Summary of Agile Pilot Green Pergola

Company name	**Zoomline SRL**
Company location	**Bucharest, Romania**
Domain	**Urban greening** **Environmental education** **Nature-based urban infrastructure**
Municipality	Bucharest, Sector 2
Project period	November 2025 – June 2026
Solution	The **Green Pergola** is a self-supporting, modular timber structure (9 × 3 × 3 m) installed in the courtyard of Ita Wegman Bilingual High School, Bucharest, designed to introduce functioning green infrastructure into a school environment with no structural connection to the building. The pergola supports climbing perennials (Trachelospermum jasminoides, Campsis radicans) across a vegetated canopy, with perennial planters along its edges (lavender, catmint, echinacea, heuchera, rosemary) and seasonal crops for hands-on educational use. e structure is classified as urban furniture, avoiding building permit requirements, and was designed from the outset to be replicable across other Bucharest schools facing similar administrative and structural constraints. The project originated as a vertical garden concept and pivoted following a thorough feasibility analysis.
Stakeholders	• Zoomline SRL (solution provider and project team); • Ita Wegman Bilingual High School, Bucharest – school director Manuela Wyneken (associated strategic partner, site host); • DGAPI Sector 2 – Ing. Alexandru Ioan (administrative and technical support for permitting and urban furniture classification). • The Sector 2 municipality was not a formal project partner and its institutional involvement remained limited, but we would like to express our sincere gratitude to miss Macovei for her valuable assistance with the administrative procedures.; key support came from the school director, who engaged immediately and consistently throughout, and from the individual DGAPI contacts who helped navigate the classification process.
Lessons learned	The pilot's most important finding is structural, not technical: implementing even a simple greening intervention in a pre-1977 Bucharest school involves navigating suspended land registries, missing technical documentation, unclear permit thresholds, and conflicting guidance from different municipal departments. These are not just exceptional circumstances, they describe a large part of Bucharest's public building stock. The Green Pergola concept is specifically engineered to work within these constraints rather than against them. Additional lessons include: horticultural expertise is non-negotiable early (an initial plant palette contained critical errors, caught and corrected through specialist consultation); institutional responsiveness matters enormously (the school director's

	immediate commitment was genuinely rare and proved decisive for project momentum); and classification of freestanding structures as urban furniture is the key administrative lever that makes school greening viable at scale without structural permits.
KPI 1 Adoption & usage	Target: ≥ 27 m² of vegetated canopy installed. The structure's footprint covers approximately 27 m² (9 × 3 m), with climbing vegetation covering the full canopy and lateral edges. As the project reached Phase 3 (procurement) by June 2026, with materials sourced and the physical build pending final administrative clearance, the canopy area target is defined and confirmed by the structural design. Regular daily use during breaks and outdoor activities will be monitored from commissioning through structured observation three times per week.
KPI 2 Time savings	Target: ≥ 2°C temperature reduction under the canopy versus the open courtyard during summer peak hours. Research literature on comparable pergola and green wall systems indicates a realistic range of 4–8°C local cooling in similar climates. Measurement will use two low-cost digital temperature loggers placed under-canopy and at a reference point in the open yard, recording at 15-minute intervals throughout June-September. Full data will be available after the first summer of operation.
KPI 3 User experience	Target: ≥ 70% positive response in anonymous surveys among students and teachers, and at least two outdoor lessons per month logged in the space during the school year. Additionally: plant survival rate ≥ 85% of permanent species after the first winter; and at least one other school formally expressing interest in replicating the model. Survey methodology and activity logging templates are designed and ready for deployment at launch.
Evaluation of the business model focusing on its viability and potential for growth	The Green Pergola value proposition is one of replicability and systemic impact rather than direct revenue generation. The business case rests on three pillars: (1) the solution is low-cost, making it accessible to school improvement budgets, CSR programmes, and local authority greening funds without requiring EU project financing; (2) it is administratively lightweight, no structural permits, no land registry changes, no specialist assessments – which is the single biggest barrier to greening in older public buildings; (3) the design is modular and fully documented for replication, meaning each subsequent implementation becomes cheaper and faster. The pilot's Phase 2 deliverable is a practical replication toolkit (structural drawings, plant specifications, maintenance guide, administrative lessons learned) intended for distribution to other schools, local authorities, and potential funders. Growth potential lies in positioning this as a scalable urban greening model for Bucharest's pre-1977 school stock, of which there are hundreds, through CSR sponsorships, municipal greening programmes, or EU co-financed urban adaptation initiatives.
Impacts	For Ita Wegman: a shaded, planted outdoor space in a previously fully paved courtyard, a new outdoor learning environment, and a strengthened relationship with local administrative contacts. For Zoomline: validated expertise in stakeholder management with public institutions, a tested project management methodology, and a documented, replicable greening model. For the broader context: a worked example – with full documentation of the obstacles and the administrative pathways used – that other schools, teams, and local authorities

	can draw on directly. The pilot demonstrates that greening is possible even when the land registry is suspended, the building predates 1977, and no technical documentation exists.
Suggestions for future actions, especially focusing on sustainability and replication	Secure a dedicated municipal contact at project initiation – the absence of a single point of contact caused consistent delays and conflicting guidance. Confirm urban furniture classification in writing early, before any procurement. Build a 30% time buffer into all activities with administrative or inter-institutional components. Commission specialist horticultural input before finalising any plant palette. For replication: release the structural drawings, plant specifications, and administrative lessons as a public toolkit, so subsequent schools don't repeat the same feasibility process from scratch.
Next steps	Complete procurement and begin physical assembly once administrative clearance is confirmed. Conduct a school community launch event to formalise educational integration and student maintenance responsibilities. Deploy temperature sensors and initiate KPI tracking. At month 6: mid-term review, first survey, plant survival assessment. At month 12: full evaluation report, replication toolkit publication, and outreach to at least one additional Bucharest school. Longer term: explore CSR, municipal, or Interreg co-financing for a broader school greening programme.
Provider's Reflection	The pivot from vertical garden to green pergola was not a retreat – it was the result of taking the feasibility process seriously. Every barrier we hit is one that will face anyone trying to green an older public building in Bucharest, and we now know how to navigate around them. The school director was an exceptional partner from the first meeting, and the contacts at DGAPI were decisive in finding a workable administrative path. What we are bringing out of this pilot is not just a pergola – it is a documented method, a tested administrative approach, and confidence that the model can be replicated.
Municipality's Reflection	The Sector 2 municipality was not formally engaged as a project partner. Practical support came through individual contacts at DGAPI – and ing. Alexandru Ioan – whose responsiveness was decisive in clarifying the urban furniture classification pathway. A formal institutional statement is not available, which is itself a relevant finding: individual goodwill within public administration can be the difference between a project that moves and one that stalls.
Expert's Reflection	The introduction of a functioning green infrastructure into a school environment is a very good idea, allowing children to high school students to understand the role of green spaces in reducing urban heat island effects, balancing humidity and carbon footprint and promoting life sciences and biodiversity.