



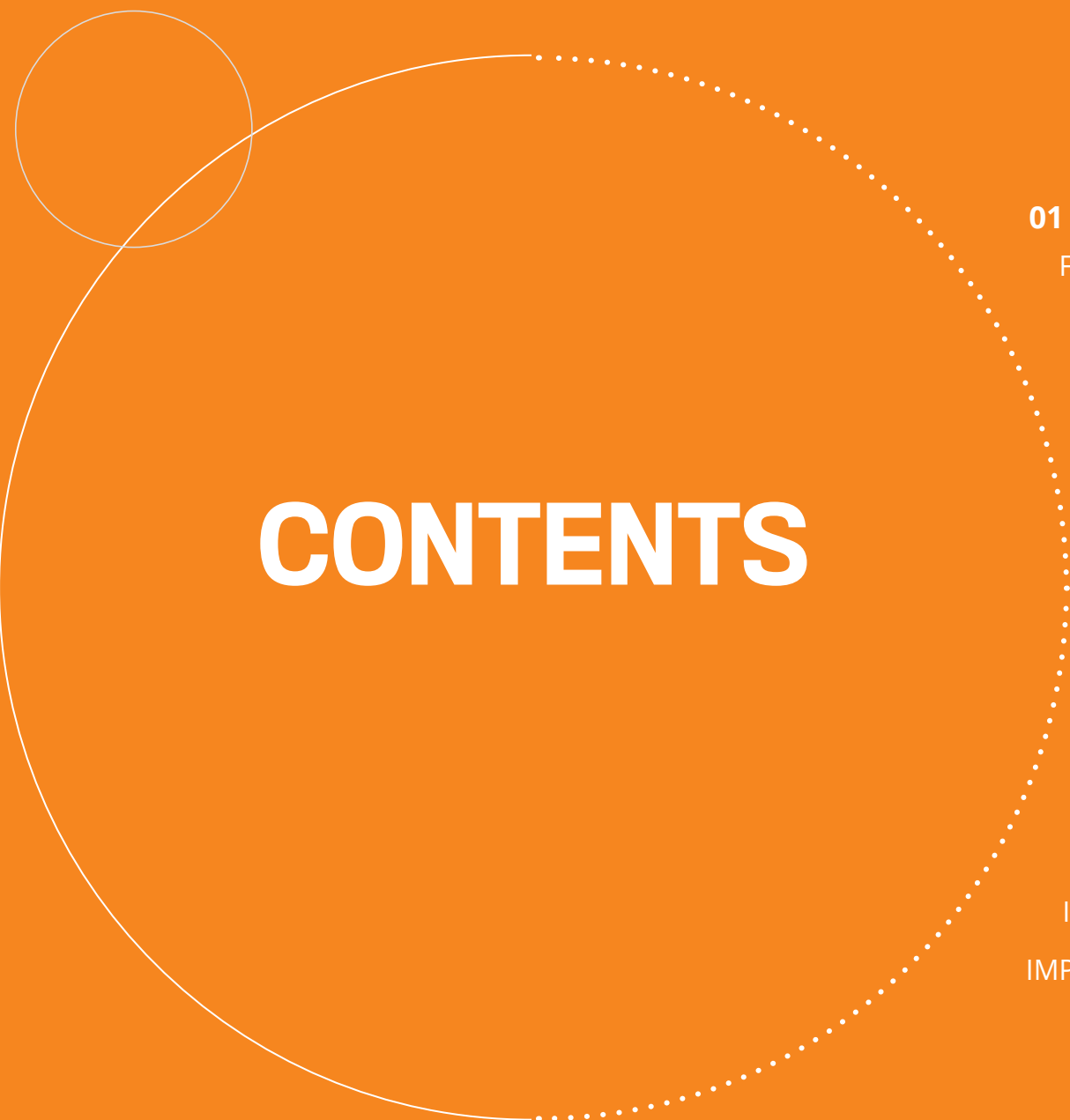
Impact Report

2024



2024

#goodthingsarecoming



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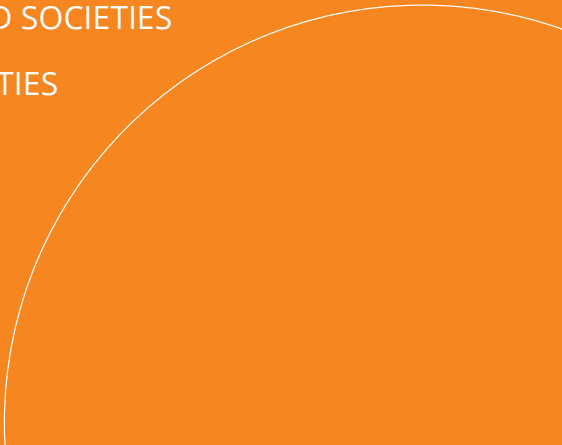
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FOREWORD

#goodthingsarecoming

At LUMO Labs, impact has never been an afterthought. It is our foundation.

In 2024, we took a bold step forward with the launch of the EUR 100 million LUMO Rise Fund. This marks the beginning of a new chapter defined by increased capital, an expanded Pan-European reach with a stronger presence in the Nordics, Baltics, and Iberian Peninsula, and a deeper commitment to driving systemic change through innovation.

2024 reflected a significant advancement in how we manage impact, with improved frameworks

and tools to ensure our investments strive towards delivering meaningful, lasting outcomes.

We continue to expand our capacity to support early-stage ventures that drive systemic change through software-led innovation. Technologies such as AI and data, Blockchain, Internet of Things (IoT), Digital security, and Extended reality (XR) remain central to how we live, learn, and build resilient communities.

Our impact strategy continues to be anchored in the United Nations Sustainable Development Goals (UN SDGs), now, with the LUMO Rise Fund, an expanded

focus on SDG 13 (Climate Action), alongside SDGs 3 (Good Health and Well-being), 4 (Quality Education), and 11 (Sustainable Cities and Communities). We believe that advancing regenerative solutions across health, education, and urban sustainability must go hand-in-hand with addressing the climate crisis.

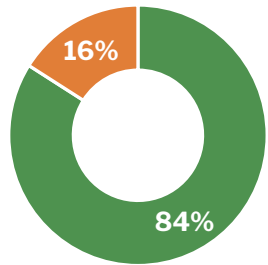
This is our fourth Impact Report, and it reflects not only the progress of our ventures but also our continued refinement of our impact approaches through the structured LUMO Impact Program.

We hope this report inspires, informs and challenges. Let's keep building companies that don't just minimize harm, but actively regenerate what matters most.

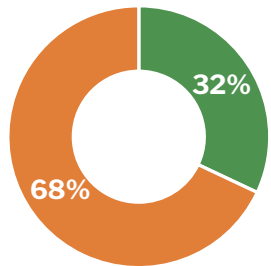
Team LUMO Labs



HIGHLIGHTS



■ Netherlands ■ International



■ Female Co-Founder ■ Male Co-Founder

25
portfolio
company
investment

100%
portfolio
companies
active

6

companies
onboarded to
impact program
in 2024

11

completed growth
targets and impact
measuring module

**Maturity
Stage**
pre-seed
and seed

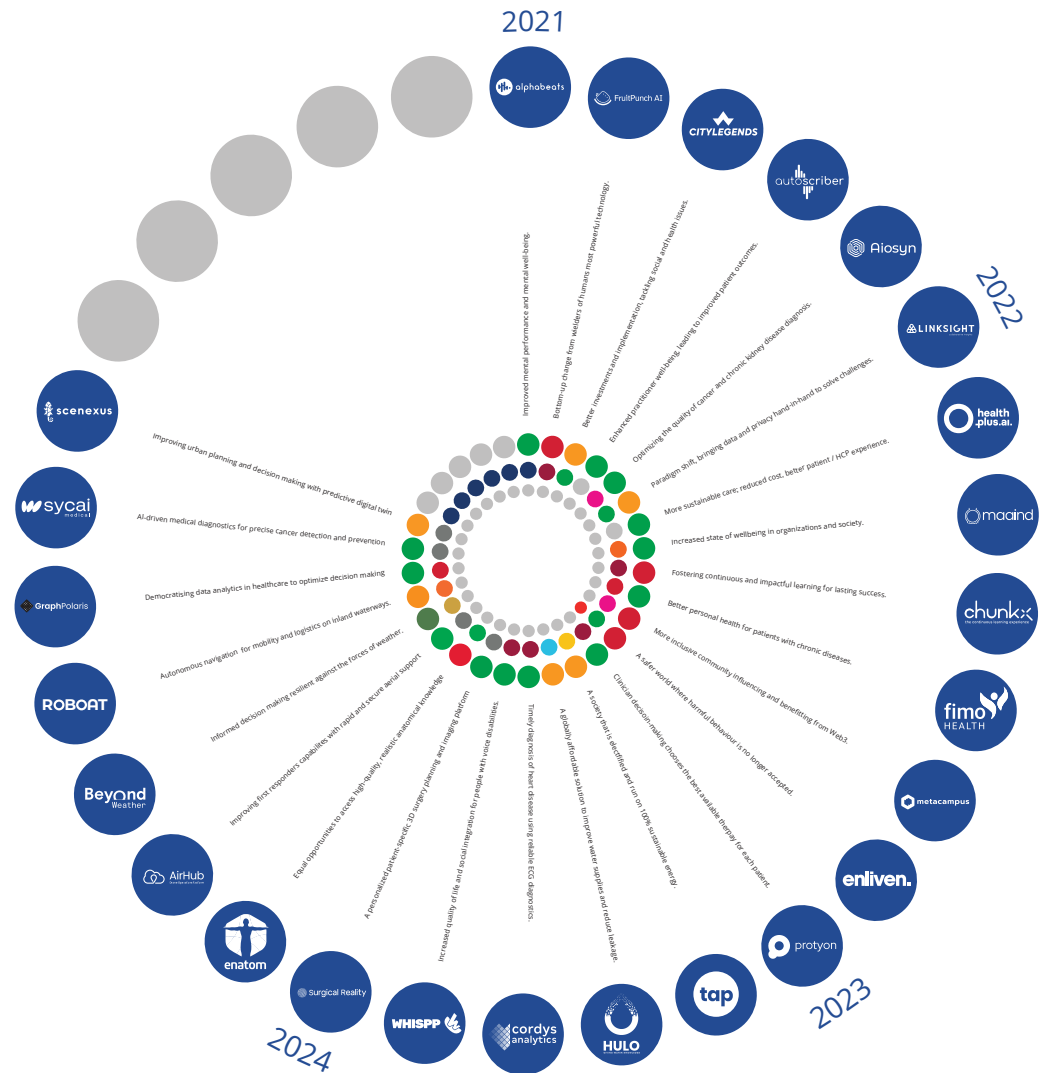
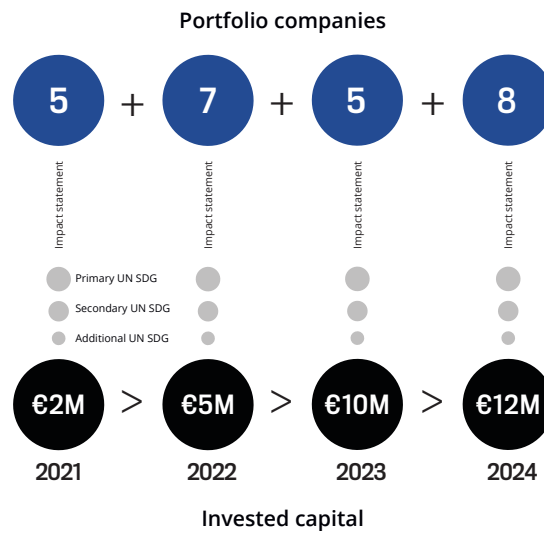
4
follow-on
funding

25-50
founders
age



4
UN SDGs
being
impacted

PORTFOLIO GROWTH



REFLECTING ON 2024: OUR IMPACT INVESTMENT JOURNEY

From LUMO Fund II to LUMO Rise Fund
2024 was a defining year for LUMO Labs

As we continue our journey in impact investing, we're pleased to introduce a clear distinction between LUMO Fund II and the newly launched LUMO Rise Fund in 2024.

While building on the foundation of Fund II, the LUMO Rise Fund reflects our next phase of growth and ambition.

Throughout this report, we will note when activities or outcomes relate to either fund to provide clarity and context.

With the launch of the EUR100 million LUMO Rise Fund, we significantly expanded our capacity to invest in visionary founders building regenerative solutions for society and the planet.

Meanwhile our portfolio companies reached new heights, securing strategic partnerships, earning regional and global recognition, and advancing their impact across health, education, sustainability, and beyond.

We welcomed a new wave of high-potential ventures into the portfolio, strengthening our mission to drive systemic change through software-led innovation.

LUMO Rise Fund leadership growth

In 2024, we strengthened our team with the addition of Linn-Cecilie Linneman and Jorge Blasco as Partners, reinforcing LUMO Labs' strategic presence across Europe

Linn-Cecilie Linneman, based in Norway, brings extensive experience in the Nordic impact and venture capital ecosystem, having led Katapult and worked closely with founders and funds across the region.

Jorge Blasco, based in Spain, is a seasoned investor with deep roots in the Iberian tech landscape and a sharp eye for scalable innovation with purpose.

Their appointments reflect our belief that local presence, cultural fluency, and strong networks are essential to sourcing the best impact-driven entrepreneurs. With Linn and Jorge on board, LUMO Labs is better connected regionally and more aligned than ever to build a regenerative, inclusive future through early-stage technology investment.

LUMO Rise Fund Impact Governance

Two globally respected experts, Kimberly Fuqua and Peter Brock, have joined our Scientific, Industry, and Impact Board of Advisors and Impact Committee, further strengthening LUMO Rise Fund's impact governance.

Kimberly and Peter bring combined expertise in impact investing, systemic transformation, and DEI, anchoring our commitment to building companies that generate scalable, purpose-driven impact by design while reinforcing our approach as an impact-driven fund.

Kimberly Fuqua is a seasoned executive at Microsoft with more than two decades of leadership in technology and customer success. A global advocate for diversity, equity, and inclusion, Kimberly combines her experience in transformational program delivery with a passion for advancing inclusive innovation. Her work as a motivational speaker, professional development coach, and change management expert continues to drive meaningful change across corporate and community spaces.

Peter Brock brings over 25 years of experience advising entrepreneurial families and family offices on asset strategy, succession planning, and impact-driven investing. As the founder of Beewyzer, an

impact investor, author (Impact Investing Magazin), and mentor, Peter is a trusted advisor to family enterprises across Europe, known for his integrity, independence, and focus on sustainability.

Together, Peter and Kimberly bring invaluable insight and leadership to our governance efforts.

New focus areas LUMO Rise Fund

In 2024, we strategically expanded LUMO Rise Fund's core investment themes to include Climate Action and Digital Security

Climate resilience has become inescapably central to the future of our cities, health systems, and social infrastructure, making it imperative that we support

innovations tackling the environmental challenges of our time.

At the same time, as software continues to underpin every facet of society, we see digital security not as a technical layer but as a fundamental enabler of trust, inclusion, and societal stability.

These additions build on our foundational focus areas of health, education, and sustainable cities, and reflect the growing complexity and interconnectedness of the world we invest in.

Several high-potential startups were added to our portfolio in 2024, each leveraging emerging technologies to tackle critical societal issues.

Airhub

Airhub provides drone software for first responders with real-time video streaming, automated flight planning, and AI-based object detection. Helping emergency teams operate more safely and effectively in urban environments.

Beyond Weather

Beyond Weather delivers advanced AI-driven weather forecasting for agriculture, energy, and logistics sectors. Analyzing complex climate patterns across multiple variables to provide insights into weather resilience and improve seasonal forecasting and planning.

Enatom

Enatom is reshaping medical education with their immersive, ultra-realistic 3D anatomy platform; accessible anytime, anywhere. Turning complex anatomy into an intuitive learning experience that puts medical training into everyone's hands.

Graph Polaris

Graph Polaris offers a no-code platform for visual graph analytics, enabling applications in fraud detection, recommender systems, and drug discovery. Providing intuitive visual tools to democratize access to complex data relationships and analytics for researchers and businesses.

Roboat

Roboat develops autonomy systems for waterway vessels, enabling autonomous transport of people and goods. Supporting sustainable urban logistics through smart navigation and vessel control with their plug-and-play solution.

Surgical Reality

Surgical Reality is developing real-time 3D surgical guidance tools for minimally invasive procedures using AR and AI-driven organ segmentation. Improving surgical outcomes by enhancing precision and reducing complications while expanding access to advanced care.

Scenexus

Scenexus enables urban policymakers and planners to test infrastructure changes through real-time mobility simulations. Delivering predictive insights on traffic, air quality, and public health impacts to improve urban planning outcomes.

Sycal Medical

Sycal Medical streamlines radiologist workflows with an AI driven platform that detects benign, pre-malignant, and malignant lesions in upper abdominal organs. Enabling early, accurate diagnosis at greater scale through automated reporting.



PORTFOLIO SUCCESSES LUMO FUND II

Our portfolio companies made significant strides in 2024. With a range of milestones reflecting the growing commercial and societal relevance of the founders we back and the kind of ventures we are proud to support.

Autoscriber announced a strategic collaboration with Microsoft to scale its clinical AI platform across the EMEA region.

Whispp was named one of TIME Magazine's Best Inventions of 2024 for its voice accessibility technology.

HULO.ai took home the top prize at the VDS Startup Competition, recognized for its water management solutions.

Impact ecosystem engagement

As we expanded into new regions in 2024, we deepened our presence in Europe's impact-tech ecosystem by establishing a permanent base at Norrsken House in Barcelona, reinforcing our commitment as a pan-European Fund.

We actively participated in leading events like Slush and 4YFN, connecting with visionary founders, forging strategic partnerships, and strengthening our co-investor and collaborator network.

This approach reflects our belief that meaningful change requires both local engagement and global collaboration.

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IMPACT-DRIVEN

THE FUNDAMENTAL BELIEFS BEHIND OUR CHOICES

EMBRACING INNOVATION FOR IMPACT

At LUMO labs, being impact-driven isn't a tagline, it's the foundation of how we operate

Every investment decision we make, from sourcing and due diligence to post-investment support and eventual exit, is guided by a commitment to delivering measurable positive outcomes for people and the planet.

WHAT IMPACT-DRIVEN MEANS TO US ?

Our impact lens is embedded into the full investment life-cycle.

Being impact-driven means we actively embed impact into our investment life-cycle, from due diligence to governance, reporting, and active post-investment engagement.

We invest exclusively in ventures whose core activities contribute to environmental or social goals aligned with the United Nations Sustainable Development Goals (SDGs). Through our tailored Impact Program, we support founders in developing a clear Theory of Change, selecting relevant indicators, and staying aligned with measurable outcomes.

IMPACT DRIVEN WITH COMPETITIVE FINANCIAL RETURNS

We believe that scalable impact requires viable business models. That's why we back founders who care deeply about solving problems and have the ambition to build commercially thriving companies. Impact and financial performance are not competing outcomes - as we embed impact into each portfolio company's business model as a core value driver, not an add-on.

Being impact-driven means holding ourselves accountable. Our governance includes an independent Impact Committee and we publish annual impact reports with full transparency. As regulation, social expectations, and environmental urgency evolve, our approach remains dynamic, data-informed, and forward-looking.

THEORY OF CHANGE

Our 2024 Theory of Change builds on the foundation we've established while evolving as our portfolio grows and new challenges emerge. We remain rooted in our conviction that purpose-driven technology is a critical lever for systemic transformation.

Through early-stage investment and hands-on support via our LUMO Program, we catalyze scalable solutions that enhance quality of life, protect the planet, and build system resilience.

VISION A world where cities thrive sustainably, healthcare is inclusive and resilient, and education adapts to every need. Technology enhances quality of life, reduces environmental impact, and creates equitable opportunities for healthy, fulfilling lives.

CHALLENGES Rapid urbanization, climate change, and demographic shifts strain our cities, healthcare, and education systems. Urban growth intensifies social, environmental, and infrastructure pressures while climate threatens sustainability and resilience.

INPUT

- Dedicated time, expertise, and hands-on support from LUMO Partners and team across the investment lifecycle.
- Targeted capital investments in early-stage software startups working with emerging and disruptive technologies.
- Access to the proprietary LUMO Impact Program, strategic coaching, and a curated network of experts, partners, and co-investors.

OUTPUT

- Investments in startups at the intersection of technology and impact related to defined UN SDGs.
- Execution of proprietary LUMO Impact Program for the portfolio companies.
- Provision of strategic networking and partnership opportunities to portfolio companies.

OUTCOME

- Strengthened operational and strategic capacity of portfolio companies to deliver on their mission.
- Increased awareness and adoption of technologies aimed at improving the quality of life of individuals and quality of urban climate.
- Increased capacity for the startups to attract follow-on investments and scale their operations effectively.

IMPACT

- Tangible social and environmental improvements through real-world application of tech solutions in healthcare, education, urban environments and climate.
- Sustainable growth and scalability of startups that lead to broader adoption of their solutions
- Amplifying global impact through targeted SDGs forging a sustainable future for all.

IMPACT FOCUS

Our objective is to drive the digitalization of Europe, enhance the quality of life and well-being of individuals, and reduce the strain on public healthcare, social welfare systems, and the planet.

At LUMO Labs, our impact purpose and focus is rooted in a core belief: early-stage software technologies are uniquely positioned to drive scalable, systemic change.

We invest at the (pre-)seed stage, when impact can be embedded most deeply into the DNA of a venture, and continue to support companies as they grow.

We invest in ventures whose core proposition directly contributes to one of the following UN Sustainable Development Goals (SDGs):

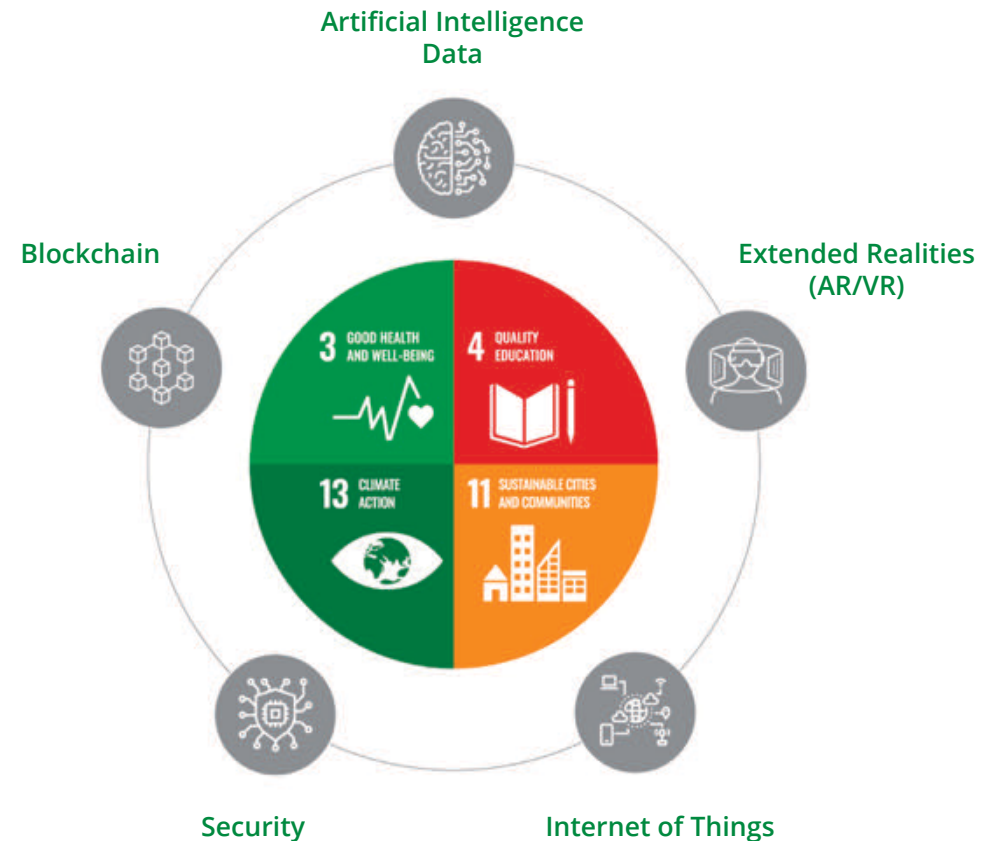
- SDG 3 : Good Health and Well-being
- SDG 4 : Quality Education
- SDG 11: Sustainable Cities and Communities
- SDG 13 : Climate Action (*added in 2024*)

We focus on software-based solutions leveraging Artificial Intelligence (AI/ML) and Data, Blockchain and Digital Security, and Internet of Things (IoT) and Extended Realities (AR/VR).

We invest early because the (pre-)seed stage also offers critical opportunities to embed impact into the business model and governance structure of a startup from day one. At this stage, capital is both catalytic and often scarce.

We aim to close the gap between idea and institutional funding, ensuring high-potential, impact-driven ventures are not lost due to market

inefficiencies or short-term pressures.



With our LUMO Impact Program, every portfolio company receives structured support, from developing their Impact Theory of Change and tracking Key Value Indicators (KVI) to coaching for ongoing Impact Management

Beyond capital, we offer the LUMO Impact Program, including impact coaching, strategy, and management modules.

Our portfolio is designed as a systemic ecosystem: curated companies with shared values and technological foundations that reinforce each other's potential, collectively contributing to healthier, more resilient, and equitable societies.

Scaling our international reach:
A Pan-European focus

Strategically headquartered in **Eindhoven** at the heart of Europe's deep-tech corridor, we have further scaled our international presence with the launch of the LUMO Rise Fund: Expanding into the Nordic, Baltic, and Iberian regions with operating hubs in **Amsterdam, Barcelona, Oslo, and Los Angeles**.

This expanded reach enables us to better identify, support, and scale ventures building a more resilient, inclusive, and regenerative future across Europe and beyond.

IMPACT APPROACH

Turning intent into action:
Operationalizing Impact in 2024

In 2024, LUMO Labs reached a pivotal milestone, balancing support for our growing early-stage portfolio under the existing impact fund while preparing for the launch of the LUMO Rise Fund.

Our investment has impact embedded across:

- **SDG-aligned sourcing** (Health, Education, Sustainable Cities and Climate Action (LUMO Rise Fund))
- **Structured on-boarding to the LUMO Impact Program**
- **Regular Impact Days** focused on progress, learning, and alignment.

Our impact investing process is summarized in more detail on the following page.

PRE-INVESTMENT

Filter for fit and purpose

Positive Screening:

Aligned with SDGs 3, 4, 11; and from 2024, SDG 13

Negative Screening:

International Finance Corporation (IFC) Exclusion List - list of sectors that are considered harmful to people, and the environment, or are inconsistent with development goals.

ONBOARDING

After our initial investment follow tailored onboarding workshops to the LUMO Impact Program with specialized template and tools.

Aligning with primary SDG targets and define or refine Impact Compass and Theory of Change

Alignment of key value indicators (KVI), Impact Measurement and Growth Targets.

LUMO IMPACT PROGRAM

During the LUMO program, the impact team remains actively engaged with each company—as they refine their Theory of Change, set performance metrics, and monitor progress against stated impact targets.

Our approach is proactive, ensuring that each company receives relevant, actionable guidance based on its stage, sector, and specific goals.

FOLLOW-ON INVESTMENT STAGE

For the follow-on investment stage, companies update their quarterly KVI reporting and annual Impact Target updates for investors and review and refine their Impact pitch according to their impact business model growth.





Looking ahead with the LUMO Rise Fund

The launch of the LUMO Rise Fund in July 2024 marks a new chapter in our impact journey, as we build further on our proven foundation.

While our core impact pillars remain unchanged, this phase introduces enhanced governance, deeper regulatory alignment including our goal to transition to SFDR Article 9, and more sophisticated impact measurement through refined frameworks.

These advancements reflect our growing ambition and unwavering commitment to founders who embed impact in their DNA, driving meaningful societal and environmental change.

IMPACT GOVERNANCE

OUR GOVERNANCE PHILOSOPHY

Our governance framework ensures integrity, transparency, and accountability in the deployment and monitoring of capital toward environmental and social outcomes.

Governance at LUMO is a dynamic system that evolves alongside our impact ambition and regulatory context.

Regulatory Alignment and Compliance

We are committed to aligning with globally recognized standards and operating within a robust regulatory framework, including:

- Supervision by the Dutch Authority for the Financial Markets (AFM)
- EU Sustainable Finance Disclosure Regulation (SFDR) – applying a best-efforts approach
- UN Principles for Responsible Investment (PRI)
- Impact Management Platform (IMP)
- UN Sustainable Development Goals (SDG) Global Indicator Framework

GOVERNANCE STRUCTURE

Our multi-tiered governance architecture ensures decision-making, oversight, and accountability:

Investment Committee Fund II & LUMO Rise Fund

Comprised of Founding Partners and Senior Partners, the IC is responsible for final investment decisions based on alignment with SDGs, particularly Goals 3, 4, 11, and 13.

Scientific, Industry & Impact Advisory Board

An independent panel of domain experts spanning science, technology, ethics, and impact. The Board advises on strategy, reviews methodologies, and advice on fund-level impact performance.

Impact Committee LUMO Rise Fund

Ensures consistent integration of impact across the fund. Composed of LUMO team members and two SIIBA representatives, it oversees strategy alignment with impact, ESG standards, and global frameworks.

Impact Leadership Team

Runs the LUMO Impact Program, with the oversight of the Founding Partner, and embeds impact across fund and portfolio levels—from onboarding and KVI setting to continuous measurement and fund-level governance.

IMPACT LEADERSHIP TEAM



Lorna Goulden
Impact Venture Advisor



Meron Mekonnen
Associate



Britta Gruenig
Impact Officer and Coach



**Dagmar van
Ravenswaay Claasen**
Senior Partner



Andy Lüring
Founding Partner

IMPACT OFFICER AND COACH

We are proud to have Britta Gruenig on our team, one of Europe's leading experts in impact investing. Britta coaches our startup founders, and ensures we maximize the real-world outcomes of our work.

Britta was one of the first employees building up the Center for Sustainable Finance and Private Wealth at the University of Zurich, in collaboration with IRI at Harvard Kennedy School. Previously, as a senior team member at the Katapult Foundation, she founded and directed the Impact Investing Academy for private wealth owners in the Nordics.

IMPACT MANAGEMENT PROJECT

The IMP reached consensus that impact can be deconstructed into five dimensions: What, Who, How much, Contribution and Risk.



WHAT outcome(s) does the effect drive, and how important are they to the people (or planet) experiencing it?



WHO experiences the outcome and how underserved are they in relation to the outcome?



HOW MUCH of the outcome occurs? Does it happen at scale? Does the effect drive the outcome deeply? Does it last for a long time?



What is the **ENTERPRISE CONTRIBUTION** to what would likely happen anyway?



What is the **RISK** to people and planet if the impact does not occur as expected?

"What if the greatest companies of tomorrow were not only wildly profitable but solving the biggest problems that the world is facing?"

What if the most amazing startups of today were not only looking for a billion-dollar valuation but for positively transforming a billion lives or more?

We don't want to just support impact companies. We want to help them become impact-driven at their core because you can easily call yourself an impact company and drop a couple of slides, but what we are doing is to help you truly become such a company where impact is not just part of your brand, but it's at the core of the DNA of what makes your company stand out and succeed in the world.

There are a couple of different elements to this program. We help you build your business model for impact. We help you to define your real and measurable impact on the world.

It's all about becoming credible and walking your talk all the way. This is not an exercise that you just do once. It's a journey, and we're here to help you and support you along the way.

And at the end of this journey, you won't just talk about impact, but you will breathe it, you will build it, and you will prove it to the impact investors, to your customers, and it will also mobilize and galvanize your employees."

- Britta Gruenig



Britta Gruenig
Impact Officer and Coach

EMBEDDED POLICIES AND PRACTICES

Our governance follows codified policies that guide investment and operational conduct:

- **Responsible Investment Policy** Defines our intentionality, mission alignment, and approach to impact due diligence and engagement.
- **Sustainability Risk Policy** – Outlines our management of risks across the lifecycle.
- **Remuneration Policy** Includes an Impact Carried Interest mechanism
- **Diversity, Equity & Inclusion Policy** Promotes inclusive decision-making and addresses bias in investment practices.

Regular internal governance reviews are conducted annually to ensure alignment with evolving regulations and stakeholder feedback.



SFDR

IMPACT TRANSPARENCY

We apply a best-efforts approach to align with SFDR requirements, embedding transparency and accountability into our impact governance to ensure credible, non-(impact) washing reporting.

Credible impact investing requires transparency and strong governance. We align with the EU Sustainable Finance Disclosure Regulation (SFDR) and operate as an Article 8+ fund, targeting sustainable investment

objectives through SDGs 3, 4, and 11.

We are advancing the LUMO Rise Fund toward formal Article 9 classification. This transition reflects our deepening commitment to sustainable investment and strengthens accountability to our stakeholders.

Our approach is built on continuous improvement: we evolve our frameworks, refine our disclosures, and maintain integrity in our investments. This ensures we deliver genuine impact for investors, founders, and society without impact washing.

LUMO Labs SFDR Disclosure can be found here <https://lumolabs.io/sfdr>

DE&I

DIVERSITY EQUITY AND INCLUSION

Diversity, Equity and Inclusion (DEI) are paramount, both within our team, our venture advisors, LP's, advisory board and across our portfolio

We foster a culture that embraces diversity and encourages critical thinking.

companies. We believe that diverse perspectives, backgrounds, and lived experiences are essential

to building successful, resilient ventures that create meaningful social, environmental, and economic value. This commitment extends across all layers of our ecosystem, our internal team, and the companies we support.

By challenging assumptions and avoiding bias, we, drive better decision-making and create inclusive environments where talent thrives.

OUR LIVING IMPACT ECOSYSTEM

At LUMO Labs, we continue to nurture a dynamic ecosystem where our ventures, and we as impact investors, are empowered to grow. We embed our work within global frameworks and shared values to maximize our collective impact.

Ongoing Commitments We continue to deepen our involvement with global initiatives that align with our investment philosophy through key partnerships:



Signatory of:



UN Principles for Responsible Investment (UN PRI) Signatory: Continued commitment to the UNPRI, integrating transparency, ESG standards, and long-term sustainability into our decision-making frameworks.

European Green Digital Coalition: Supporting Partner: Sustaining our involvement in climate-aligned digital innovation, we continue to support EU-led efforts to accelerate the green transition through technology and collaboration.

IMPACT VC Member: Proud member of a global alliance of impact-first investors working collectively to shape a more responsible, inclusive venture capital landscape.



RESULTS

2024

Our portfolio impact extends beyond financial returns, embracing our investment thesis that focuses on fostering **Healthy Lives, Educated Societies**, and **Resilient Cities** through innovative, scalable, and sustainable solutions that address the pressing challenges of urbanization, climate change, and technological advancements.

We have defined our Impact Indicators by taking inspiration from the Global Indicator Framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, considering the potential impactful companies we can invest in, current trends and developments, and our Fund's thesis presented as follows;



HEALTHY LIVES

The primary focus of **SDG 3: Good Health and Well-Being** is to benefit individuals, where the goal is to have a direct impact on their Physical and Mental Wellbeing.

A key secondary beneficiary is the Healthcare Infrastructure in both enabling as well as more efficiently streamlining the reduction and prevention of burden caused by disease, illness, injury and stress.

HEALTHY LIVES

DIGITAL INNOVATION TRANSFORMING CARE DELIVERY AND OUTCOMES



As global health systems face mounting pressures – rising disease burden, access gaps, escalating costs, and demand exceeding capacity – the need for transformative, scalable innovation has never been more critical.

Over the past year, our health-focused portfolio companies have continued to demonstrate how impact-driven

ventures can meet these challenges – pioneering a fundamental shift from reactive, generalized treatment to proactive, precision-driven care ecosystems. Through deep tech innovation, these companies simultaneously address systemic challenges while expanding access, improving outcomes, and building resilient health systems.

SDG 3: Good Health and Well-Being

is addressed by several of our portfolio companies through targeted interventions across the entire care continuum – from early detection through treatment optimization to ongoing management.

Their solutions address a critical market reality: health equity now depends not just on access, but on the speed, precision, and personalization of care delivery.

Healthcare efficiency gains are being pursued through intelligent automation solutions, with

Autoscriber developing clinical documentation workflows designed to *reduce physician administrative time by up to 40%* – freeing up critical time that can be redirected to direct patient care. This represents a fundamental shift toward maximizing physician-patient interaction.

Linksight is building secure, privacy-preserving data collaboration platforms that enable evidence-based decision-making between healthcare organizations without compromising confidentiality.

At the diagnostic frontier, companies like **Aiosyn** and **Sycal Medical** are developing computer vision and machine learning platforms that promise to democratize pathology and radiology expertise.

These technologies aim to *reduce diagnostic delays from weeks to hours* while improving accuracy rates and enabling early detection of cancer and pre-cancerous conditions – potentially addressing the global shortage of specialized radiologists and pathologists that affects billions worldwide.

Cordys Analytics is building continuous cardiac monitoring algorithms designed to *identify heart disease risk before symptoms appear*, representing a fundamental evolution toward preventive rather than reactive care.

Protyon is tackling one of oncology's most critical challenges – treatment selection – through molecular visualization with a drug response prediction

platform that guides clinicians toward personalized cancer therapies, potentially reducing the trial-and-error approach that characterizes much of current oncology practice.

Surgical and clinical decision-making stands to be further enhanced through innovations such as 3D planning environments from **MedicalVR**, designed to reduce operative complications, and clinical decision support systems from **HealthPlus AI**, aimed at improving treatment protocol adherence.

For chronic disease management – affecting over 6 in 10 adults globally – **Fimo Health** is creating intelligent health companions that leverage behavioral analytics and predictive modeling to

provide personalized guidance. Their platform is designed to reduce hospital readmissions while improving patient engagement and self-efficacy.

Whispp is developing real-time speech processing algorithms that aims to restore seamless communication for individuals with voice impairments, directly targeting quality of life improvements across social and psychological dimensions.

In the field of mental health and cognitive performance, **Maaind** and **Alphabeats** are pioneering neuroadaptive interfaces and biofeedback systems intended to enhance cognitive performance and emotional regulation. These platforms represent a shift toward proactive mental

These ventures tackle fundamental challenges of precision, equity, and scalability – ensuring that technology serves both healthcare infrastructure and human dignity.

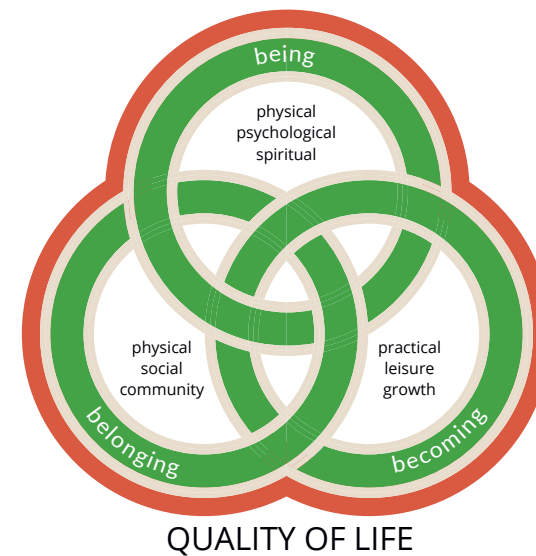
They address mental health stigma, reduce diagnostic delays, enhance surgical planning, and empower patients and professionals with intuitive, evidence-based, and transformative tools.

fitness rather than reactive mental health treatment – a paradigm that could transform how we approach psychological wellbeing.

Impact success will be measured in meaningful clinical outcomes: Improved diagnostic accuracy, reduced surgical complications, decreased hospital readmissions, enhanced treatment response rates, better mental health outcomes, and ultimately – measurable improvements in quality of life across physical, psychological, and social dimensions.

These health-focused innovations demonstrate how impact-driven ventures can simultaneously address market needs, improve clinical outcomes, and strengthen systemic resilience. They directly

benefit individuals through improved physical and mental wellbeing while strengthening healthcare infrastructure by enabling more efficient prevention and reduction of disease burden.



Quality of Life Model source [University of Toronto's Quality of Life Research Unit](#)



VISION

A world where AI-driven healthcare ensures timely, accessible, and high-quality diagnostics for all, minimizing cancer related deaths and empowering a more sustainable and equitable healthcare system

CHALLENGE

Lack of effective and non-invasive cancer prevention methods in the current healthcare system.

IMPACT

Reduction in global mortality rate for cancer (improve population's health)

- Reduction in Health inequalities
- Early disease detection rate
- Reduction in diagnostic errors
- Time efficiency in diagnosis
- Improved patient outcomes

sycaimedical.com

MAJOR MILESTONES

Achieved CE Mark Class IIb for SYCAI MEDICAL's AI-powered software, validating safety, clinical performance, and enabling commercial deployment across Europe.

SOCIETAL IMPACT

SYCAI's early detection of pancreatic and liver cancer is empowering clinicians with advanced imaging and risk assessment to improve outcomes and reduce the burden of late-stage treatment.

LOOKING AHEAD INTO 2025

Focused on market expansion, driving adoption in radiology workflows, and securing CE Mark for broader applications in pancreatic and liver lesion detection.

CASE STUDY

HEALTHY LIVES



VISION

A world in which every clinical decision-making process chooses the best available therapy for each patient.

CHALLENGE

Targeted drug therapy is not personalized enough and uses incomplete information.

IMPACT

Improves health outcomes for cancer patients by optimising personalised therapy with more precise targeting.

Improves quality of life and also positively impacts healthcare costs.

protyon.tech

MAJOR MILESTONE

Developed modeling service now actively supporting lung cancer diagnosis in Dutch hospitals. Clinical trial data collection, with internal testing demonstrating 75% accuracy and ongoing performance improvements.

SOCIETAL IMPACT

Enhanced accuracy, speed, and robustness of Protylabe platform, advancing real-world impact by improving treatment decisions through better molecular modeling.

LOOKING AHEAD INTO 2025

Expanding hospital adoption and strategic partnerships to accelerate clinical integration and move closer to becoming a core part of the healthcare system.



CASE STUDY

HEALTHY LIVES

“Cancer is complex, but our mission is simple: to transform molecular insights into actionable care, bringing precision, clarity, and hope to patients.”



EDUCATED SOCIETIES

The primary beneficiaries of the focus on **SDG 4: Quality Education** are people both as individuals as well as a combined human resource required for successful and sustainable urban development.

Where the goal is to have a direct impact on access on lifelong, relevant and targeted education that indirectly impacts lifestyle and urbanization challenges and opportunities

EDUCATED SOCIETIES

DIGITAL INNOVATION DEMOCRATISING LIFELONG LEARNING AND OPPORTUNITY



As society faces accelerating change – from digital transformation to workforce disruption – traditional education systems struggle to keep pace. Talent shortages, outdated curricula, and unequal access risk leaving entire populations behind, particularly in tech-driven economies.

This growing skills gap threatens not only individual livelihoods but the

resilience and inclusivity of society itself.

Our education-focused ventures demonstrate how impact-driven innovation can close this gap by developing tools, platforms, and experiences that empower individuals with the confidence, skills, and relevance needed to thrive in the future of work and civic life.

SDG 4: Quality Education is addressed by several of our portfolio companies through digital innovation, inclusive learning design, and lifelong re-skilling platforms. They point toward a future where education becomes personalized, accessible, and aligned with the skills and values needed in a just, data-driven society.

These ventures represent a fundamental shift away from static, one-size-fits-all education models toward dynamic, personalised learning ecosystems

– designed not just to inform, but to truly empower.

Across diverse sectors and learning contexts, our companies are building solutions to help individuals develop the skills, perspectives, and confidence needed to participate fully in tomorrow's economy and society.

Enliven is addressing education's often-overlooked social dimension: empathy and emotional intelligence. Their immersive VR training environments are being developed to help organizations foster cultures of inclusion and psychological safety; equipping employees not only with technical competencies but with the emotional intelligence essential for diverse, equitable workplaces where innovation can flourish.

Chunkx is developing AI-driven micro-learning platforms that enable professionals to build future-critical skills within time and attention constraints. Their personalized learning paths adapt to individual needs, potentially creating a more resilient workforce ready for continuous change.

In healthcare education, **Enatom** is developing immersive anatomical training solutions to provide high-quality medical education where cadaver labs are unavailable. From Europe to Africa, their platform aims to democratise medical expertise without sacrificing educational quality or clinical realism.

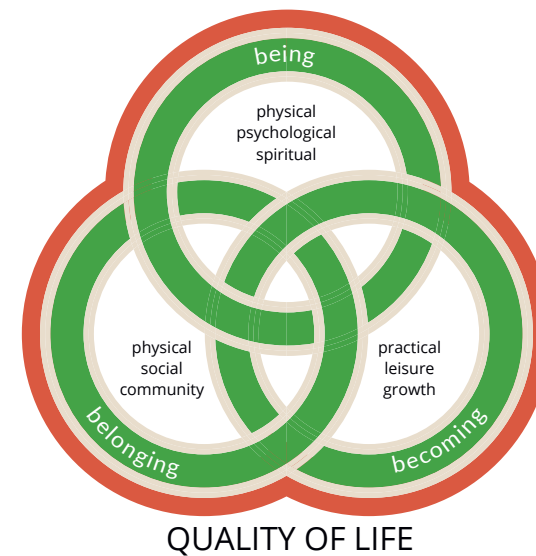
These platforms are designed to expand access to education while fundamentally redefining what meaningful, impactful learning could look like in practice.

These ventures represent a fundamental shift away from static, one-size-fits-all education models toward dynamic, personalized learning ecosystems—designed not just to inform, but to truly empower. Across diverse sectors and learning contexts, our companies are building solutions to help individuals develop the skills, perspectives, and confidence needed to participate fully in tomorrow's economy and society.

Impact success will be measured in meaningful educational outcomes: Improved learning retention, increased skill acquisition rates, enhanced employment readiness, reduced educational inequality, better learning engagement, and ultimately-measurable improvements in quality of life across being, becoming, and belonging.

From professional up-skilling platforms to empathy development tools, from democratized medical training to inclusive digital economy preparation, each company builds toward a more just, inclusive, and future-ready society where learning becomes a continuous, empowering force.

Their collective vision positions education as a catalyst for equity, human dignity, and sustainable progress-creating pathways for individuals to reach their full potential while contributing to their communities.



Quality of Life Model source [University of Toronto's Quality of Life Research Unit](#)



enliven.

VISION

A safer world where harmful behavior is better understood, more often talked about and no longer accepted, with the silent majority empowered to take action to prevent.

CHALLENGE

A lack of empathy is a key part of many of today's social problems: racism, bullying, child abuse (domestic) violence, and inequality, to name but a few. To truly understand, without having experienced the same situation is a challenge.

IMPACT

A safer world for all where harmful behavior is no longer accepted.

www.enlivenempathy.com

MAJOR MILESTONE

Enliven was embedded in ASML's leadership program, training 4,500+ leaders over 3 years via Aberkyn (McKinsey) - the first license-only deployment validating scalable corporate integration.

SOCIETAL IMPACT

Enliven's VR training rated 90% effective in bias awareness; 84% call it their most impactful session, with 76% more likely to intervene in real situations.

LOOKING AHEAD INTO 2025

Expanding with ASML into new programs on psychological safety, neurodivergence, and wellbeing.

Launched first full license-based rollout with Shimano Europe, training 20 internal champions to deliver sessions to 800+ employees across 7 countries.

CASE STUDY

EDUCATED SOCIETIES

"We're proving empathy is a skill—teachable, scalable, and core to effective leadership."



VISION

A world in which professionals are empowered to curate their learning experiences. Continuously developing the skills required in a constantly changing world without the pressure to learn everything at once.

CHALLENGE

With talent shortage it is crucial to equip people with new skills. Yet time and attention are constrained. This creates mounting pressure for professionals to navigate learning resources and to adequately retain newly acquired knowledge.

IMPACT

A continuous and impactful learning culture increasing the long-term success of learning measures.

chunkx.io

MAJOR MILESTONE

Evolved from concept to product with an AI-powered learning solution, enabling systemic change in workforce development amid rising skill obsolescence.

SOCIETAL IMPACT

Reached 50,000 active learners with 60% achieving development goals. Delivered truly adaptive, personalized learning at scale with partners like Deutsche Bahn and ERGO.

LOOKING AHEAD INTO 2025

Aiming to expand across Europe, strengthening workforce adaptability through continuous, personalized learning to drive long-term economic resilience.

CASE STUDY

EDUCATED SOCIETIES



RESILIENT CITIES

The primary beneficiaries of a focus on **SDG11: Sustainable Cities and Communities** are citizens and their communities living in an urban environment.

Where the goal is to have an impact on various aspects of Urban Infrastructure and key Urban Resources that directly influence the wellbeing, safety and resilience of the city.

RESILIENT CITIES

DIGITAL INNOVATION ENABLING RESILIENT, INCLUSIVE URBAN SYSTEMS



As urbanization accelerates and climate risks intensify, cities face unprecedented pressure to remain livable, inclusive, and future-ready.

From water stress and extreme weather to mobility bottlenecks and youth disengagement, today's urban challenges are complex, interdependent problems that demand systems-level innovation.

Over the past year, our urban impact ventures have continued to demonstrate how technology can work at the intersection of infrastructure, intelligence, and inclusion; developing solutions for more resilient, data-informed, and people-centered communities.

Our companies are building technologies to help cities make

smarter, faster decisions under increasing complexity.

Contributing to **SDG 11: Sustainable Cities and Communities** by improving critical urban systems through digital innovation, adaptive infrastructure, and inclusive design that points toward a future where cities are not only more efficient, but fundamentally more human.

Scenexus is developing a predictive digital twin platform that enables city leaders to simulate and optimise across transport, energy, and climate domains-potentially transforming how urban planning responds to interconnected challenges.

Others are working to strengthen the core infrastructures of urban sustainability.

Hulo.ai is developing an AI-driven water management platform designed to help utilities reduce the 30% of clean water lost globally while delivering more reliable, equitable access to communities. Their data analytics approach aims to turn water infrastructure into a more responsive, resilient system.

Tap Electric is building smart charging solutions that align EV adoption with grid capacity constraints, creating intelligent charging experiences that could accelerate electrification while supporting infrastructure stability.

In mobility and emergency response, **Roboat**

is pioneering autonomous watercraft systems designed to activate underused urban waterways for both transportation and logistics; potentially easing pressure on congested road networks while opening new possibilities for how cities move people and goods.

AirHub is developing integrated drone platforms intended to expand emergency response capabilities, making cities safer and more responsive during crisis scenarios through coordinated aerial systems.

At the heart of urban social fabric, **CityLegends** is building community-driven platforms that reconnect cities with younger generations through urban sports and culture. By creating spaces for

youth to move, create, and belong, their approach aims to support healthier, more vibrant city life while channeling civic engagement where it often begins—at street level.

These ventures reflect a shared understanding that resilient cities are built not by infrastructure alone, but through the thoughtful integration of people, data, and place. Their collective vision points toward urban environments that don't just adapt to mounting pressures, but evolve into spaces that are safer, more equitable, and deeply livable for all residents—creating the foundation for sustainable urban growth that enhances rather than diminishes quality of life.



VISION

All cities are optimally equipped to accommodate a sustainable, healthy, and a resilient living environment for all.

CHALLENGE

Urbanisation continues globally and causes sustainability and liveability challenges. There is an inability to handle the complexity of spatial planning; Interdependency between policy domains; Organisation in silos; Long process times; Inefficiencies in policy making

IMPACT

Better city investments. Faster implementation with the right people. Effectively addressing social and health problems.

www.scenexus.io

MAJOR MILESTONES

The team developed a platform that enables smart infrastructure planning, saving €5M+ annually and reducing environmental impact while keeping cities accessible.

SOCIETAL IMPACT

Built a Digital Twin of the metropolitan Eindhoven region (MRE) in the Netherlands to support sustainable growth through the Beethoven project.

LOOKING AHEAD INTO 2025

Expanding projects in Amsterdam and Lisbon, with growing global interest from Finland, the UK, Spain, and the U.S., laying the groundwork for international lighthouse projects in urban planning.

CASE STUDY

RESILIENT CITIES



VISION

A world where water utilities are resilient with a sustainable water cycle for ecosystems and communities.

CHALLENGE

Climate is changing, and with that the water cycle. Ecosystems and communities are facing clean water scarcity. 30% of clean water is lost worldwide, yet water utilities are not resilient against such water losses; finding it hard to create actionable insights from data.

IMPACT

Increase of liveability and quality of life with healthier, more resilient, and more enjoyable urban environments for all residents.

hulo.ai

MAJOR MILESTONE

HULO's water leak localization tech is now active in water networks across the Netherlands, Southern Europe, and Latin America, detecting leaks in minutes instead of days.

SOCIETAL IMPACT

Enabling faster interventions directly reduces water loss, carbon emissions, and community disruptions. With a bottom-up impact calculator that transparently measures and reports utility savings.

LOOKING AHEAD INTO 2025

Focused on international scale-up and enhancing predictive capabilities, continuing our mission to make every liter count.

CASE STUDY

RESILIENT CITIES



Thank you for reading our 2024 LUMO Labs Impact Report

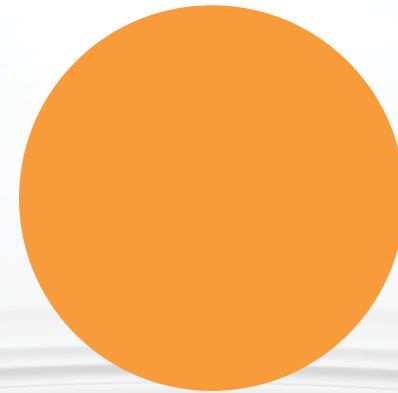
Want to contact us?

We welcome promising impact driven start-ups as well as investors to discuss investment opportunities—both fund investments as well as co-investment in a particular portfolio company. If you are interested to learn more, reach out to our investment team.

[Lumolabs.io/contact/](https://lumolabs.io/contact/)

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