FROM SCIENTIFIC EXCELLENCE TO INNOVATION ECOSYSTEMS

LASER-PRO as a Catalyst for European Competitiveness

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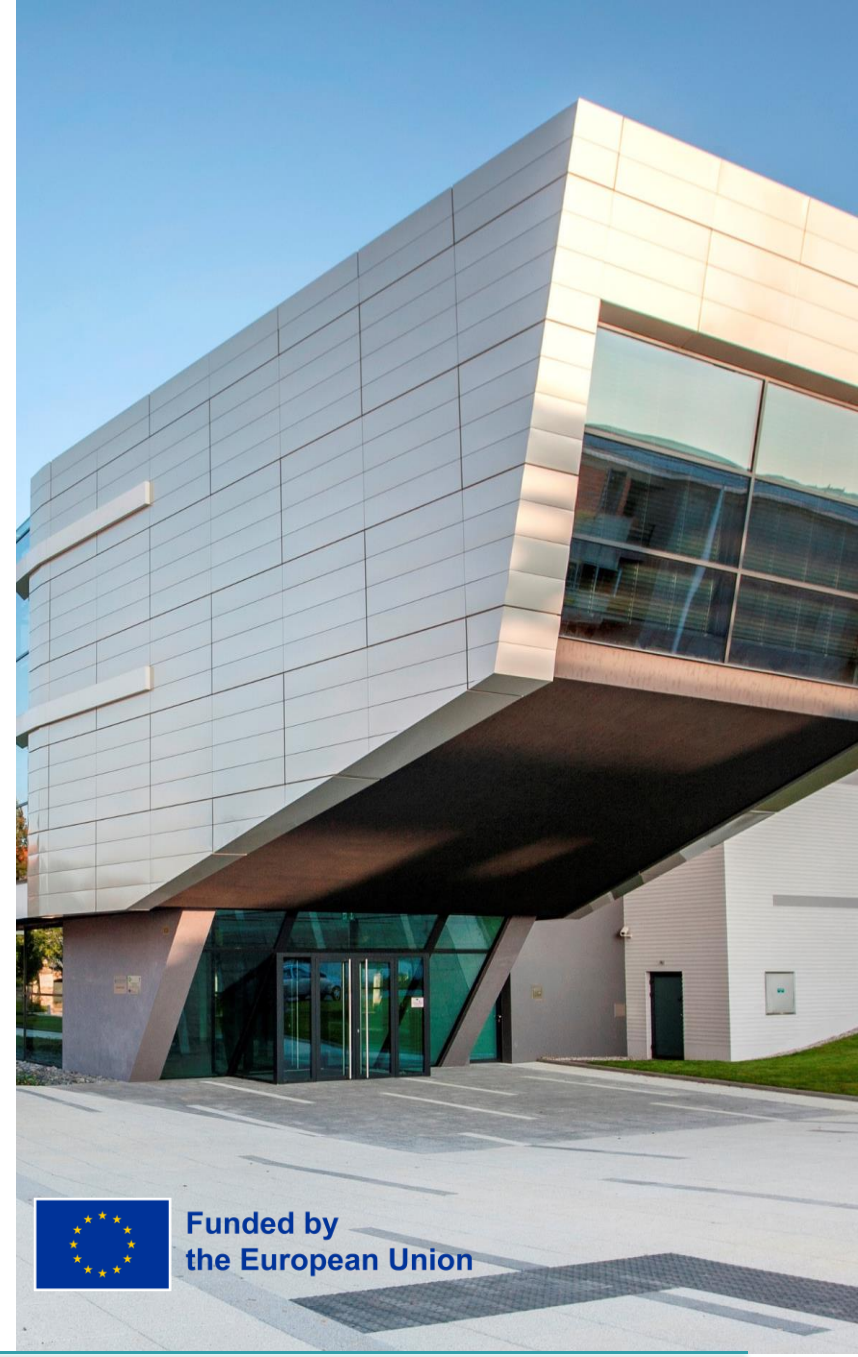


Europe has excellent science. Is that enough?

Excellence does not automatically become impact.



The missing link is often the ecosystem connecting these stages.

15 years. Three projects. One transformation.

2011

HiLASE Regional R&D Centre

Cohesion funding

BUILD CAPABILITIES

Infrastructure & technology

2017

HiLASE Centre of Excellence

Teaming / Widening

BUILD EXCELLENCE

People, science & partnerships

2025

LASER-PRO

Excellence Hubs / Widening

BUILD ECOSYSTEMS

Industrial innovation & impact

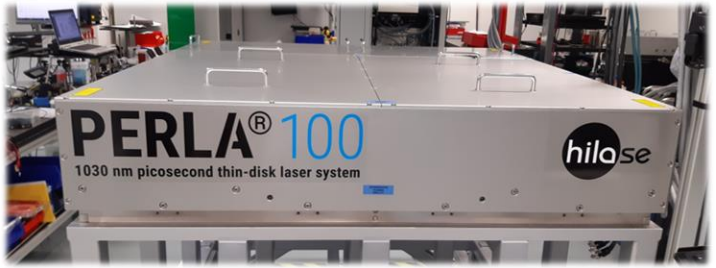
Infrastructure → Excellence → Ecosystem → Sustainable impact

Three instruments — complementary investments

Build the assets

Facilities, equipment and foundational capabilities





Build the institution

Talent, scientific excellence and international standing



Build the connections

Cross-border ecosystems, industry and regional innovation



European instruments were **not interchangeable: each addressed a different stage of transformation**.

LASER-PRO: connecting strengths across borders

18
partners

€ 6M
budget

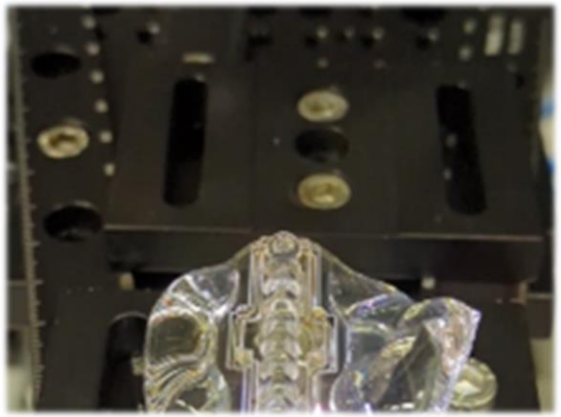
2025–28
project period



Shared strategy • Research and industry • Open calls • Long-term partnerships

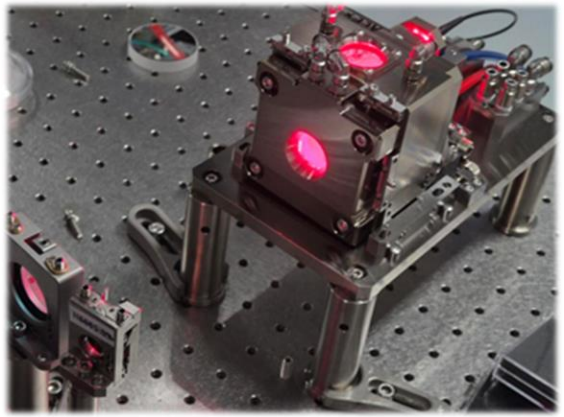
LASER-PRO: from technology to industrial value

EUROPEAN ALIGNMENT • Photonics21 • industrial alliances • strategic technology priorities



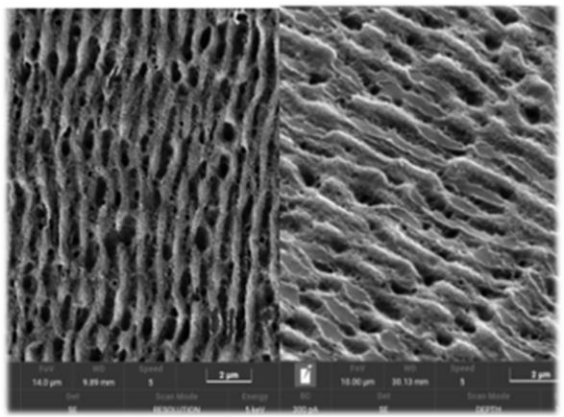
SUSTAINABLE MANUFACTURING

Precision laser glass processing



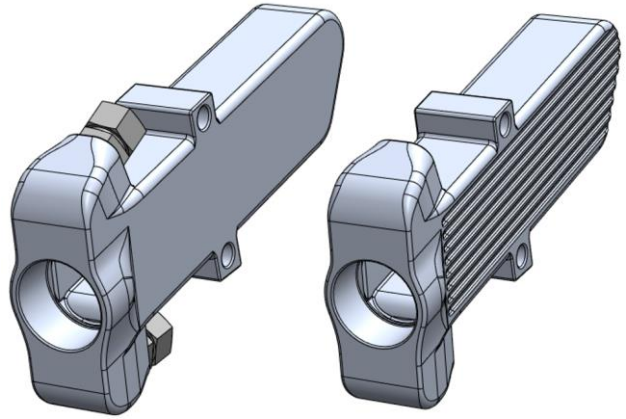
SEMICONDUCTOR TECHNOLOGIES

Deep-ultraviolet laser sources



BIOMEDICAL APPLICATIONS

Laser-structured implants



LASER ENGINEERING

3D-printed advanced laser components

CONNECT → CO-CREATE → COMMERCIALISE → SCALE

From research centre to RTO-oriented organisation

1

GENERATE KNOWLEDGE

Excellent science and talent

2

DEVELOP TECHNOLOGIES

Engineering, validation and scale-up

3

ENABLE INDUSTRIAL IMPACT

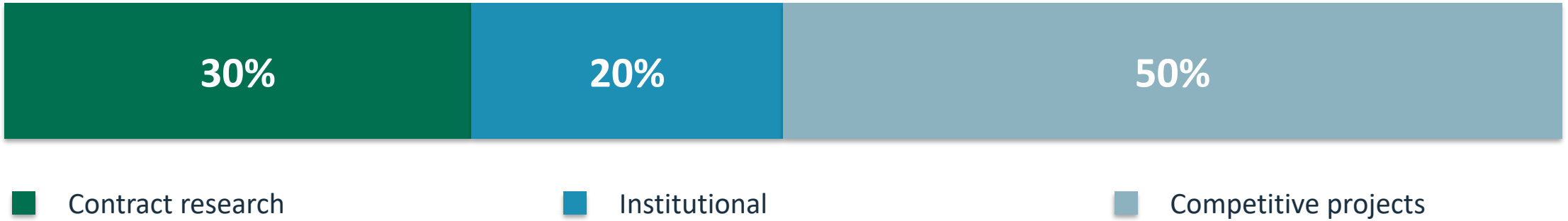
Accessible capabilities and strategic partnerships



RTO = an institutional model; technology infrastructures = capabilities and services enabling technology development and uptake.

Financial sustainability is the missing link

HiLASE funding mix | indicative 2026



Not less public investment.

Smarter public investment, combined with market demand.

Approximate planning figures; not audited FY2026 results. **Sustainability requires a resilient mix of revenue sources.**

Lessons learned from our journey

1 Infrastructure is necessary, never sufficient

Equipment creates opportunity; **people create excellence.**

2 Excellence requires transformation

Leadership, talent, culture and **international partnerships** matter.

3 Impact requires an ecosystem

Industry demand, trust and **long-term commitment** cannot be built alone.



From funding projects to sustaining capabilities

European competitiveness depends on capabilities that endure beyond individual grants.

TECHNOLOGY INFRASTRUCTURES — Accessible facilities, expertise and validation services

RTO CAPABILITIES — Long-term competence development and industrial engagement

SUSTAINABLE ECOSYSTEMS — Partners, demand and diversified funding

FROM EXCELLENCE FUNDING → LONG-TERM CAPABILITIES → EUROPEAN COMPETITIVENESS

The next generation of scientific & innovation leaders

LASER-PRO Talent Programme — transformation requires people, not just equipment.

LEADERSHIP ACADEMY

Developing leadership mindset and strategic capabilities

MIDDLE MANAGEMENT

24 managers participating in development activities

MOBILITY & EXCHANGES

Connecting talent and expertise across partner institutions

INNOVATION CULTURE

Entrepreneurial thinking, trust and industry engagement

The most sustainable investment is the capability of people to keep innovating.

LASER-PRO: Building an Ecosystem That Outlives the Project

A lasting Czech–Lithuanian innovation ecosystem — connected to European strategic priorities

GOVERNANCE THAT ENDURES

Cross-border Excellence Hub Board

Joint strategic direction, priorities and long-term partnerships

National Boards + Working Groups

Mobilise research, industry and public authorities; translate strategy into action

A SHARED STRATEGIC AMBITION

1 Smart specialisation

Position **laser technologies** as a smart-specialisation **priority** in Czechia and Lithuania.

2 Industrial pipeline

Sustain **joint demonstrators**, SME access and business partnerships

3 Long-term resources

Combine **public investment, competitive funding** and **industry demand**

PROJECT GOVERNANCE → PERMANENT COOPERATION → EUROPEAN INDUSTRIAL IMPACT

From Widening to European Competitiveness

Widening helped us **build excellence.**

Excellence Hubs help us **build ecosystems.**

Now Europe must turn them into **lasting competitive advantage.**

