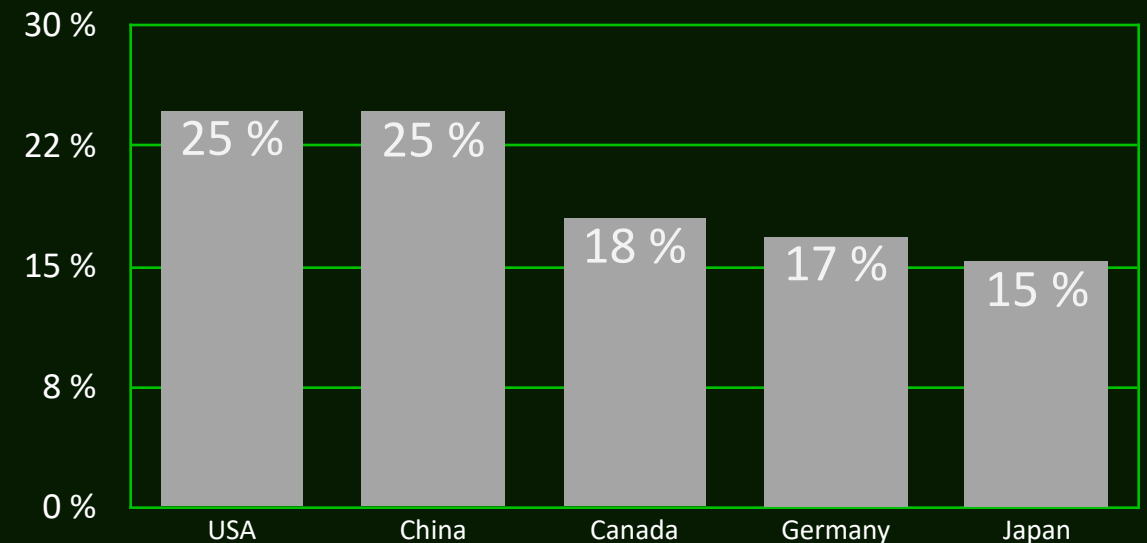
A growing demand for indoor and vertical farming

The global market revenue for indoor farming is expected to grow from around \$38 billion in 2023 to approximately \$90 billion by 2030 (compound annual growth rate: 13%, Statista)



Source: [grandviewresearch.com](https://www.grandviewresearch.com) 2022

Average annual growth rate (CAGR) of selected countries for vertical farming.
The total market value is estimated to reach \$10 bn in 2027.



Source: [globenewswire.com](https://www.globenewswire.com) 2022

Despite varying predictions, significant market growth is expected in the coming years.

01

We will sell our product directly to end customers through our website or the online platform Amazon.

02

Our major investment costs include further development for market readiness and expanding our patent to selected non-European target markets.

03

The unit costs of our product are primarily determined by the stainless-steel (plastic-free) growing chamber, the lighting unit, and the vertical guidance system of the growing chamber.

Our Business Model

How We Make Money

The Team

Who We Are and What We Can Do

Founder and CEO of 4S Aachen GmbH

I am Dr. Florian Köhler, founder and CEO of 4S Aachen GmbH. I hold a PhD in Physics and a Master's degree in Business Administration. Throughout my professional career as a management consultant, I have been assisting automotive OEMs and Tier-1 suppliers in the development of their products. My vision is to enable every individual to cultivate their own plants, regardless of their location or experience.

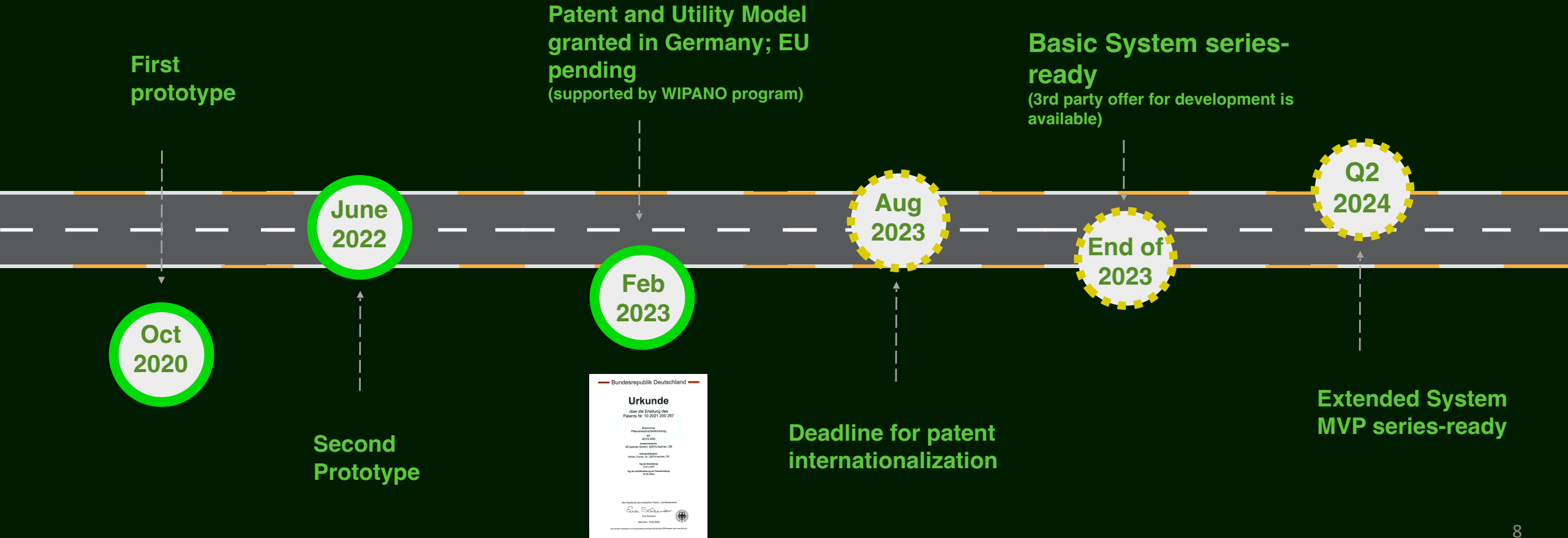
A portrait of Dr. Florian Köhler, a man with brown hair and glasses, wearing a white shirt. He is smiling and looking towards the camera.

Dr. Florian Köhler

Founder and CEO Of 4S
Aachen GmbH

The Roadmap

What We Have Achieved and What We Plan to Do



Call to Action

What We Need and What We Offer

We are seeking funding of **150,000€** to develop our product to market readiness, secure international IP, and generate initial sales.

The breakdown of the funding allocation is as follows:

- Product Development: 50,000€
- Patenting Costs: 30,000€ (USA, Japan, China & India)
- Material Reserves and Personnel Costs: 50,000€
- Buffer: 20,000€



By investing in our project, you will have the opportunity to be part of an innovative and growing market that offers both ecological and economic benefits.



4S Aachen GmbH presents a unique and sustainable solution for the challenges of modern plant cultivation. With our patented technology, we enable efficient indoor farms, providing healthy food for everyone.

Seize the opportunity to invest in our future today!

**4S Aachen
GmbH**
sustainable and self-sufficient solutions

Quellen

Not part of presentation - only internal use and idea collection

<https://www.globenewswire.com/en/news-release/2022/05/30/2452599/28124/en/The-Worldwide-Vertical-Farming-Industry-is-Projected-to-Reach-10-Billion-by-2027.html>

<https://www.grandviewresearch.com/industry-analysis/indoor-farming-market>

<https://www.statista.com/topics/4467/indoor-farming/>
<https://www.grandviewresearch.com/industry-analysis/indoor-farming-market>
<https://www.futuremarketinsights.com/reports/indoor-farming-market>

Competitors: Richel Group, Netafim, Hydrodynamics Int., Agrilution, Argus Control System Ltd.