

VIPERLAB - a H2020 project to empower the European perovskite research

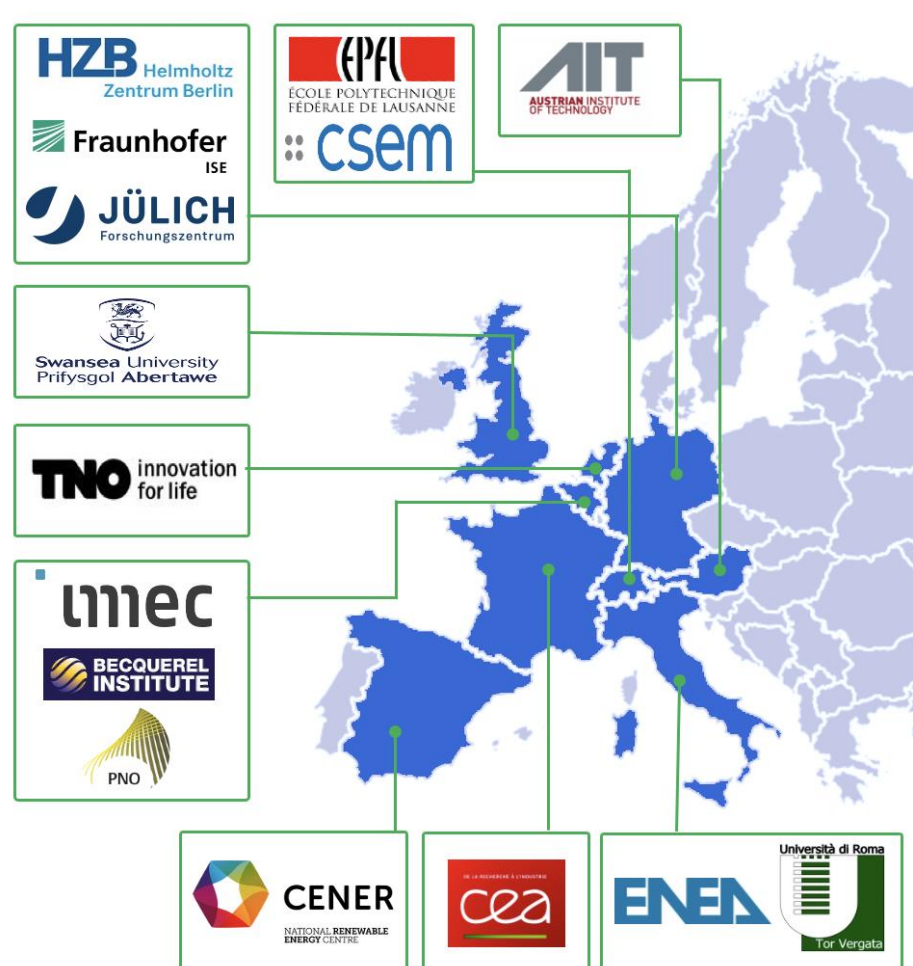
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¹HZB Helmholtz Zentrum Berlin für Materialien und Energie GmbH Germany; ²AIT-Austrian Institute of Technology, Austria; ³Becquerel Institute, Belgium; ⁴CEA Commissariat à l'énergie atomique et aux énergies alternatives, France; ⁵CENER - Centro Nacional de Energías Renovables, Spain; ⁶CSEM- Centre Suisse d'Electronique et de Microtechnique Switzerland; ⁷ENEA-Italian National agency for New Technologies, Energy and Sustainable Development, Italy ⁸EPFL Swiss Federal Institute of Technology Lausanne Switzerland ⁹FRAUNHOFER Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.v., Germany; ¹⁰IMEC- Interuniversity Microelectronics Centre, Belgium; ¹¹JÜLICH - HI ERN Forschungszentrum Jülich GmbH / Helmholtz Institute Erlangen-Nuremberg, Germany; ¹²PNO PNO Innovation NV Belgium; ¹³SWANSEA University, United Kingdom; ¹⁴TNO- Netherlands Organisation for Applied Scientific Research Netherlands; ¹⁵University of Roma Tor Vergata Italy

Perovskite Single Junction and Pero/Si tandem Solar cells are among the most important PV technologies that Europe will be able to exploit for the future market penetration of the world's lowest cost and lowest carbon footprint photovoltaic production. On the other hand, the technology still does not meet the requirements for mass production, especially in view of the three objectives: manufacturability, sustainability, and stability. VIPERLAB, a project funded by Horizon 2020 under grant agreement No. 101006715, proposes facilitated and coordinated access to the best EU perovskite research infrastructures to stimulate European researchers from academia and industry to collaborate on research and development of next generation solar cell technology, to facilitate cycles of more rapid and reliable technology evaluation to enable rapid entry into the market of perovskite-based photovoltaic products and thus more widespread use of renewable energy conversion technology.

H2020-VIPERLAB project:

Coordinated by HZB 15 partners from 8 European countries



Main goal:
Through facilitated and coordinated transnational and virtual access to the best EU perovskite infrastructures and the use of advanced data mining approaches, the project stimulates European academic and industrial researchers to work together on the research and development of the next generation of solar cell technology, which will accelerate the perovskite PV technology development in Europe.

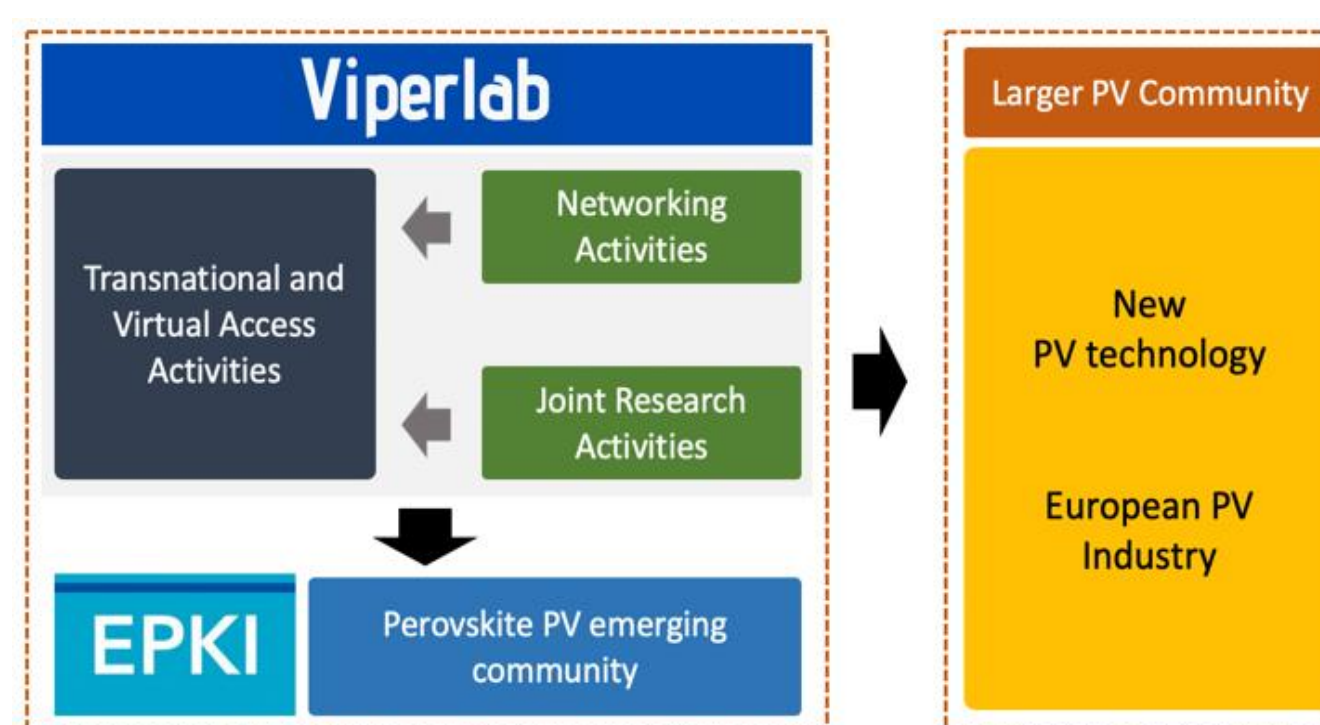


15 Partners | 13 Physical infrastructures | 4 Virtual infrastructures

Total Budget: 5,52 Mio € | Starting date: 01.06.2021 | Duration: 42 Months

More info

Our concept and objective :



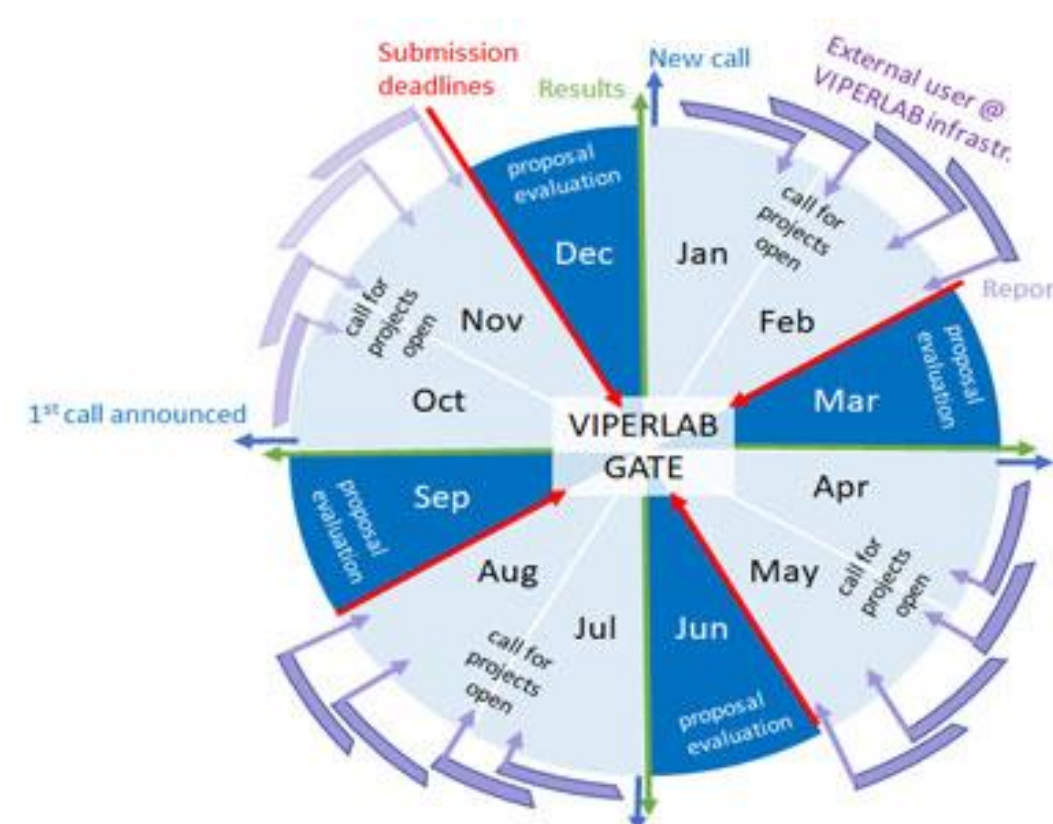
- Access to expertise and infrastructure by combining and sharing top EU infrastructures.
- Connect and support starting EU perovskite community by Networking and Training Actions.
- Develop infrastructure and knowledge-base.



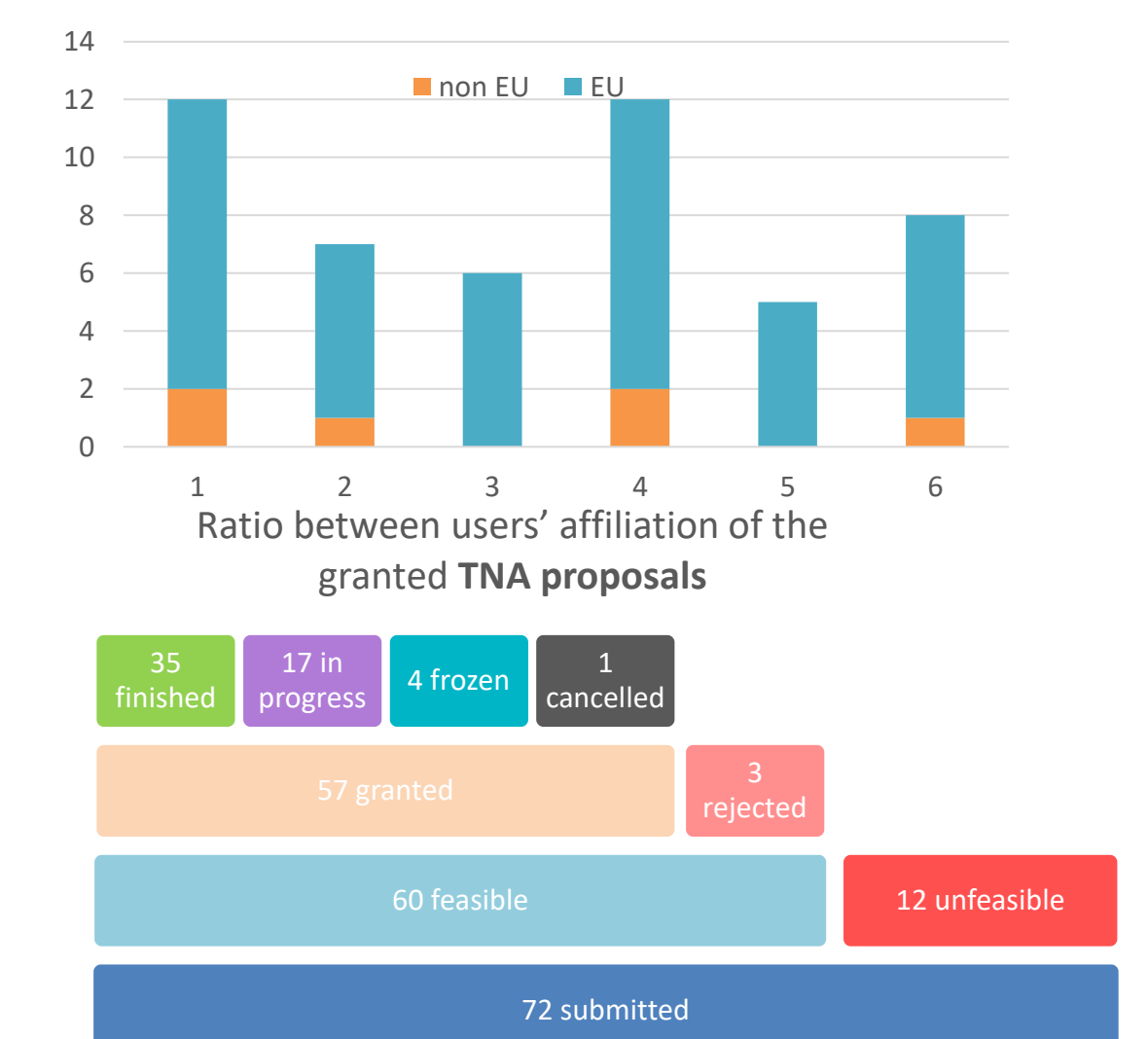
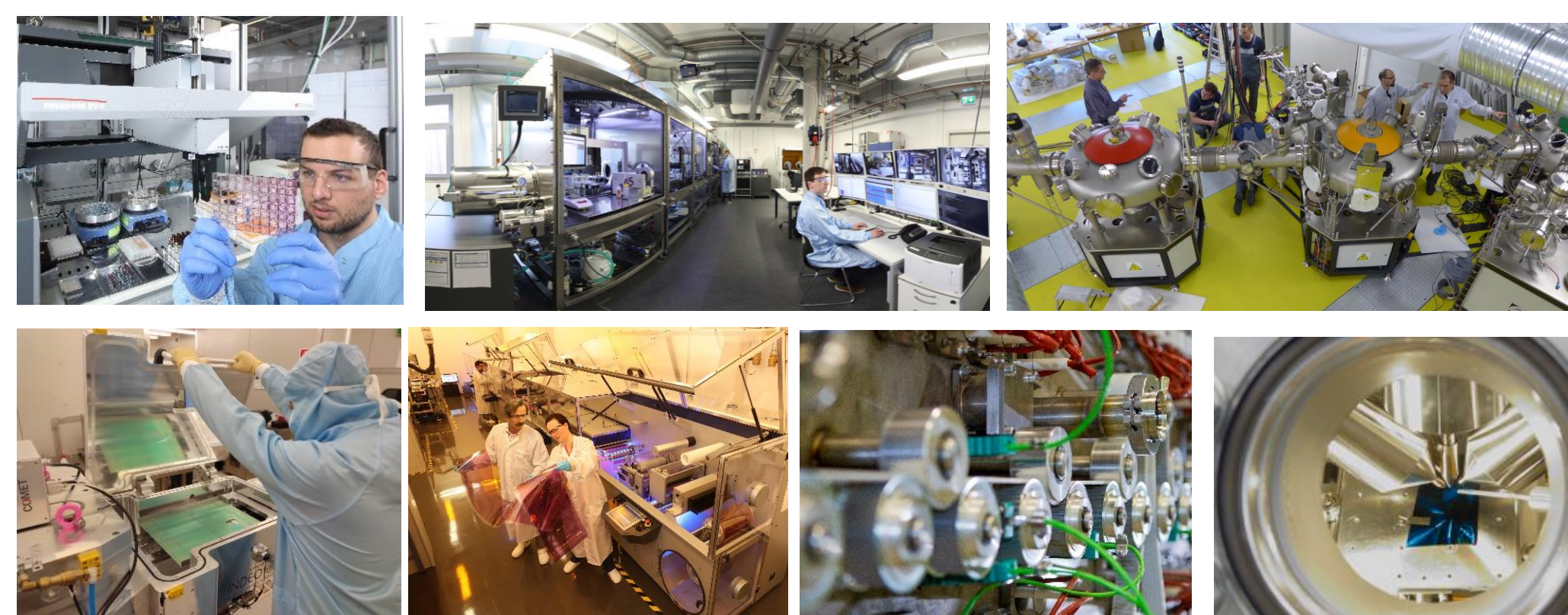
- Joint Research Activity**
- Materials and device innovation Infrastructure
 - Advanced device processing infrastructure
 - Characterization and standardization
 - Environmental, social and economic impact

- Networking Activity**
- Harmonization and path towards standardization
 - Communication, Dissemination, Exchange, Training
 - Community building and Exploitation

ACCESS TO OUR RESEARCH INFRASTRUCTURE

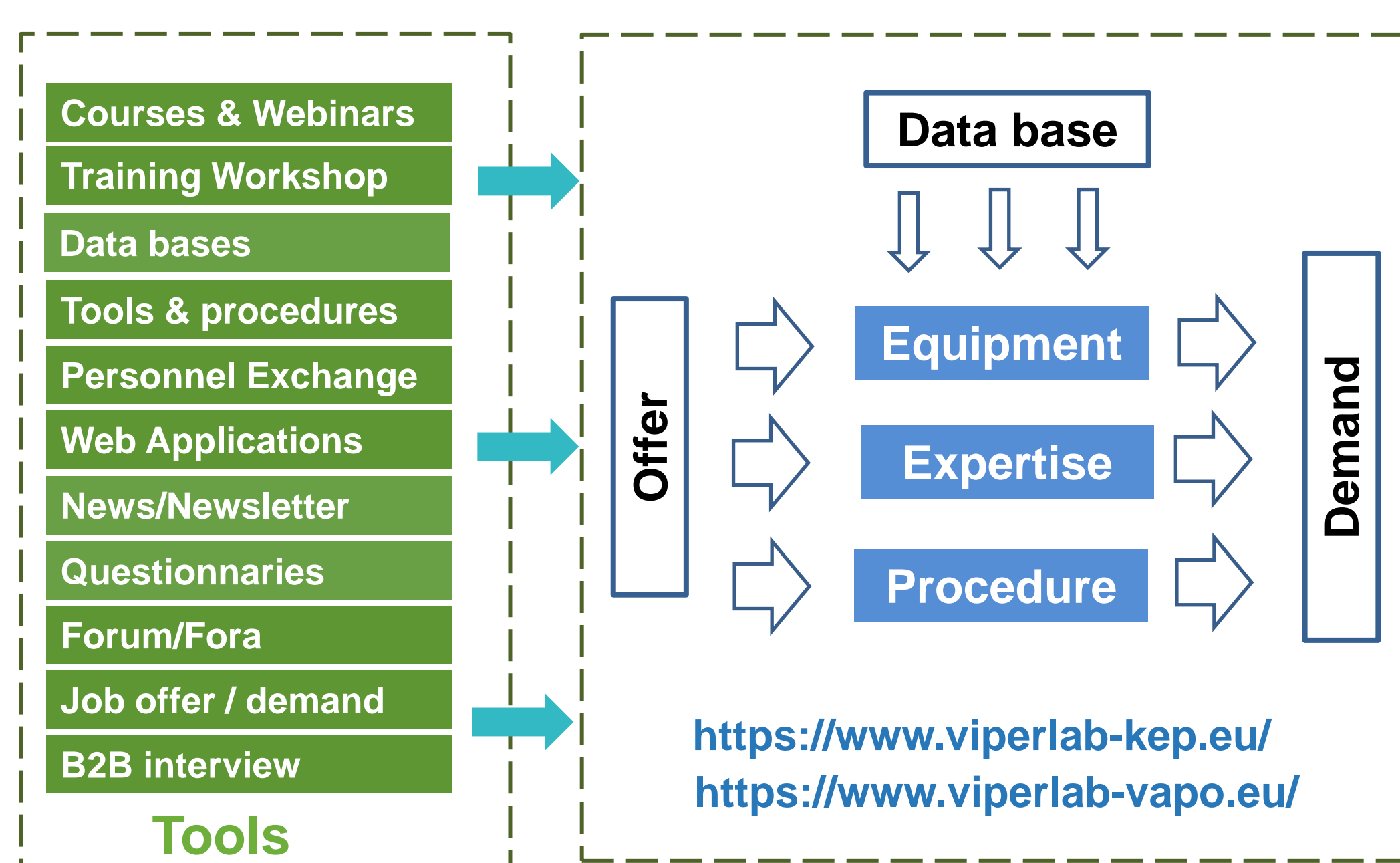


Seven calls to access so far



VIPERLAB KEP-Knowledge Exchange Platform & VAPO-Virtual Access Point Platforms:

The exchange of knowledge is a milestone that brings together academic staff, research institutes, members of companies open to innovation and wider groups and communities, translating and / or transforming it into an opportunity for mutual profit and to learn more and better thanks to the use of complementary skills. This improves results, accelerates goal achievement and research impact.



- ❖ Offer/demand management and needs of infrastructures, equipment, expertise, technical documents, test procedures, data bases, modelling tools.
- ❖ Open access on-line lectures, courses, workshop by widely using webinars.
- ❖ Public access in reserved web-area (documents, data, reports, etc.).
- ❖ Restricted area for specific technical documents (for user-partners only).
- ❖ On-line forum/for a, questionnaires & ICT Tools for internal, external and technical/scientific discussions on specific themes. to optimize submissions and collection of specific information.

Acknowledgements