

LASER-PRO: Excellent Laser Technologies for the Sustainable Prosperity of Europe

EXCELLENCE HUBS 2027 | 21/09/2026

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HiLASE Centre



LASER-PRO at a Glance

- *Excellence Hub for Photonics and Laser Technologies*
- *Consortium - 18 partners*
- *HiLASE - coordinator*
- *Czechia – **Lithuania** – Ukraine*
- *€6M budget*
- *48 months (1/25 – 12/28)*
- *Quadruple Helix approach*



Connecting Science • Industry • Government • Society
to transform laser excellence into Prosperity.

Why LASER-PRO Exists

Europe excels in science.

Europe struggles in commercialization.

LASER-PRO bridges this gap.

- *Photonics = Key Enabling Technology*
- *Semiconductor sovereignty*
- *Sustainable manufacturing*
- *Healthcare innovation*
- *Digital transformation*

11 projects from 205 funded (5,4%)

- In CR– only 1 project
- EC - big expectations
- Need to adapt communication accordingly

„Teaming of the regions“

**LASER TECHNOLOGIES AND
APPLICATIONS – FOUNDATION OF
THE PROJECT**

**Strategic Perspective – Key
technologies at the EU level**

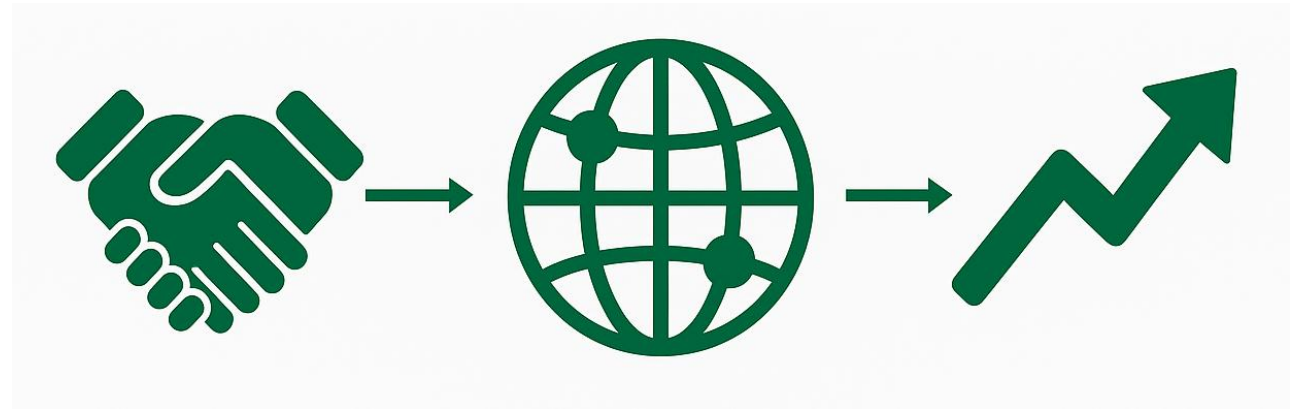
Not Just Another EU Project

LASER-PRO is a strategic response to Europe's deep-tech gap

We are building:

- innovation **capacity**
- innovation **culture**
- innovation **ecosystems**

rather than individual projects.



From Discovery → Innovation → Prosperity

Lessons learned/recommendations

Excellence Hubs are not scientific projects! Topic is important!

What worked (preparatory phase):

- Strong knowledge of the partner ecosystem and consortium - RIS3
- Previous collaboration and established relationships
- Good understanding of the institutional and regional context
- Building on synergies and complementary expertise
- Sufficient time for preparation and alignment
- Deep understanding of the call – follow its objectives carefully

Topic → Logical Frame → Project story

Excellence Hubs Goals

- Build **world-class innovation ecosystems** in emerging regions.
- Foster long-term **collaboration between academia and industry**.
- Develop **cutting-edge competencies for researchers, entrepreneurs, and professionals**.
- Promote **green, digital, and smart solutions** for sustainable industrial transformation.
- Create **new business opportunities** especially for SMEs, university spin-offs and start-ups, especially deep tech;

Horizon Europe's Excellence Hubs initiative aims **to foster robust and sustainable research and innovation ecosystems across Europe, with a particular focus on connecting regions** through advanced science and industrial applications.

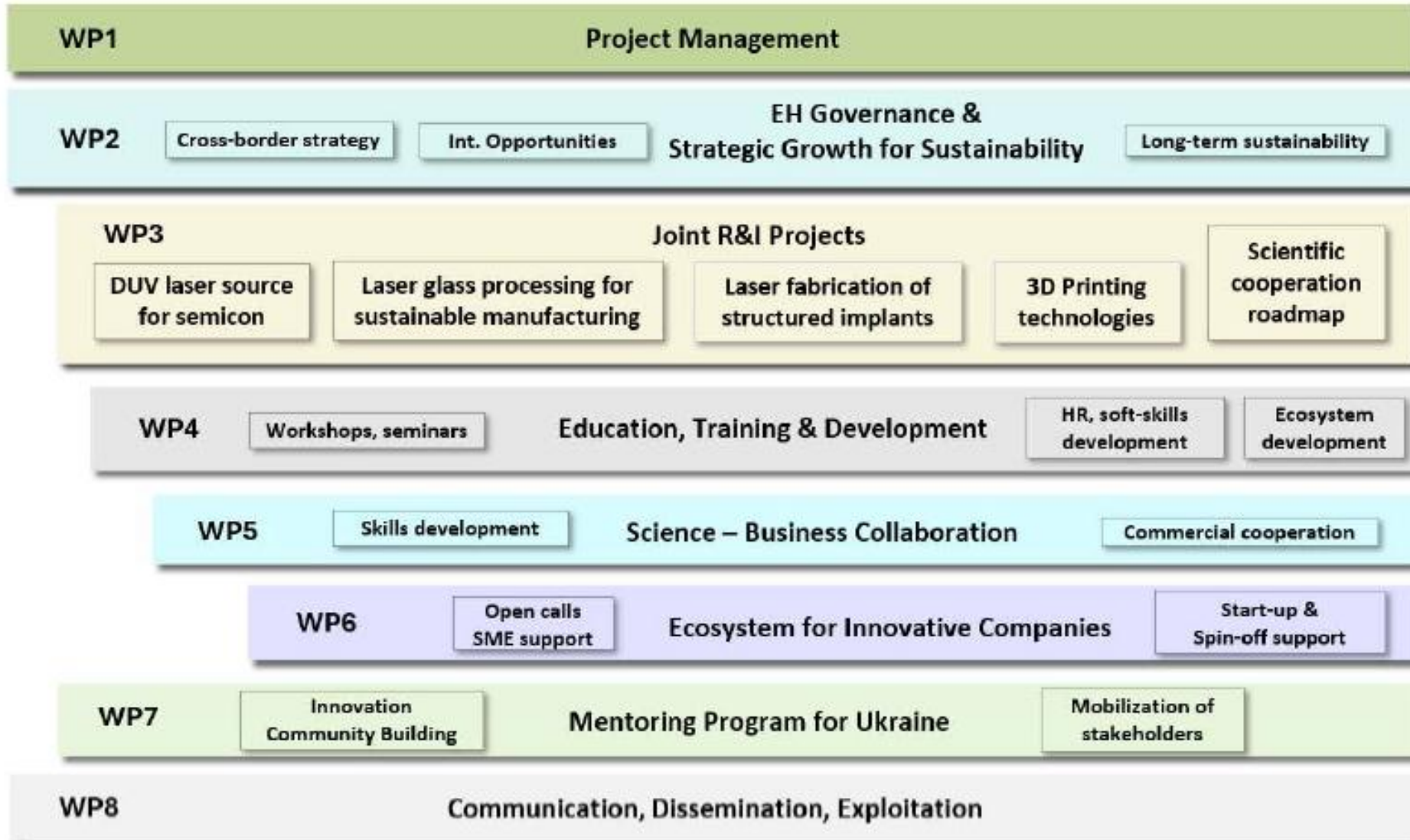
What We Promised

Seven Strategic Objectives:

- *SO1 Excellence Hub Governance and sustainability*
- *SO2 **Joint** R&I Projects*
- *SO3 Innovation **Culture***
- *SO4 Science-Business Collaboration - **Valorisation***
- *SO5 Startups & SMEs – **mentoring programme***
- *SO6 Visibility & Outreach*
- *SO7 Ukraine Integration*

How we will do it

Eight Work packages (+ Ethics):

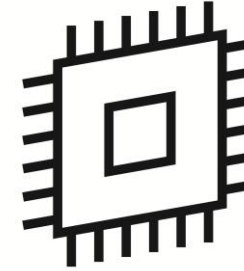


Four Joint R&I Demonstrators



Sustainable Manufacturing

Laser glass processing



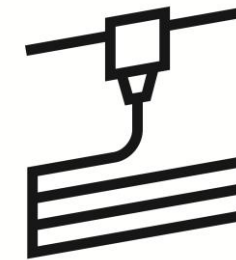
Semiconductor Industry

DUV laser source technologies



Biomedical Applications

Structured implants for improved biocompatibility



Laser Engineering

3D printing for thermal and mechanical stability of lasers

Building People and Mindset

Innovation Culture in Practice

- *Leadership Academy*
- *Middle Management Academy*
- *Technology Transfer Training*
- *Staff Exchanges & Group Missions*
- *Programme for Start-ups*
- *Ecosystem Visits*
- *Ecosystem mapping*



Innovation ecosystems are built by People, Leadership and Culture.

Lessons learned/recommendations

Excellence Hubs - The foundation is the ecosystem!

What worked (writing proposal phase):

- A clear vision of the project activities – and the ability to stand behind it
- Strong focus and clear prioritisation
- Authenticity of the regions and a clear definition of their strengths
- Working together to address weaknesses
- Ambition backed by real potential
- A clear link to EU prosperity and competitiveness

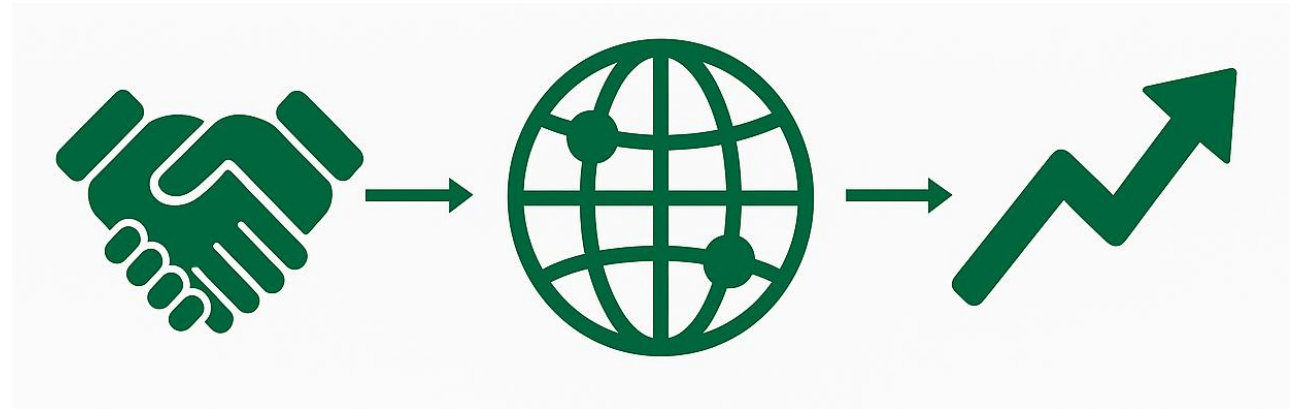
Strong project management know-how → Amires as partner

Not just talking about prosperity — building it

LASER-PRO is directly aligned with our mid-term strategy!

What's working well:

- Strong interest from researchers
- Active involvement of companies
- Creation of new spin-offs and start-ups



Not just another EU project — a strategic tool for future development.

Leadership academy for researchers

STAR Research & Innovation Cluster and HiLASE Centre

ACADEMY



Me as a Leader



My Team and I



**Institution as
Ecosystem**



**Practical Skills
for Leaders in
Science**

Delivering Beyond Expectations

KPI	Target (M48)	M15
Scientific workshop participants	150	364
Soft-skill participants	420	506
Industrial participants	100	534
Science-business initiatives	20	14
Ukrainian ecosystem actors	110	173

Several key indicators have already reached or exceeded their M48 trajectory.

Challenges and Lessons Learned - Realization

Challenges

- *Coordination of 18 partners*
- *Different ecosystem maturity levels*
- *Operating in a wartime environment*
- *Delays in selected technical activities*
- *Balancing research and ecosystem-building activities*

Mitigation

- *Strong governance structure*
- *Monthly coordination meetings*
- *Active risk monitoring*
- *Flexible implementation approach*

→ **Good preparation is essential — it enables effective implementation.**

We are creating a **European innovation ecosystem** where **discoveries** become **technologies**, **technologies** become **businesses**, and **businesses** create **prosperity**.



Thank you for your attention

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