FORMAS

Ansökan

2025-05-21

Radloff, Katharina

Information om sökande

Projektledare: Katharina Radloff

Födelsedatum: 19860328

Kön: Kvinna

Medelsförvaltare: Umeå kommun

Hemvist: Strategisk utveckling

Dr-examen:

Akademisk titel: Diplomingenjör Energi- och miljömanagement

Arbetsgivare: Umeå kommun

Information om ansökan

Utlysningsnamn: Effekt, från forskning till nytta 2025

Bidragsform: Nyttiggörandeprojekt

Sökt inriktning: Nationella forskningsprogram

Ämnesområde utlysning: Formas

Projekttitel: GreenPulse: Evidensbaserad vertikal grönska för motståndskraftiga nordiska städer

Projektstart: 2025-12-01

Projektslut: 2027-11-30

Sökt beredningsgrupp: Brg2553 , Brg2554, Brg2553

Klassificeringskod: 40504. Miljö- och naturvårdsvetenskap, 10408. Biokemi

Ämnesområde ansökan: 5003. 21.1 Samhällsvetenskaplig miljöforskning, 5402. 25.0 Stadsutveckling (stadens utformn o funktion)

Nyckelord: urban greening, air pollution, nordic climate

Sökta medel

År:	2025	2026	2027	Totalt sökt belopp
Belopp:	183 013	1 972 766	1 842 754	3 998 533

Grundinformation

Grundinformation

Beräknad projekttid

2025-12-01 - 2027-11-30

Projekttitel på svenska (max 200 tecken inklusive mellanslag)

GreenPulse: Evidensbaserad vertikal grönska för motståndskraftiga nordiska städer

Projekttitel på engelska (max 200 tecken inklusive mellanslag)

GreenPulse: Evidence-Based Vertical Greening for Northern Urban Resilience

Populärvetenskaplig beskrivning på svenska (4 500 tecken inklusive mellanslag)

Urban grönska får allt större betydelse inom både EU:s och Sveriges miljö- och planeringspolitik. Genom satsningar som den Europeiska gröna given och EU:s biodiversitetsstrategi betonas vikten av grönare städer, där naturbaserade lösningar används för att förbättra luftkvalitet, klimatanpassning, hälsa och biologisk mångfald. I Sverige driver både Boverket och Naturvårdsverket på för mer grönska i städer, bland annat för att skapa bättre livsmiljöer för pollinatörer.

Projektet GreenPulse utvecklar ett nytt, vetenskapligt testat system för vertikal grönska som är anpassat för det nordiska klimatet. Målet är att förbättra luftkvalitet och skapa nya livsmiljöer för pollinatörer i tätbebyggda områden där markytan är begränsad. Systemet bygger på kombinationen av luftrenande mossor och blommande växter som attraherar insekter.

Vertikal grönska har visat sig effektiv när det gäller att filtrera bort skadliga ämnen som kvävedioxid (NO_2) och partiklar (PM10), som bidrar till hjärt- och lungsjukdomar. Samtidigt bidrar den till bullerdämpning och ökad trivsel. Men trots dessa fördelar används vertikal grönska sällan i Norden. Det beror på upplevda hinder som teknisk komplexitet, höga underhållskostnader och osäkerhet kring funktion i kallt klimat.

Projets pilotplatsen är Västra Esplanaden i Umeå, ett område med höga NO_2-halter och mycket trafik. Här finns redan omfattande mätdata från tidigare år, vilket gör det möjligt att noggrant jämföra luftkvaliteten före och efter installationen. Det ger unika möjligheter till vetenskaplig uppföljning.

GreenPulse har tre huvudmål:

1. Utveckling och test av ett vertikalt grönsystem anpassat för nordiska förhållanden, inklusive kalla vintrar, kort växtsäsong och långa perioder utan dagsljus, samt forskning om dess förmåga att rena luften från skadliga partiklar och återskapa ekosystem för pollinatörer.
2. Ökad kunskap och engagemang kring vertikal grönskas möjligheter bland medborgare, planerare och beslutsfattare.
3. Planering för framtida användning, med kartläggning av platser i Umeå där GreenPulse kan bidra till bättre miljö och stadskvalitet.

GreenPulse riktar sig till flera målgrupper:

1. Stadens invånare får renare luft, ökad trivsel och mer biologisk mångfald.
2. Kommuner och stadsplanerare får ett verifierat verktyg för att nå miljö- och klimatmål.
3. Forskare får tillgång till nya data om luftföroreningar, växtprestanda och pollinatörer.
4. Företag inom grön teknik får möjlighet att utveckla och kommersialisera ett nytt, klimat-anpassat system.

På längre sikt kan GreenPulse spridas till andra städer i Norden och liknande klimatzoner. Genom att kombinera forskning, praktisk tillämpning och kommunalt samarbete skapas en lösning som både är konkret och skalbar. För att åstadkomma bred samhällspåverkan krävs dock fortsatt samarbete med aktörer inom fastighetssektorn, miljöorganisationer och offentlig planering – något som projektet lägger grund för.

Sammanfattning på svenska (1 500 tecken inklusive mellanslag)

GreenPulse är ett forsknings- och innovationsprojekt som utvecklar ett vertikalt växtsystem anpassat för nordiska förhållanden, där kalla vintrar, korta växtsäsonger och höga luftföroreningsnivåer innebär unika utmaningar. Projektet leds av Umeå kommun och kombinerar vetenskaplig validering med praktisk tillämpning i stadsmiljöer, med fokus på Västra Esplanaden - en hårt trafikerad gata med förhöjda kvävedioxidnivåer.

Systemet integrerar luftrenande mossor och pollineringsvänliga blommande växter för att förbättra luftkvaliteten och den biologiska mångfalden i städerna, särskilt i täta områden där markutrymmet är begränsat. GreenPulse syftar till att generera kunskapsbaserade bevis på hur vertikal grönska kan minska luftföroreningar och stödja ekosystem för pollinatörer.

Projektet främjar också medvetenhet och engagemang kring utrymmeseffektiva gröna lösningar och kartlägger framtida implementeringsmöjligheter i Umeå. GreenPulse är utformat för att vara skalbart och har potential att replikeras i andra nordiska städer. Genom att överbrygga forskning, planering och klimatåtgärder stöder det hälsosammare och mer hållbara stadsmiljöer.

Sammanfattning på engelska (1 500 tecken inklusive mellanslag)

GreenPulse is a research and innovation project that develops a vertical greening system tailored to Nordic conditions, where cold winters, short growing seasons, and high air pollution levels present unique challenges. Led by Umeå Municipality, the project combines scientific validation with real-world application in urban environments, focusing on Västra Esplanaden—a heavily trafficked street with elevated nitrogen dioxide levels.

The system integrates air-purifying mosses and pollinator-friendly flowering plants to improve air quality and urban biodiversity, especially in dense areas where ground space is limited. GreenPulse aims to generate knowledge-based evidence on how vertical greening can reduce air pollution and support ecosystems for pollinators.

The project also promotes awareness and engagement around space-efficient green solutions and maps future implementation opportunities in Umeå. Designed to be scalable, GreenPulse has the potential for replication in other Nordic cities. By bridging research, planning, and climate action, it supports healthier and more sustainable urban environments.

Projektbeskrivning

Projektbeskrivning

Projektets relevans (max 6 000 tecken inklusive mellanslag)

Urban greening is gaining prominence in both EU and Swedish environmental and planning policy frameworks. At the EU level, the European Green Deal and the EU Biodiversity Strategy for 2030 emphasize the need for greener cities by integrating nature-based solutions and expanding green infrastructure to enhance biodiversity and improve quality of life. These strategies support initiatives like urban forests, green roofs, green facades, and sustainable planning as tools for climate adaptation and public health improvement.

One crucial benefit of urban greening is its positive impact on air and noise quality. Vegetation, such as trees and green barriers, not only filters harmful pollutants like nitrogen dioxide (NO_2) and fine particulate matter (PM10), which are associated with respiratory and cardiovascular diseases, but also helps reduce excessive noise, primarily from traffic.

Cities are also vital in efforts to reverse biodiversity loss. EU and Swedish policies increasingly recognize urban areas as important habitats, especially for pollinators. The EU Biodiversity Strategy calls for enhancing biodiversity in urban spaces by fostering habitats for insects, birds, and other wildlife. The EU Pollinators Initiative further supports this by aiming to halt the decline of wild pollinators through habitat improvements, awareness, and monitoring.

Sweden mirrors EU objectives through national and municipal policies supporting sustainable urban development. The Swedish National Board of Housing, Building and Planning encourages the integration of green spaces in urban areas to promote ecosystem services, social cohesion, and climate resilience. The Swedish Environmental Protection Agency (Naturvårdsverket) also prioritizes pollinator habitat restoration, with a particular focus on cities.

Our GreenPulse proposal seeks to harmonize the built and natural environments, creating healthier and more sustainable urban spaces. To achieve this overarching aim, we will develop a prototype green cultivation system and test its capacity to reduce air pollution in Nordic cities. While urban greening has well-documented significant impact on public health (e.g., Li et al., 2023; Browning et al., 2022; WHO, 2025), the Nordic climate has its unique challenges that need to be addressed. Also, the proposal aims to target the decline of urban pollinators, recognizing the role of cities as pesticide-free environments for biodiversity conservation (Treder et al., 2024).

Urban air pollution and pollinator loss are global challenges. While many solutions exist, no single approach is sufficient, progress depends on combinations of actions. For example, traffic diversion from city centers has partial effects (Lin, Waller, Lin, 2024). Other solutions include green infrastructure, urban gardens, trees, and green roofs, which provide proven health and environmental benefits (Aslanoğlu et al., 2025; Paudel & States, 2023; IVL, 2025).

Vertical gardens are especially promising urban green infrastructures yet remain underused despite their advantages. Ground space is limited and expensive, making it more likely to be used for housing or offices rather than green areas. In contrast, vertical plant cultivation, often overlooked, offers enormous potential. Research has shown vertical green infrastructures improve air quality, support biodiversity, and enhance well-being (slanoğlu et al., 2025; Paudel & States, 2023; IVL, 2025). Still, widespread use is rare, due to adoption barriers, such as perceived technical difficulty and high maintenance costs, the latter being perceived as the major challenge.

To overcome these barriers, the project aims to develop a scientifically validated, cost-effective, and easy-to-maintain vertical greening system that can function in Nordic climates. The solution aims to be both evidence-based and attractive to municipalities, planners, and citizens. Achieving this requires collaboration between researchers, urban authorities, users, and innovators to create a tangible, scalable intervention.

The project will be implemented at a pilot location, Västra Esplanaden in Umeå. This heavily trafficked area, with elevated NO_2 levels, provides an ideal testing ground to explore and promote the use of vertical greenery in Nordic urban environments.

GreenPulse focuses on three main objectives:

1. **Knowledge-based evidence on the role of urban green infrastructure**: Develop a vertical greening system tailored to Nordic conditions—resilient to cold, low-light winters and short, dry growing seasons. Generate robust scientific evidence on its effectiveness in reducing harmful air pollutants and enhancing urban biodiversity by supporting pollinator habitats.
2. **Raise awareness and engagement:** Improve knowledge among the public, planners, and decision-makers about the multifunctional benefits of space-efficient vertical greenery systems in dense urban environments.
3. **Plan for implementation:** Propose a plan based on Umeå urban area mapping of locations where **GreenPulse** can contribute to city sustainability.

GreenPulse serves the interests of multiple target groups:

- **Urban residents** will benefit from improved air quality, well-being, and increased biodiversity.
- **Municipalities and planners** gain access to a scientifically validated, cost-effective solution to meet environmental and air quality targets.
- **Researchers** will explore real-world data on pollution reduction, pollinator dynamics, and plant performance under Nordic conditions.
- **Private sector stakeholders** in green infrastructure and environmental technology can access a novel, climate-adapted vertical system with commercial potential.

Over the long term, it contributes to broader civil society and policy goals by:

- Delivering co-benefits across sustainability goals—air quality, biodiversity, and public health—via a single, integrated approach
- Providing a model to encourage other municipalities to invest in evidence-based green infrastructure

Projektets potential (max 5 000 tecken inklusive mellanslag)

Our **GreenPulse** proposal takes on the challenge of developing an urban vertical greenery system specifically tailored for the challenging Nordic climate that is characterized by long, dark winters and sub-zero temperatures, coinciding with periods of peak air pollution (see summary in Appendix 1). While vertical gardens have been studied elsewhere, few have been adapted for cold, low-light conditions, making **GreenPulse**'s focus on Nordic-specific performance a distinctive contribution. The project not only addresses technological barriers, such as installation complexity and maintenance costs, but also integrates scientific validation, public engagement, and urban planning into a unified model. By combining air-purifying mosses with pollinator-friendly flowering plants, **GreenPulse** aims to enhance urban biodiversity while improving air quality in dense city environments. The pilot implementation in Umeå's high-traffic Västra Esplanaden provides an opportunity to test and refine the system under real-world conditions. Umeå Municipality (UM) has monitored air quality at this location for years prior to this study, which provides a unique opportunity, as extensive data before the installation of vertical greenery systems provide reliable control data, including seasonal and diurnal as well as weather-related variations. This is critical for the project, as such control data is vital for scientifically sound analyses but cannot be fitted within the time-frame of the call. Additionally, **GreenPulse**'s emphasis on participatory planning, mapping implementation sites, and active participation of both academia and the municipality set it apart from more isolated green infrastructure efforts. This integrated, climate-adapted, and scalable solution brings about a new standard for evidence-based, multifunctional urban greening in northern Europe.

The **GreenPulse** proposal has strong potential for dissemination and scalability across Nordic and other temperate urban regions. We aim for a free-standing and low-maintenance vertical greenery system adapted to harsh northern climates, that can be replicated in cities facing similar air quality and biodiversity challenges. To reach a broad societal impact, collaboration beyond the project team, involving municipalities, housing developers, environmental NGOs, and the private sector in green tech is required, an effort which is beyond the scope and time-frame of the project. Moreover, for a wider uptake, support from national and EU-level funding instruments, inclusion in municipal and regional planning policies, and alignment with sustainability certifications (e.g., BREEAM, Miljöbyggnad) are key. Integrating **GreenPulse** solutions into public procurement guidelines and building codes could further accelerate implementation in the future. Systemic change also depends on public awareness and behavioral shifts. The project will act as a seed in this respect, via targeted engagement (citizen-science) and communication activities. By linking research with policy, planning, and practice, **GreenPulse** hopes to catalyze a broader adoption of space-efficient green infrastructures and contribute to long-term urban transformation, not least in Nordic countries. Given recent political shifts, particularly in the U.S. administration, the responsibility for driving the green transition increasingly falls on the EU. In this context, the Nordic countries have an opportunity to lead by example and demonstrate strong climate action.

Projektets genomförande (max 8 000 tecken inklusive mellanslag)

GreenPulse is organised in four Work Packages (WP), as follows:

WP1 Design and manufacture of a free-standing vertical system aimed at reducing pollution and noise and promoting pollinators in Nordic climatic conditions.

Main coordinator: Vertisà AB (industrial partner)

Activities (A)

A1.1 Design of a Prototype for a Free-standing Urban Vertical Greenery System (Vertical garden, Appendix 2)

The design phase will be carried out in close collaboration with the **GreenPulse** team, comprising Umeå Municipality, SLU, and Umeå University. This collaborative effort will ensure that all relevant aspects and perspectives are considered when developing a vertical urban system. The technical part of the prototyping work will require the extensive expertise of Prototip0, a long-standing partner of Vertisà AB.

A1.2 Manufacturing of a free-standing vertical garden to be placed and tested in Västra Esplanaden, Umeå. The objective is to install 24 m2 of vertical vegetation (moss and flowers).

A1.3 Installation of the Vertical Garden in Umeå and Cultivation of moss and local flowering plant species. The vertical garden will be placed at the exact locations determined as the most optimal by Umeå Municipality and the researchers. All plant species to be cultivated in this project will be of local origin, selected to increase survival and to help recreate a suitable habitat for local pollinators.

A1.4 Cultivation of local flowering plant species in urban conventional pots. WP1 will also be responsible for cultivating the same plant species in conventional pots placed at different locations before (base line data) and during the testing period of the vertical garden.

WP2 Analysis of air pollutants absorbed or sinked by the moss and flowering plants cultivated in the vertical garden.

Main coordinator (research team): András Gorzsás, Department of chemistry, Umeå University.

Objective: To evaluate the vertical garden's effectiveness in mitigating air pollution by quantifying the reduction in airborne pollutants absorbed or trapped by the moss and flowering plants under real urban conditions in Umeå.

Activities

A2.1 Development of Sampling Protocols. Design and implement standardized methods for sampling plant surfaces, moss mats and soil. Pollutants sampled in the air will be continuously monitored (compared to values before installation as the established baseline).

A2.2 In-situ Monitoring of Pollutant Deposition. Conduct regular, seasonal measurements of pollutant accumulation on the vegetation, based on spectroscopic, chromatographic and microscopic analyses (e.g., ICP-MS, FTIR and Raman spectroscopies and hyperspectral imaging, XPS).

A2.3 Sensor Data Integration. Integrate sensor-based data (air temperature, humidity, particulate concentration) from WP1's solar-powered monitoring system to contextualize pollutant capture under different weather and environmental conditions.

A2.4 Comparative Effectiveness Analysis. Compare pollutant removal efficiency across species (moss vs flowering plants) to identify optimal combinations for future scaling and refinement. Correlate variables (sunny hours, precipitation, temperature, pollutant load, etc) to uptake efficiency to fine-tune design and deployment.

WP3 Assessment of Pollinators presence in the garden

Main responsible (research team)**:** Petter Axelsson, SLU / Anna Morén

Activities

A3.1 Plant composition treatment design. Design plant species composition to be incorporated into treatment sub-plots within the vertical garden. Four different treatments that vary in moss dominance and composition of flowering plants distributed across replicated 50 x 50 cm sub-plots within the garden.

A3.2 Camara installation. Install outdoor camera system to monitor insect visits to the garden, treatment sub-plots and plant species focusing mainly on bumblebees and butterflies.

A3.3 Plant community monitoring. Monitoring of plant community development and flowering over time.

A3.4 Camera Data Analysis and Reporting Analyze the collected data on pollinator presence and activity. Identify trends in pollinator behavior, abundance, and diversity over time in relation to garden features, plant community development and environmental conditions.

WP4 Project coordination, Communication and Impact

Main coordinator: Katharina Radloff, Umeå municipality and Anna Morén

Activities

A4.1 Project Management (Umeå Municipality). Regular in-person and online meetings will be organized to ensure smooth collaboration. This includes overseeing data quality and storage, maintaining partner cooperation, ensuring gender and inclusion balance, monitoring the risk assessment plan, and tracking budget use and partner requisitions.

A4.2 Project Coordination and Administration (Umeå Municipality). Umeå Municipality plays a central role in aligning efforts across work packages (WPs) and budget administration. It will maintain regular dialogue with partners to ensure problem relevance and feasible implementation of the solution.

A4.3 Communication & Impact (Anna Morén). To secure long-term impact, and with support from SLU, Umeå Municipality will engage with key stakeholders (e.g., municipal departments, urban planners, developers, schools). Two workshops will be held in which a leaflet (print and/or digital) summarizing key outcomes will also be distributed.

Risk Assessment Plan for the GreenPulse Project:

1 Technological Challenges in Prototyping and Maintenance

Risk: Delays in the design, development, and testing of the vertical greening system could affect the project timeline, particularly the ability to meet deadlines for testing in Västra Esplanaden.

Likelihood: Low to Medium

Impact: Very High

Mitigation Plan: Collaborate closely with technical partners to ensure a shared understanding of project deadlines and expectations. Allocate buffer time within the schedule to account for unforeseen technical hurdles.

2 Weather and Climate Conditions Affecting plan survival in winter

Risk: Harsh Nordic climate conditions (e.g., cold winters, limited daylight hours) may impact survival of the moss and flowering plants

Likelihood: Low (according to the design, see below)

Impact: Low (vegetation can be replaced)

Mitigation Plan: Select plant species that are specifically adapted to Nordic conditions to enhance resilience. Additionally, create a climate-responsive maintenance system to ensure the plants' survival through winter months. Continuous monitoring and adaptability will be prioritized.

3 Insufficient Engagement and Participation from Citizen Scientists

Risk: Low engagement from the community, could result in insufficient data collection, impacting the validity of the citizen-science approach.

Likelihood: Medium

Impact: Medium

Mitigation Plan: Develop targeted outreach strategies to ensure diverse participation, including outreach to community centers, schools, and local environmental organizations.

4 Delays in Reporting and Data Analysis

Risk: The time required to analyze and report the data might extend beyond planned timelines, especially if data quality is inconsistent or large volumes of data need to be processed.

Likelihood: Medium

Impact: Medium

Mitigation Plan: Allocate sufficient resources (e.g., postdoc, research assistants, data analysis tools) to ensure timely processing of (citizen-science) data. Plan for staggered analysis throughout the data collection phase to prevent backlogs. Utilize automated data analysis platforms where possible.

5 Budget Overruns

Risk: Unexpected costs related to prototype development, materials, or citizen-science engagement could lead to budget overruns.

Likelihood: Medium

Impact: Medium

Mitigation Plan: Maintain a contingency fund within the budget to cover unforeseen expenses. Transparent tracking and early identification of potential budget issues will help mitigate this risk.

Time schedule as Gantt chart (Appendix 3)

Aktörer (max 5 000 tecken inklusive mellanslag)

Project stakeholders

GreenPulse is structured into four work packages (WPs), with leadership equally distributed—two led by women and two by men. In addition to this gender balance in WP leadership, the project coordinator and main applicant is a woman, further reinforcing the project's commitment to inclusive leadership. Beyond leadership roles, we will actively ensure balanced participation in meetings, project activities, workshops, and communication actions. Inclusive language will be consistently used.

GreenPulse brings together a highly complementary team of experts from academia, public administration, and industry, ensuring a multidisciplinary approach to achieving the project's objectives in urban sustainability, air quality, and biodiversity.

András Gorzsás (Dept of Chemistry, Umeå University, UMU) As leader of WP2, András contributes with analytical chemistry technical expertise, and multivariate analysis competence (including design of experiments and statistical analyses). He is the Head of the International Society of Plant Spectroscopy with many years of experience in the chemical compositional analysis of different plant tissues, dissemination of results and communication with different stakeholders.

Petter Axelsson (SLU – Department of Wildlife, Fish and Environmental Studies) With a strong background in research on insect-plant interactions and conservation biology Axelssons research focuses on how habitat recreation, including urban greening, can promote biodiversity and ecosystem services. His expertise can support sustainable urban development, particularly in relation to pollinators and ecosystem services.

Katharina Radloff (Umeå Municipality, UM)

Katharina plays a key role in ensuring the project aligns with Umeå's urban sustainability goals. Her experience in municipal planning and stakeholder engagement enables the integration of project findings into long-term urban strategies. She will also facilitate contact with other relevant departments at the municipality and ensure broad institutional support.

Anna Morén (Marketing & Communication Officer, private firm)

Anna has solid experience in marketing, communications and PR in both the public and private sectors. She has worked with everything from farm machinery to university education - and with all the types of media and channels through which it is possible to communicate text, photo, film, sound, graphics - digital as well as analogue. Her strength is creating positive attention through storytelling.

Vertisà AB This industry partner specializes in vertical gardening systems tailored to Nordic climates. Their practical know-how and technological solutions are essential for implementing scalable, climate-adapted green infrastructure. Their involvement ensures that the project moves beyond theory to real-world application.

This interdisciplinary collaboration adds significant value by ensuring the project's solutions are not only evidence-based but also implementable and sustainable within a Nordic urban context.

The design and implementation of **GreenPulse** are strongly driven by the needs and interests of its end users and target groups. Umeå Municipality, which has in-depth knowledge of the challenges related to air pollution and low biodiversity in the city, is actively involved to ensure the solution is both effective and compatible with urban regulations. The model developed will respond to multiple needs: reducing air pollution for the benefit of all urban residents, supporting local gardeners and farmers who depend on pollinators for seed production, and strengthening urban food systems. In addition, by incorporating vegetation that mitigates noise pollution, the model will enhance urban quality of life for people, pets, and wildlife alike. The aesthetic and mental health benefits of renaturalized urban spaces are also central, with local mosses and prairie-origin flowering plants contributing to both beauty and biodiversity. These gardens will also serve educational purposes, offering schoolchildren opportunities to learn about local flora and pollinators through interactive elements like QR-coded information plates.

Referenslista (max 3 000 tecken, inklusive mellanslag)

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Budget och övrig information

Budget

Koordinerande projektpart

Koordinerande projektpart Umeå kommun (212000-2627)

Umeå kommun (212000-2627)

Koordinerande projektpart

Företag/Organisation

Organisationsnummer*
212000-2627

Land*
Sverige

Organisationens namn*
Umeå kommun

Adress

Årsomsättning*
133 000 000

Postnummer*
90184

Balansomslutning*
21 621 000 000

Postort*
Umeå

Antal anställda*
12 285

Kontaktperson*
Katharina Radloff

E-post Kontaktperson*
katharina.radloff@umea.se

Arbetsplats

Namn på arbetsplats*
Strategisk utveckling

Land*
Sverige

Adress
Skolgatan 31A

Postnummer*
90184

Postort*
Umeå

Plats där huvuddelen av arbetet kommer att genomföras.

Kostnader

Kostnader	2025	2026	2027	Totalt
1 Personalkostnader	25 856	336 128	310 272	672 256
2 Utrustning, byggnader och mark	0	0	0	0
3 Kostnader för konsulter och licenser m.m	0	0	0	0
4 Övriga direkta kostnader inkl. resor	1 000	2 000	20 000	23 000
5 Indirekta kostnader	7 757	100 838	93 082	201 677
Totalt	34 613	438 966	423 354	896 933

Finansiering

Finansiering	2025	2026	2027	Totalt
1 Sökt bidrag från Formas	34 613	438 966	423 354	896 933
2 Annat stöd (offentligt) (a)	0	0	0	0
3 Annat stöd (privat)	0	0	0	0
4 Egen finansiering	0	0	0	0
Totalt	34 613	438 966	423 354	896 933

(a) Om annat stöd finns, ange finansiär

Beräknad stödnivå

100%

Medfinansieringsgrad

0%

Motivering av personalkostnader i budget

Genomsnittlig timkostnad: 525 kr/h inkl. sociala avgifter och OH

Projektpart

Projektpart 1 (Ny) Vertisa AB (559322-7340)

Vertisa AB (559322-7340)

Projektpart

Företag/Organisation

Organisationsnummer*
559322-7340

Land*
Sverige

Organisationens namn*
Vertisa AB

Adress

Årsomsättning*
272 000

Postnummer*
905 92

Balansomslutning*
22 000

Postort*
Umeå

Antal anställda*
0

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mdelrgg@gmail.com

Arbetsplats

Namn på arbetsplats*
bolagets kontor

Land*
Sverige

Adress

Postnummer*
905 92

Postort*
Umeå

Plats där huvuddelen av arbetet kommer att genomföras.

Kostnader

Kostnader	2025	2026	2027	Totalt
1 Personalkostnader	56 500	478 000	346 500	881 000
2 Utrustning, byggnader och mark	100 000	400 000	0	500 000
3 Kostnader för konsulter och licenser m.m	0	0	0	0
4 Övriga direkta kostnader inkl. resor	0	0	0	0
5 Indirekta kostnader	0	0	0	0
Totalt	156 500	878 000	346 500	1 381 000

Finansiering

Finansiering	2025	2026	2027	Totalt
1 Sökt bidrag från Formas	125 200	702 400	277 200	1 104 800
2 Annat stöd (offentligt) (a)	0	0	0	0
3 Annat stöd (privat)	0	0	0	0
4 Egen finansiering	31 300	175 600	69 300	276 200
Totalt	156 500	878 000	346 500	1 381 000

(a) Om annat stöd finns, ange finansiär

Beräknad stödnivå

80%

Medfinansieringsgrad

20%

Motivering av personalkostnader i budget

Genomsnittlig timkostnad: 600 kr/h inkl. sociala avgifter och OH, Vertisà kommer att bidra till projektet enligt GBER art. 25. Vertisà ansöker om 80% av kostnaderna från Formas och bidrar med 20% in-kind.

Projektpart 2 (Ny) Umeå universitet (202100-2874)

Umeå universitet (202100-2874)

Projektpart

Företag/Organisation

Organisationsnummer*
202100-2874

Land*
Sverige

Organisationens namn*
Umeå universitet

Adress

Årsomsättning*
5 407 000 000

Postnummer*
901 87

Balansomslutning*
317 700 000

Postort*
Umeå

Antal anställda*
4 006

Kontaktperson*
Andras Gorzsas

E-post Kontaktperson*
andras.gorzsas@chem.umu.se

Arbetsplats

Namn på arbetsplats*
Kemiska institutionen

Land*
Sverige

Adress

Postnummer*
901 87

Postort*
Umeå

Plats där huvuddelen av arbetet kommer att genomföras.

Kostnader

Kostnader	2025	2026	2027	Totalt
1 Personalkostnader	11 200	134 400	123 200	268 800
2 Utrustning, byggnader och mark	0	25 000	0	25 000
3 Kostnader för konsulter och licenser m.m	0	0	0	0
4 Övriga direkta kostnader inkl. resor	0	167 000	548 000	715 000
5 Indirekta kostnader	0	8 000	0	8 000
Totalt	11 200	334 400	671 200	1 016 800

Finansiering

Finansiering	2025	2026	2027	Totalt
1 Sökt bidrag från Formas	11 200	334 400	671 200	1 016 800
2 Annat stöd (offentligt) (a)	0	0	0	0
3 Annat stöd (privat)	0	0	0	0
4 Egen finansiering	0	0	0	0
Totalt	11 200	334 400	671 200	1 016 800

(a) Om annat stöd finns, ange finansiär

Beräknad stödnivå

100%

Medfinansieringsgrad

0%

Motivering av personalkostnader i budget

Genomsnittlig timkostnad: 700 kr/h inkl. sociala avgifter och OH

Projektpart 3 (Ny) Sveriges lantbruksuniversitet (202100-2817)

Sveriges lantbruksuniversitet (202100-2817)

Projektpart

Företag/Organisation

Organisationsnummer*
202100-2817

Land*
Sverige

Organisationens namn*
Sveriges lantbruksuniversitet

Adress

Årsomsättning*
4 665 668 000

Postnummer*
90183

Balansomslutning*
4 840 925 000

Postort*
Umeå

Antal anställda*
3 261

Kontaktperson*
Petter Axelsson

E-post Kontaktperson*
petter.axelsson@slu.se

Arbetsplats

Namn på arbetsplats*
Institutionen för vilt, fisk och miljö

Land*
Sverige

Adress

Postnummer*
90183

Postort*
Umeå

Plats där huvuddelen av arbetet kommer att genomföras.

Kostnader

Kostnader	2025	2026	2027	Totalt
1 Personalkostnader	0	202 000	206 000	408 000
2 Utrustning, byggnader och mark	0	38 000	18 000	56 000
3 Kostnader för konsulter och licenser m.m	12 000	144 000	132 000	288 000
4 Övriga direkta kostnader inkl. resor	0	30 000	30 000	60 000
5 Indirekta kostnader	0	83 000	85 000	168 000
Totalt	12 000	497 000	471 000	980 000

Finansiering

Finansiering	2025	2026	2027	Totalt
1 Sökt bidrag från Formas	12 000	497 000	471 000	980 000
2 Annat stöd (offentligt) (a)	0	0	0	0
3 Annat stöd (privat)	0	0	0	0
4 Egen finansiering	0	0	0	0
Totalt	12 000	497 000	471 000	980 000

(a) Om annat stöd finns, ange finansiär

Beräknad stödnivå

100%

Medfinansieringsgrad

0%

Motivering av personalkostnader i budget

Genomsnittlig timkostnad: 600 kr/h inkl. sociala avgifter och OH, konsultstöd tas in för kommunikation av projektet.

Kostnader

Kostnader	2025	2026	2027	Totalt
1 Personalkostnader	93 556	1 150 528	985 972	2 230 056
2 Utrustning, byggnader och mark	100 000	463 000	18 000	581 000
3 Kostnader för konsulter och licenser m.m	12 000	144 000	132 000	288 000
4 Övriga direkta kostnader inkl. resor	1 000	199 000	598 000	798 000
5 Indirekta kostnader	7 757	191 838	178 082	377 677
Totalt	214 313	2 148 366	1 912 054	4 274 733

Finansiering

Finansiering	2025	2026	2027	Totalt
1 Sökt bidrag från Formas	183 013	1 972 766	1 842 754	3 998 533
2 Annat stöd (offentligt)	0	0	0	0
3 Annat stöd (privat)	0	0	0	0
4 Egen finansiering	31 300	175 600	69 300	276 200
Totalt	214 313	2 148 366	1 912 054	4 274 733

Projektets beräknade stödnivå

94%

Medfinansieringsgrad

6%

Budgetspecifikation (max 5 000 tecken inklusive mellanslag)

Budgeten följer den planerade projektperioden med 24 månader och start 1 december 2025. Budgeten speglar fördelning och insatserna av projektparterna där huvudparten är lönekostnaden. Olika parter tillämpar olika overheadkostnader, för SLU är OH 41 %, Umeå har en OH på 30%.
För Umeå universitetet som utför analyser ingår det även en kostnad för utrustning. I SLUs budget ingår även konsultstöd för extern kommunikation.
Vertisas kostnader består i huvudsak av material, design och tillverkning. Vertisa kommer att bidra till projektet enligt GBER art. 25. Vertisà ansöker om 80% av kostnaderna från Formas.

Övriga direkta kostnader är utgifter för fika vid träffar för avgift för open access publicering för vetenskaplig artikel (beroende på journal) ingår i Umeå kommuns övriga direkta kostnader.

Intyg för organisationer som delvis bedriver ekonomisk verksamhet

Projektparter som delvis bedriver ekonomisk verksamhet och avser att söka icke-statsstöd ska intyga att de avser delta inom sin icke-ekonomiska verksamhet. Intyget undertecknas av behörig företrädare för organisationen och laddas därefter upp som pdf i Prisma (max 4 MB). Formas godtar e-signatur. Intyg om separerad redovisning eller underordnad ekonomisk verksamhet.

Finns det en part eller flera parter (inklusive koordinerande part) som delvis bedriver ekonomisk verksamhet men avser att söka icke-statsstöd för detta projekt?

Nej

Etik

Etiska överväganden

Etiska överväganden (max 4 000 tecken inklusive mellanslag)

The ethical issues that potentially arise in the project mainly relate to the handling of data received in interview and workshop situations. To ensure good ethics during the implementation of the project, all data collection will follow the EU GDPR regulations and the Swedish Research Council's ethical guidelines for the humanities and social sciences, and more specifically the principles of information, consent and confidentiality.

At this stage, we assess that no sensitive personal data will be collected, but as a policy lab can take different paths, we do not rule out that such data may be handled. In accordance with the Ethical Review of Research Involving Humans Act (2003:460), an application will be submitted to the Swedish Ethical Review Authority before we begin our data collection and analysis. The project does not include any human or animal experiments.

People who will be involved in the project will be informed about its purpose, their role and how their participation will be used. A consent form will be developed and collected for all participants who are not project partners. This applies to interviews, workshops and other activities involving people external to the project. Interviewees and workshop participants will be given the opportunity to read and comment on any quotes. Key persons will be given the opportunity to read and comment on drafts before final publication.

All materials produced during the workshops and their documentation will be stored on internal computer servers. If the application is approved, a data management plan will be developed before the project starts.

I projektet ingår djurförsök

Nej

I projektet ingår humanförsök

Nej

I projektet ingår hantering av persondata

Nej

Klassificeringar

Klassificeringar

Ämnesområde

50. PROGRAMOMRÅDE MILJÖ > 5003. 21.1 Samhällsvetenskaplig miljöforskning

54. PROGRAMOMRÅDE SAMHÄLLS- O LANDSKAPSPLANERING > 5402. 25.0 Stadsutveckling (stadens utformn o funktion)

Forskningsämne (SCB-kod)

40504. Miljö- och naturvårdsvetenskap

10408. Biokemi

Globala målen för hållbar utveckling

03 Hälsa och välbefinnande

11 Hållbara städer och samhällen

15 Ekosystem och biologisk mångfald

Nyckelord 1

urban greening

Nyckelord 2

air pollution

Nyckelord 3

nordic climate

Bilagor (medverkande och CV)

Lista över medverkande projektdeltagare i projektet (PDF, max 4 MB)

Se nästa sida för bilaga.

Lista över projektdeltagare

Organisering

Projektledare och projektgrupp ses i tabellen nedan.

Projektperiod 2025-12-01 - 2027-11-30

Förnamn	Efternamn	Doktorsexamen och datum för doktorsexamen om relevant	Organisation	Roll i projektet	Arbets-tid i projektet
Katharina	Radloff	-	Umeå kommun	Miljöstrateg. Projektledare WP4	20%
Katarina	Gref	-	Umeå kommun	Projektledare Gator och Parker, WP4	5%
Andras	Gorzsas	Oorganisk kemi, 2005, Umeå Universitet	Umeå Universitet	Analytisk kemi, ledare för WP2	10%
Maria del Rosario	García Gil	Biochemistry and Microbiology, 1999, Faculty of Biology, University of Valencia	Vertisà AB	Ledare WP1	1000 timmar
Petter	Axelsson	2011, SLU	Vilt, fisk och miljö, SLU	Ledare WP3	2 veckor / år
To be specified	To be specified		Vilt, fisk och miljö, SLU	Tekniker	20%
Anna	Morén		Anna Morén	Kommunikation, marknadsföring, PR	480 timmar

CV och meriter för nyckelpersoner i projektet (PDF, max 4 MB)

Se nästa sida för bilaga.

FORMALIA [CV max 1 page)		
Name:	Katharina Radloff	
Age:	39	**Female/Male: F**
Role in the project:	Project leader	
Motivation why this person is a key person:	Broad and extensive experience in leading cross-administrative processes and projects.	
Organisation:	Umeå municipality	
Current job title:	Environmental strategist	
Participation rate, % of full time	20 %	
E-mail/telephone:	Katharina.radloff@umea.se 070 388 1643	

RELEVANT COMPETENSES AND EXPERIENCES	
2016 – ongoing	Environmental strategist at Umeå municipality Rapporteur for both political committees, steering groups and associations. Leads working groups through processes and projects. Responsible for budgets, follow-up of goals and strategic action plans. Coordinates collaboration and cross-municipal issues. Further trained in change management.
2018 (jan - jun)	Senior consultant at Knightec AB Sub-project manager for a digitalisation project at Skellefteå Kraft. The project aimed to create structure and a systematic way of working for plant documentation.
2014 - 2016	Officer at the Swedish Environmental Protection Agency Performed supervision of companies subject to the nitrogen dioxide fee and was responsible for processing and advising on support for local climate investments.
2012 - 2014	Environmental engineer at Metsä Board AB, Husum Responsible for monitoring conditions and control programmes, as well as contact with authorities and reporting. The role included training new employees and setting the right requirements for purchasing.

EXAMINA	
2011	Diploma engineer in 'Energy and Environmental Management' Europa-Universität Flensburg, Germany

FORMALIA [CV max 1 page)			
Name:	Katarina Gref		
Age:	48	**Female/Male:**	Female
Role in the project:	Coordinating the physical measures on the street"		
Motivation why this person is a key person:	Extensive and long-standing experience in leading street transformations, infrastructure, and urban development projects.		
Organisation:	Umeå Municipality		
Current job title:	Project Manager		
Participation rate, % of full time	5 %		
E-mail/telephone:	Katarina.gref@umea.se 070-264 33 79		

RELEVANT COMPETENSES AND EXPERIENCES	
2022 - Present	**Project Manager at Umeå Municipality** Leading and managing infrastructure and urban development projects. Presenting to political committees, steering committee and organizations. Guiding workgroups through processes and projects. Responsible for budgets and goal tracking. Coordinating internal work within the municipality and communicating with the public, businesses, and organizations related to urban transformation and street projects.
2008-2022	**Traffic Planner at Umeå Municipality** Working on planning and development of the municipality's public outdoor environments. Engaged in traffic planning, traffic safety, and the design of streets and pedestrian and bicycle paths. Participating in the development of new detailed plans and responding to building permit referrals. Specializing in cycling issues.
2007-2008	**EU Administrator at the County Administrative Board of Västernorrland** Approved and supervised companies granted EU funds from the Social Fund and the Regional Fund. Responsible for processing and advising on support.
EXAMINA	
1999-2004	**Bachelor of Arts (B.A.) in Human Geography, Umeå University**
Other matters/ Relevant publications	
2022/ 2024	**Design Guide for Smart and Fast Streets.** Research and development projects for fast street transformation, supposing changes in street policy at the national, regional and municipal level.

FORMALIA [CV max 1 page)		
Name:	Andras Gorzsas	
Age:	49	**Female/Male: M**
Role in the project:	Analytical chemist, leader of WP2	
Motivation why this person is a key person:	Extensive experience in the chemical analysis of biological tissue, multivariate analyses, design of experiments, method development, hardware and software development (1), (2)	
Organisation:	Umeå University	
Current job title:	Staff scientist, Manager (Vibrational Spectroscopy Core Facility)	
Participation rate, % of full time	10 %	
E-mail/telephone:	andras.gorzsas@umu.se / 073-1513377	

RELEVANT COMPETENSES AND EXPERIENCES	
2010 - present	Manager, Vibrational Spectroscopy Core Facility, Umeå University Analytical method, software and hardware development
2008 - 2010	Researcher, Umeå Plant Science Centre, SLU Hyperspectral imaging of plants Scientific Coordinator of the Formas FuncFiber project
2005 - 2008	Postdoctoral fellow, SLU Development of vibrational spectroscopic tools for the chemical analysis of plant tissues
Salient commissions of trust	SciLifeLab PI, Head of the International Society for Plant Spectroscopy, Head of the Vibrational Spectroscopy Section of the Swedish Chemical Society

EXAMINA	
2005	PhD in Inorganic Chemistry, group Lage Pettersson Department of Chemistry, Umeå University “Vanadate and Peroxovanadate Complexes of Biomedical Relevance – A speciation approach with focus on diabetes”
1999	MSc in synthetic organic chemistry Research group for Antibiotics, Hungarian Academy of Sciences “Synthesis of enzyme-inhibitory inositol derivatives”

List of Publications	
(1)	https://www.umu.se/en/staff/andras-gorzsas/
(2)	ORCID ID: 0000-0002-2298-8844

Anna Morén			
Name:	Anna Morén		
Age:	52	**Female/Male:**	Female
Role in the project:	Responsible for marketing, communication and PR regarding the project.		
Motivation why this person is a key person:	**Anna Morén has over 25 years of experience of marketing, communication and PR in public & private companies as well as in the role of leading her own company.**		
Organisation:	Anna Morén 19730208-8500		
Current job title:	CEO/Marketer		
Participation rate, % of full time	12,5%		
E-mail/telephone:	anna.moren@coolkid.se, +46 70 300 95 77		

RELEVANT COMPETENSES AND EXPERIENCES	
2018 -> present	**Marketer at The Faculty of Forest Sciences, The Swedish University of Agricultural Sciences.** Planning and implementation of various types of promotional and communication activities for the undergraduate and master programmes
2021-2022	**Event Coordinator at Umeå University Holding Company (The Innovation Office)** Planning and execution of physical, digital and hybrid events. Worked with a strong focus on live streaming.
2016-2016	**Project leader at Jippo Eventbyrå, VK Media** Planning, marketing, selling and organizing of different types of events. Both the companies own and on behalf of clients.
2015-2016	**Marketing Coordinator, VK Media** Substituted for two people in the marketing department; the team leader and the person responsible for sponsorship and events.
EXAMINA	
2003	**Masters degree in Media and Communication Science at Umeå university.**

VERTISA AB			
Name:	María del Rosario García Gil (MRGG)		
Age:	53	**Female/Male:**	Female
Role in the project:	CEO of Vertisà AB. Design, prototype and manufacture a free-standing vertical garden.		
Motivation why this person is a key person:	**MRGG is the CEO and founder of Vertisà AB, a company based in Umeå and established three years ago. Vertisà specializes in designing and installing vertical gardens tailored to the Nordic climate. The company has developed and patented its own climate-adapted watering system, making it a pioneer in the field.** **MRGG began her journey in vertical cultivation in 2014 with the launch of her first startup, and since then, she has been continuously developing innovative solutions and products for vertical plant growing. Over the years, she has gained hands-on experience and completed courses in both vertical gardening and business management. Vertisà AB stands out as a unique player in the Nordic region, where few companies focus on outdoor vertical gardening—none of which are based in northern Sweden.**		
Organisation:	Vertisà AB 559322-7340		
Current job title:	CEO		
Participation rate, % of full time	25%		
E-mail/telephone:	mdelrgg@gmail.com; 0730962240		
RELEVANT COMPETENSES AND EXPERIENCES			
Time period:	**Entreprenör´s education** CORE (Coaching för kvinnor med goda idéer) (Uminova) 2013 Balkong odling (Folkuniversitet, Umeå) 2013 FRAMSTEG entreprenör för att utvecklas idé snabbare och säkrare (Uminova) 2014 Kvinnor som entreprenör (SLU holding) 2014 START UP (Uminova) 2015 START UP 2 (Uminova) 2016		
Other matters			

Prices: SKAPPA pris, winner, 2021; Venture Cup, Water challenge diploma, 2021

Venture Cup Norr, Finalist, 2021; IVA-100 list kung. IngenjörsVetenskap Akademien, 2021, 2022

Petter Axelsson			
Name:	Petter Axelsson		
Age:	52	**Female/Male:**	Male
Role in the project:	Leader of WP3 on pollinator biodiversity		
Motivation why this person is a key person:	**Petter Axelsson bring scientific knowledge on insect-plant interactions, conservation and habitat restoration, including urban greening**		
Organisation:	SLU		
Current job title:	Researcher		
Participation rate, % of full time	3.5%		
E-mail/telephone:	+079-3042878		

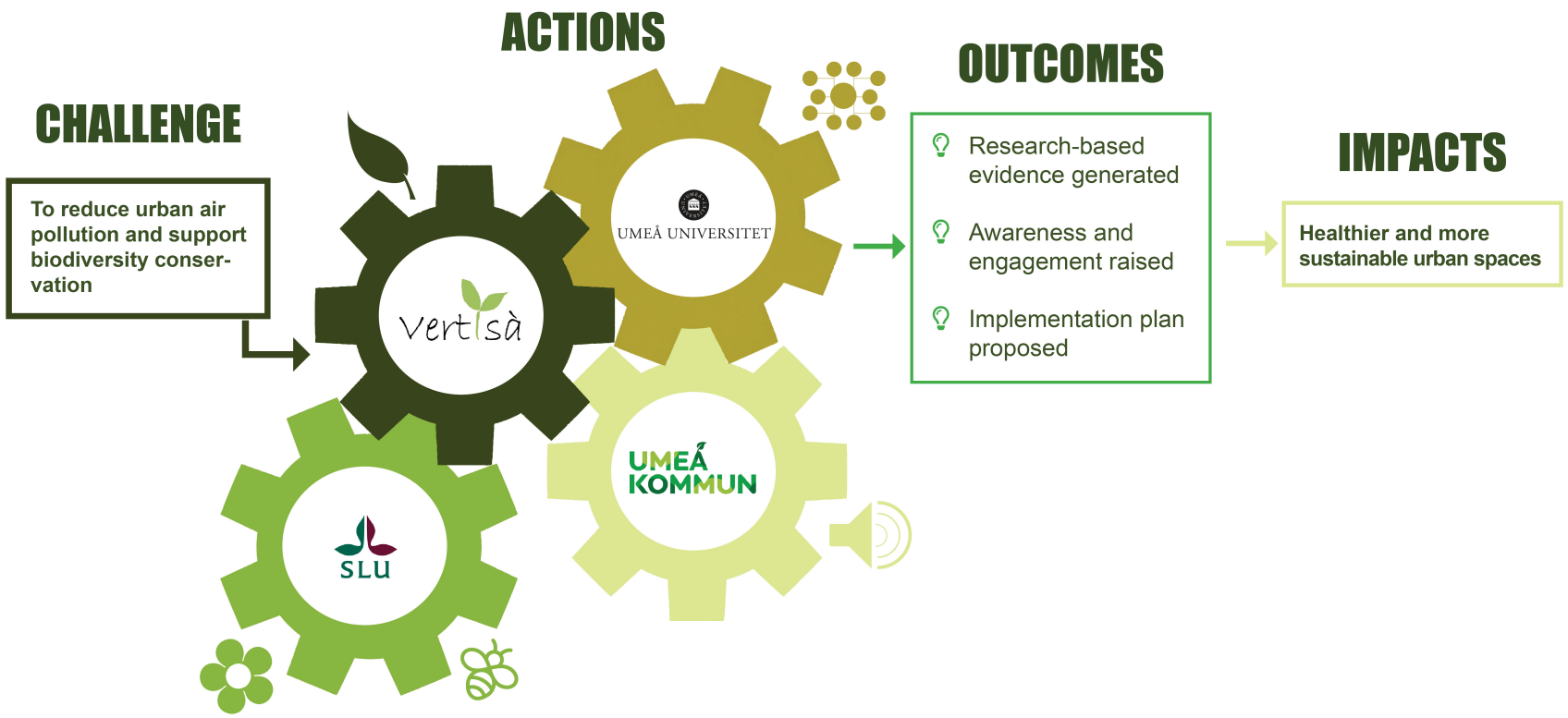
RELEVANT COMPETENSES AND EXPERIENCES	
2022-2024	Program Director of Studies (15%), conservation and management of Fish and Wildlife (MSc), Swedish University of Agricultural Sciences, 901 83 UMEÅ
2021-2024	Program Director of Studies (15%), Forest Science Program (BSc), Faculty of Forest Science, Swedish University of Agricultural Sciences, 901 83 UMEÅ
2020-	Associate professor, Department of Wildlife, Fish, and Environmental studies, Swedish University of Agricultural Sciences, 901 83 UMEÅ.
2020-	Restoration Research Director, Ecoculture.
2017-2020	Research professor, Department of Wildlife, Fish, and Environmental studies, Swedish University of Agricultural Sciences, 901 83 UMEÅ.
2016	Researcher, Department of Wildlife, Fish, and Environmental studies, Swedish University of Agricultural Sciences, 901 83 UMEÅ.
2013-2015	Postdoc, Department of Forest Ecology and Management, Swedish University of Agricultural Sciences, 901 83 UMEÅ.
EXAMINA	
2011	**PhD from Swedish University of Agricultural Sciences**

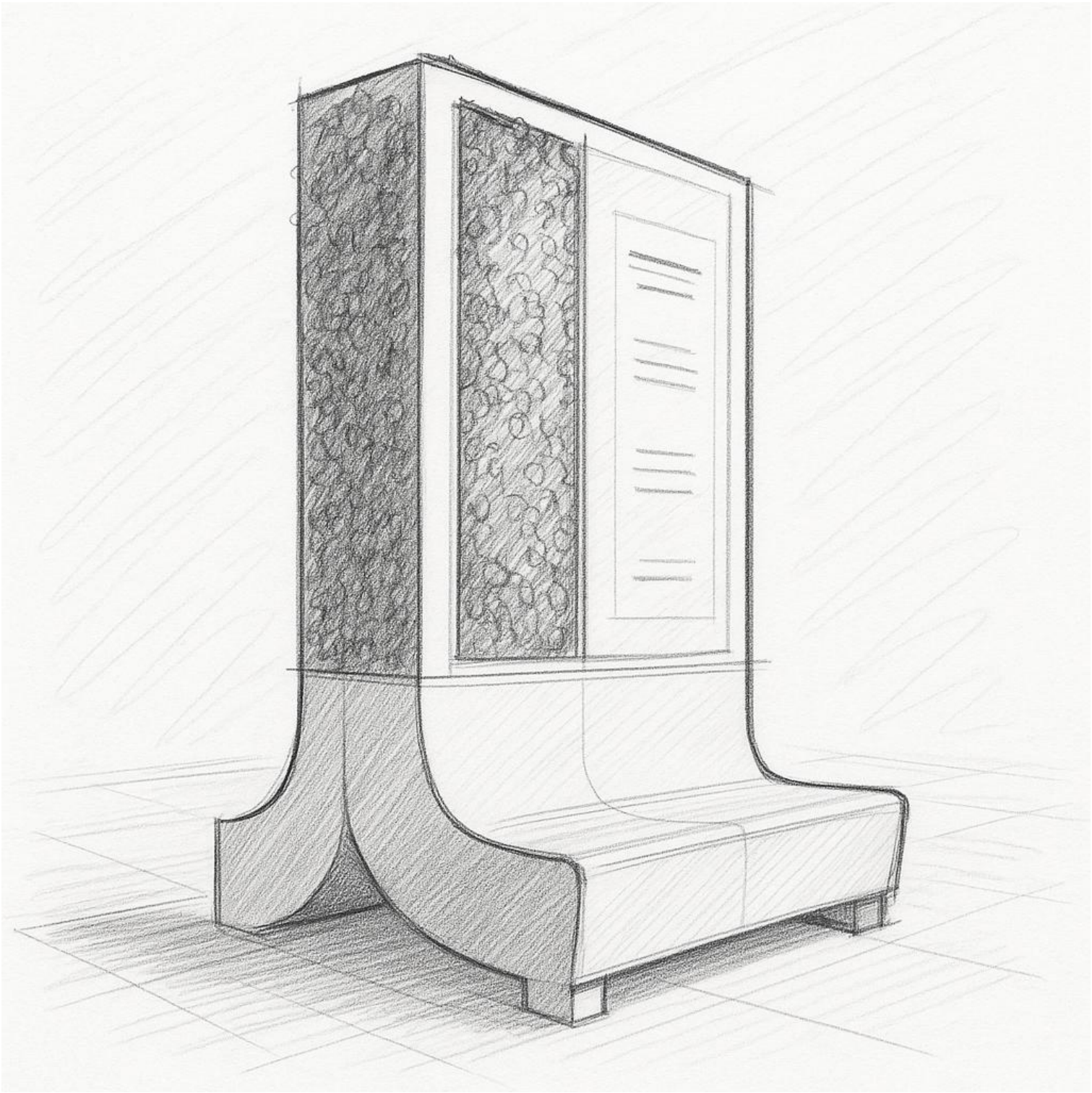
Other matters/ Relevant publications
Biometric information from Google scholar total peer-reviewed: 43, Citations:701, i10 index: 21

Valfri Bilaga

Illustrationer, figurer, tabeller (PDF, max 4 MB)

Se nästa sida för bilaga.


CHALLENGE
To reduce urban air pollution and support biodiversity conser-vation
ACTIONS
Vertisà
UMEÅ UNIVERSITET
SLU
UMEÅ KOMMUN
OUTCOMES
Research-based evidence generated
Awareness and engagement raised
Implementation plan proposed
IMPACTS
Healthier and more sustainable urban spaces



WP			2025												2026												2027										
			winter			spring			summer			autumn			winter			spring			summer			autumn												
			12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11										
1	A1.1	Design of the Vertical Garden Prototype																																		
	A1.2	Manufacturing of the Vertical Garden																																		
	A1.3	Installation and Cultivation																																		
	A1.4	Cultivation of Conventional Pots																																		
2	A2.1	Development of Sampling Protocols																																		
	A2.2	In Situ Monitoring of Pollutant Deposition																																		
	A2.3	Sensor Data Integration																																		
	A2.3	Comparative Effectiveness Analysis																																		
3	A3.1	Plant composition treatment design																																		
	A3.2	Camara installation																																		
	A3.3	Plant communicty monitoring																																		
	A3.4	Camera data analysis and reporting																																		
4	A4.1	Project Management																																		
	A4.2	Project Coordination and Administration																																		
	A4.3	Communication and Impact																																		

Registrera

Villkor

Ansökan ska förutom av den sökande även signeras av behörig företrädare för medelsförvaltaren. Företrädaren är vanligtvis prefekten vid den institution där forskningen ska bedrivas, men ska i vissa fall utgöras av exempelvis rektor. Detta framgår i sådana fall av den aktuella utlysningstexten för bidraget.

Signering av *den sökande* innebär en bekräftelse av att:

- uppgifterna i ansökan är korrekta och följer Formas instruktioner
- bisysslor och kommersiella bindningar har redovisats för medelsförvaltaren och att det där inte framkommit något som strider mot god forskningssed
- nödvändiga tillstånd och godkännanden ska finnas senast vid projektstart, exempelvis avseende etikprövning.

Signering av *medelsförvaltaren* innebär en bekräftelse av att:

- den beskrivna forskningen, anställningen och utrustningen kan beredas plats inom institutionen under den tid och i den omfattning som anges i ansökan
- institutionen godkänner kostnadsberäkningen i ansökan
- projektet bedrivs i enlighet med svensk lagstiftning.

Ovanstående punkter ska ha diskuterats mellan parterna innan företrädaren för medelsförvaltaren godkänner och signerar ansökan.

Ansökningar där en organisation är sökande signeras automatiskt vid registrering av ansökan.