Autonomous mobile trees creating climate-resilient hubs where traditional planting fails - German climate-tech company seeks partners for manufacturing, distribution, and implementation

Summary

Profile type	Company's country	POD reference
Technology offer	**Germany**	**TODE20250929005**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Commercial agreement with technical assistance**	**• World**
Contact Person	**Term of validity**	**Last update**
Noriko MITA	**29 Sep 2025** **29 Sep 2026**	**29 Sep 2025**

General Information

Short summary

A German climate-tech start-up transforms public spaces where traditional planting is impossible—due to underground infrastructure, multifunctional use, or heritage protection—into climate-resilient hubs. The company's autonomous units integrate robotics, AI and real trees to track sunlight, reposition themselves to deliver shade, cooling, and greenery where it is needed most. Partners are sought for manufacturing, distribution, and implementation.

Full description

Rising urban temperatures intensify the heat-island effect and make cities increasingly uncomfortable. Meanwhile, traffic and industrial emissions degrade air quality, elevating respiratory and cardiovascular risks. Together, these pressures threaten public health and urban sustainability.

A German start-up company tackles these challenges with adaptive green infrastructure that transforms public spaces into climate-resilient hubs. Their core innovation is a flexible, autonomous mobile tree unit for sites where conventional planting is impractical. Each unit integrates sensors, automated irrigation, and an intelligent control system that tracks sunlight and subtly repositions the tree to maximise shade and cooling—making small turns or shifts only when needed. The results are upgraded public spaces that are more attractive, comfortable, and liveable.

Because the units continuously monitor soil health, light, and temperature—and water themselves automatically—day-to-day caretaking is minimal. Maintenance is limited to routine tree care and periodic technical checks scheduled to local requirements.

The smart solution serves both B2B and B2G markets. Target customers include cities and municipalities; real-estate developers; architecture and urban-planning offices; event organisers; tourism and hospitality (e.g., hotels, recreation centres); museums and cultural venues; and healthcare facilities (e.g., hospitals).

The first full-scale pilot is planned for 2025.

The German company seeks partners for manufacturing, distribution, and implementation, especially those with strong access to cities, urban-infrastructure networks, and smart-city markets, and the capability to support local deployment and maintenance.

Advantages and innovations

- Targeted cooling on demand: Units reposition to where people actually are, maximising shade and thermal comfort precisely when and where it's needed.
- Deployable where planting is impossible: Works above dense underground utilities, over slabs, plazas, and temporary sites—no excavation.
- Fast, non-invasive implementation: Mobile, plug-and-play setup with minimal permitting, disruption, or construction.
- Autonomous & geofenced movement: Sun-tracking, small corrective turns, safe speeds, obstacle detection; remote control as fallback.
- Built-in stewardship: Automated irrigation and sensor-based monitoring (soil moisture/health, light, temperature) reduce manual care to periodic checks.
- Data for decisions: Continuous microclimate data and dashboards support evidence-based planning, operations, and KPI reporting.
- Flexible & seasonal by design: Reconfigure layouts for seasons, events, and heatwaves—then reposition again as needs change.
- Lower total cost vs. fixed works: Avoids heavy civil works and relocation costs; assets can be redeployed across sites over their lifetime.
- Grid-light/renewable ready: Supports renewable/low-power operation and smart scheduling to minimise resource use.
- Scalable from single units to fleets: Start with one pilot, grow to clusters that create connected shade corridors.
- Inclusive public-realm upgrade: Immediate visual and experiential improvement that attracts footfall and extends dwell time.
- Compliance & funding fit: Helps cities meet urban-greening/resilience targets with measurable impacts.
- Interoperable tech stack: Open interfaces for integration with smart-city platforms and facility management.
- Portable asset value: If a site changes, the unit moves—with no sunk cost in the ground.

Technical specification or expertise sought

Stage of development

Under development

Sustainable Development goals

- **Goal 3: Good Health and Well-being**
- **Goal 13: Climate Action**
- **Goal 11: Sustainable Cities and Communities**

IPR Status

Secret know-how

IPR Notes

IPR Notes

Partner Sought

Expected role of the partner

The start-up seeks organizations with a strong local presence in smart-city, urban-infrastructure, or environmental-technology markets, such as manufacturers, distributors, and engineering/service providers. Partners will manage local assembly, sales and distribution, and on-site implementation and maintenance of the smart units, ensuring seamless integration into municipal projects and client operations.

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **SME <=10**
- **SME 11-49**
- **SME 50 - 249**
- **Big company**

Dissemination

Technology keywords

- **10002007 - Environmental Engineering / Technology**
- **10002002 - Outdoor Air Pollution/Treatment**
- **11007 - Sports and Leisure**
- **10002004 - Climate Change mitigation**

Market keywords

- **09005 - Agriculture, Forestry, Fishing, Animal Husbandry & Related Products**
- **07005003 - Hotels and resorts**
- **07001007 - Other leisure and recreational products and services**
- **09007005 - Facility management companies**

Targeted countries

- **World**

Sector groups involved

Media

Images

Example_Square_overview

Example-public_square

Example_sqaure_used_by_people_for recreational_purposes