EPFL Innovation Park

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Fondation EPFL Innovation Park
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Press release:

The EPFL Innovation Park is launching its visionary program *Tech4Regeneration* in collaboration with the companies Romande Energie and Logitech with the support of canton de Vaud, in order to promote adoption at scale of solutions which could restore the necessary conditions to life on Earth.

The 20 start-ups selected for the first edition of this program are announced exclusively below.

In response to an alarming situation

In September 2023, researchers from the *Stockholm Resilience Centre* in Sweden have announced that six thresholds have been crossed among the 9 planetary limits, a concept which allows the scientific community to quantify necessary conditions for humans to live in a secure and sustainable way.

Some of these limits, such as greenhouse gases, have been the subject of press for a couple of years now, mainly due to the visible effects of climate changes. However, other limits are less perceptible but just as worrying, such as the effects on biodiversity and pollution caused by chemicals, plastics, and antibiotics.

Multidisciplinary resources mobilised

Facing such challenge, many researchers have mobilised to create technological solutions, aiming at restoring degrading resources and conditions. This is reflected by the strong growth of "cleantech" start-ups, created in the Swiss Romandie and particularly at EPFL. The technology is, however, simply a component of the solution and won't solve the integrity of the problem. To allow these start-ups to improve the health of the planet and society, the EPFL Innovation Park is launching the program *Tech4Regeneration* aiming at mobilizing the large network of consultants in durability, coaches in business development, middle-sized and large companies, and investors. It is only by encouraging these different actors into collaborating tightly that we will see the emergence of an economy capable of respecting and reinstating natural and vital resources.

Beyond sustainability, a regenerative economy

Over the years, many industrial and financial companies have integrated the notion of sustainability in the core of their business model, with the large-scale adoption of environmental, social, and governmental (ESG) norms. Even if it were to become the norm, sustainability would mean achieving a status quo, which will not be enough to offset the degradation of the planet and ensure the survival of humanity as we know it today. A further step is needed, aiming at "regeneration". This approach focuses on replacing actual economic models, which draws on natural resources to create services and consumer products all the while generating pollution and waste in important quantities. On the other hand, a *regenerative economy* meets the needs of people and society, while remaining within the limits of a prosperous, safe, and sustainable development for humanity.

Consciously knowing that the depletion of natural resources and environmental problems will eventually impact their business models, most industrial companies have well understood the challenges of a "regenerative economy", but also that these need to be approached in a systematic and collaborative technique. Visionary companies such as the Romande Energie group and Logitech have joined the programme to collaborate on cross-sector issues and put their industrial and operational skills at the service of innovative start-ups whose solutions can have a regenerative impact if we help them bring them to market on a large scale.

The EPFL Innovation Park intents to unite more enterprises through this program, through undergoing discussions with major actors in different relative domains, including energy, transports, buildings, agriculture, and digital services. The collaboration of entrepreneurs and industrial experts is working towards accelerating the development of regenerative solutions by applying the precepts of circular economy, industrial ecology, numerical decarbonated transition, as well as regenerative finance, to name but a few examples.

From technological start-ups to a large regenerative economic ecosystem

Following the call for applications launched last December, the program *Tech4Regeneration* received 68 applications from 14 countries and 10 Swiss cantons. Around thirty multi-disciplinary experts assessed the applications to select the most promising innovations.

The 20 startups selected will spend the next 9 months taking part of this so-called "acceleration" program of training workshops, tailored coaching and contacts with industrial partners, customers and potential investors. They will also benefit from financial aids in the form of prizes and field tests. The aim of the program is to enable start-ups to become the new leaders in regeneration, and to pave the way for businesses of all sizes that will have no choice but to join the movement sooner or later.

Through this program, participants and partners will cooperate to develop and put together practical knowledge on implementing a regenerative economy. This first program will evolve in a "*Regeneration Hub*" and is part of a much bigger project of co-creation and collaboration between research institutes, start-ups, SMEs, industrial groups, and big international organisations, which will extend into the future Ecotope district of EPFL.

Startups selected for the 2024 cohort divided into three categories:

1. **Circular economy – treating and recycling waste in industry, agriculture and construction**
    - **Biomede**, Lyon, FR : extraction of heavy metals from agricultural land by plants.
    - **Composite Recycling**, Ecublens, CH : a recycling solution for glass fibre-reinforced plastic waste.
    - **Gaia Tech**, Berne, CH: extraction from agricultural waste of natural alternatives to artificial and petroleum-based products for the cosmetics and food industries.
    - **Grensol**, Zürich, CH: process for treating plastic waste that is difficult to process, in particular to recycle the residues from vehicle carcasses and produce hydrogen, methane and solid carbon in a decarbonised way.
    - **Hexem**, Renens, CH: a wastewater treatment solution for the food and drink industry that produces biogas.

2. **Digital technologies for regenerative finance, biodiversity, agriculture and supply chains**
    - **Aquascope**, Worcester, UK: a large-scale water quality monitoring solution for sustainable agriculture and finance.
    - **Inverto Earth**, Berne, CH: a platform for assessing, monitoring and financing ecosystems for biodiversity conservation.
    - **Open Forest Protocol**, Sofia, CH: A platform using blockchain to offer buyers of carbon credits a decentralised and transparent system for measuring, monitoring and verifying reforestation projects.
    - **Synature**, Ecublens, CH: bioacoustic assessment of biodiversity with AI processing to encourage and support conservation and reforestation initiatives over time.
    - **Space4Good**, La Haye, Hollande: a solution based on satellite data and artificial intelligence for monitoring biomass and deforestation/reforestation.
    - **Databaum**, Bâle, CH: artificial intelligence data analysis solution for disease forecasting and optimising agricultural treatments.
    - **Lagrange.AI**, Lausanne, CH: artificial intelligence platform to improve the efficiency, resilience and carbon footprint of supply chains.

3. **Low-carbon energy production and storage**
    - **Deepeex**, Lausanne, CH: sustainable electricity production from deep geothermal energy.
    - **Emissium**, Sion, CH: A platform for monitoring and optimising carbon emissions linked to electricity consumption.
    - **Neology Hydrogen**, Lutry, CH: a decentralised hydrogen production system based on "green" ammonia that is easier and cheaper to deliver to points of consumption.
    - **Sohhytec**, Lausanne, CH: Local production of renewable fuel (hydrogen + oxygen) and electricity (electricity + heat) from solar energy.
    - **Voltiris**, Lausanne, CH: solar modules, combining the use of high-tech glass for agricultural greenhouses with the production of renewable energy.
    - **Swistor**, Lausanne, CH: durable, non-toxic, ultra-fast-charging energy storage devices that combine high energy and power levels.
    - **SolidWatts**, Pully, CH: A dielectric (microwave) industrial heating process to replace older, less efficient solutions using fossil fuels.
    - **Planeto**, Genève, CH: software for designing sustainable district heating and cooling networks.

About the EPFL Innovation Park

The EPFL Innovation Park supports the deployment of disruptive innovations and technology transfer at the École Polytechnique Fédérale de Lausanne (EPFL) and other regional academic partners. It provides flexible office spaces and labs, training, incubation, acceleration, and coaching services to 250+ high-tech companies: startups, SMEs, and R&D centers of major corporations.

Positioned as the leading center for entrepreneurship in Western Switzerland, the Innovation Park enjoys a strong track record of bringing startups to success. Over the years, it has developed several equity-free accelerators open to international startups together with a wide and dynamic network of

experts, service providers, business partners and investors. It aspires to become a global player in innovation and a vibrant deep-tech hub for health, digital trust, and regenerative economy.

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About Romande Energie

The Romande Energie Group is the leading electricity provider in Western Switzerland with services spanning the energy value chain. It offers a wide range of sustainability solutions to help cut carbon emissions, including tailor-made support for the independent production of clean energy as well as products and services that save energy and encourage smarter energy use.

Romande Energie aims to make Western Switzerland the first region in the country to be 'net zero'. It continues to invest heavily in expanding its network of local renewable assets – solar farms, hydropower and biomass plants, its many district heating networks, and its geothermal and wind projects – with an ever-increasing share of renewable energy supplied to its customers.

Romande Energie is committed to being a trustworthy partner in creating a society that respects the environment and people, and in promoting a sustainable local economy. Helping customers build this sustainable future is its core purpose.

For more information, visit https://www.romande-energie.ch/.

About Logitech

Logitech helps all people pursue their passions and is committed to doing so in a way that is good for people and the planet. We design hardware and software solutions that help businesses thrive and bring people together when working, creating, gaming and streaming. Brands of Logitech include Logitech, Logitech G, Streamlabs and Ultimate Ears. Founded in 1981, and headquartered in Lausanne, Switzerland, Logitech International is a Swiss public company listed on the SIX Swiss Exchange (LOGN) and on the Nasdaq Global Select Market (LOGI). Find Logitech at www.logitech.com, the company blog or @logitech. Find Logitech and more of its business products and enterprise solutions at www.logitech.com/business, Logitech Business or @LogitechBiz.

About the Department for the Promotion of the Economy and Innovation (SPEI)

The Service de la promotion de l'économie et de l'innovation (SPEI) supports and advises companies and entrepreneurs based in the canton of Vaud.
SPEI provides direct financial grant, in particular to accelerate innovation or the transition to sustainability. It supports and advices companies, startups and project leaders in their collaborations with the cantonal administration, and directs them to the appropriate entities according to their specific needs, such as coaching, financing, innovation or finding land or premises.
Through its actions, SPEI aims to encourage job creation and place innovation and sustainability at the heart of Vaud's economic development policy.
For more information, visit https://www.vd.ch/toutes-les-autorites/departements/cheffe-de-departement/service-de-la-promotion-de-leconomie-et-de-linnovation-spei.