

Press Release - 11 January 2023

# Leonard's acceleration programs take in 45 new projects in 2023

Most of the selected projects provide pioneering solutions to address major environmental and energy challenges in cities and infrastructure

Paris, 11 January 2023 — Leonard, the VINCI Group's foresight and innovation platform, has presented the 45 start-ups, innovative companies and VINCI employee teams selected to join its four acceleration and support programs in 2023. These projects provide pioneering solutions meeting challenges in the environmental transition, safety and productivity across construction, mobility and energy. They will start working with Leonard in January 2023.

**Press contact** 

Matthieu Lerondeau **Leonard** Head of Communications & Communities <u>matthieu.lerondeau@vinci.com</u> +33 6 24 43 47 47 Leonard has been leading a strong community of innovators for almost 6 years. They come from a variety of backgrounds and have been playing a growing part in the transformation of construction, mobility, energy and real estate. VINCI's foresight and innovation platform runs four acceleration and support programs to help start-ups, employees and Group entities succeed in their entrepreneurial projects.

LEON/

The juries made of VINCI executives and Leonard partner investors have selected 45 projects focusing on the environment, safety, productivity and competitiveness of VINCI's companies and activities.

The variety of projects mirrors the creativity of the entrepreneurs working in VINCI's areas of expertise:

- Reduction of the environmental impact of construction projects
- Construction project management
- Renewable energy (wave, solar and wind power, geothermal) and nuclear power
- Energy efficiency and mass deployment of heat pumps
- Carbon capture and climate tech
- Innovative construction materials
- Construction project and construction site management
- Targeted delivery of construction materials
- Digital twin
- 3D printing in construction

#### Julien Villalongue, Leonard's Managing Director:

« We are very excited to support these 45 new projects at Leonard. Reducing the environmental impact of construction and energy activities motivates more than half of our projects. This illustrates the great responsiveness of entrepreneurs to the current events and their alignment with the environmental ambition that VINCI has set as its strategic objective. »

# Four ambitious programs to meet the challenges of transforming the businesses of cities and infrastructure

Leonard's four acceleration and support programs are open to start-ups, innovative companies, VINCI employees and companies from the Group that are determined to play their part in the transformation of the businesses of construction, mobility, energy and real estate.

The SEED program supports early stage startups for 6 months, to help them get off the ground, grow and find funding for their projects. The 2023 cohort will include 11 projects. They will receive a €30,000 capital injection, training leading to certification delivered by the Stanford Center for Professional Development, one or more internal VINCI mentors, a network of external experts and contacts with our network of investors. This 6-month intensive program will end with a Demo Day open to investors and decision-makers from the VINCI Group.



- **The CATALYST program** helps more mature innovative companies deploy their products and services in partnership with VINCI Group companies. The 2023 cohort will include 10 of these companies. They will enjoy preferential access to VINCI executives and Leonard will be by their side from their first meeting to the time they sign a contract.
- The Intrapreneurs program supports innovative projects initiated by VINCI employees. The goal is to foster new business opportunities within the Group. This program has fasttracked 64 projects since its inception in 2018, and 17 new business ventures have emerged within VINCI as a result. In 2023, the seventh iteration of the program will onboard 10 teams.
- The Al Program aims to identify and develop projects using Al technologies, with a high return on investment for the business units of the Group. It is designed to help business units of the group to initiate and develop their Al strategy to maintain or increase their competitiveness in the future. After supporting 36 projects since its inception in 2020, the Al program will support 14 new endeavours in 2023.

# **About Leonard**

Leonard is the innovation and foresight platform of the VINCI Group. Leonard was created to imagine the future of the Group's business lines and is tasked with watching emerging trends in VINCI's areas of expertise and markets, identifying new growth opportunities, and setting up incubation and acceleration programs for Group employees as well as start-ups. To house these programs and start conversations with all the people blazing new trails in VINCI's business lines, Leonard opened Leonard:Paris, a 4,500 square meters lab in Paris. In 2020, Leonard set up a team to expand its operation in Germany, Austria and Switzerland.

To find out more about Leonard: https://leonard.vinci.com/en/

# **About VINCI**

VINCI is a world leader in concessions, energy and construction, active in some 120 countries. Our ambition, in response to the climate emergency, is to accelerate the transformation of living environments, infrastructure and mobility. We also aim to foster social progress by being a humanist group that exemplifies inclusion and solidarity. Powered by our economic performance and the engagement of our 260,000 employees, we forge a more sustainable world. We achieve that by fully embracing our role as a private sector partner working in the public interest and strongly emphasising listening and dialogue with our stakeholders in all our business lines.

To find out more about VINCI: <u>www.vinci.com</u>



# Appendix

## The 2023 cohorts

# **SEED Program: 4<sup>th</sup> cohort**

11 start-ups selected

- Eleven early-stage startups selected among nearly 60 applications from 12 countries,
- Two thirds of the projects provide a solution to reduce the environmental impact of activities,
- Hosted at Leonard:Paris if they so wish, the startups also benefit from support and a contribution in capital from Leonard.

#### Adapt (France) - <u>www.adapt.sh</u>

Adapt is developing an application that helps consumers reduce the carbon footprint of their energy. Hour by hour, Adapt's tool predicts the share of electricity generated from fossil fuels in the user's region.

**#energy #sustainability** 

#### Autarc (Germany) - www.autarc.energy

Autarc is a platform optimizing the process of heat pump installation by providing leads and simplifying the contractual process for installers and simplifying the access to installers and financing options to clients.

#### #energy #efficiency

#### BIM to Build (France) - www.bimtobuild.fr

BIMtoBuild wants to revolutionise the working methods of construction sites. Their solution digitises the ongoing work and facilitates efficient management of the project in real time. **#digitalisation #BIM #productivity #contech** 

#### BLIC (France) - <u>www.blic.pro</u>

BLIC is a connected smart parcel locker dedicated to construction sites that reinvents deliveries to become more sustainable and secure.

### **#productivity #jobsite #logistics**

#### Bosso Technology (Zambia) - www.thebosso.com

Bosso is a construction marketplace allowing providers to find new customers, manage their inventory and helping construction companies get access to a broad catalogue of materials and a reliable delivery service.

#### **#contech #logistics #productivity**

4



#### Fixers (France) – <u>www.fixers.fr</u>

Fixers is an application that facilitates maintenance jobs for tenants by qualifying issues according to responsibility between landlord and tenant and providing relevant professionals and tutorials.

#### **#platform #productivity**

#### Heliosand (France) - www.heliosand.com

Heliosand offers a solar, innovative and ecological solution to recycle industrial waste in a global context of tension on construction sands. Heliosand's thermal processes use concentrated solar power to recover mineral industrial waste and desert sand into aggregates for construction.

#### #solar #energy #industry #contech

#### Moebius (France) - <u>https://www.moebius.pro/</u>

Moebius has developed a system connected to mixer trucks which makes it possible to deliver concrete in small quantities for the operators and the end customer. This accessory also improves the logistics of certain industrial deliveries.

#### **#industry #concrete #logistics**

#### Ostrea (France) - <u>www.ostreadesign.com</u>

Ostrea transforms shell waste into a natural resource by developing an aesthetic, sustainable and low-carbon new material based on recycled shells. This material can be used to make floor/wall coverings, worktops or furniture.

#### **#materials #biobased #circulareconomy #blueeconomy**

#### **Pilion (France)**

Pilion is an ultra-fast and safe "accordion" scaffold. Assembly time is divided by 5 and two operators are enough to install it thanks to a lifting device. Pilion avoids falls, handling accidents, RSI and noise pollution.

#### #safety #productivity #jobsite

#### WaveX (France & UK) - www.wavemining.com

WaveX is developing a nearshore wave energy converter operating under the sand that aims at making electric energy twice as cheap as fossil fuel energy is today. **#energy #blueeconomy** 



# **CATALYST Program: 4<sup>th</sup> cohort**

10 innovative companies selected

- Ten innovative companies selected among over 180 evaluated ventures.
- At least 6 of the selected companies provide an innovative solution to reduce the environmental impact of businesses activities within the realm of the VINCI Group,
- In 2022, 95 contracts have been signed between CATALYST start-ups and the group.

#### Altaroad (France) - <u>www.altaroad.com</u>

A new way of tracking flows of materials and waste, enabling financial and environmental gains. Altaroad provides a web application enabling digital traceability of construction waste and more generally flows of materials and traffic, with real time carbon footprint calculations and impact reduction suggestions. They also developed smart cameras to detect the right vehicles and identify loaded contents and smart connected weighing sensors to capture data while in motion.

#### **#productivity #environment #circulareconomy**

#### Build2B (France) – www.build2b.fr

Build2B is a marketplace for freelancers working in the construction and real estate sectors. Build2B has been a member of Leonard's SEED acceleration program. **#productivity** 

#### Econcrete (Israel) – <u>www.econcretetech.com</u>

A fully compliant, bio-reinforced concrete technology that increases the ecological and structural value of coastal and marine infrastructure. **#contech #environment** 

#### Ellona (France) – <u>www.ellona.io</u>

Ellona commercializes cloud-based micro sensors performing monitoring of various gas emissions, particles, liquid... The Al data banks allows them to implement situational intelligence (events detection and identification) using digitized human perceptions in smart cities, airports, hospitals, offices and construction sites.

#### **#productivity #prevention #Industry #AI #environment**

#### Exodigo (USA) – www.exodigo.com

Exodigo has developed a non-intrusive subsurface imaging platform that uses multi-sensing fusion and AI to provide a digital geolocated 3D map of buried assets. **#productivity #prevention #environment** 

#### Heex Technologies (France) – www.heex.io

Heex Technologies accelerates AI development and enhances operations monitoring by enabling organizations to get the most value out of their data.



er @ VINCI 🎝

#### Inex Circular (France) – www.sourcing.inex-circular.com

Inex Circular is a digital solution that enables users to find outlets for their excavated land and to connect local waste producers and recyclers. The platform also allows to detect lands and roofs available for the development of PV projects.

#### #productivity #energy #Al #circulareconomy

#### Loris (USA) – <u>www.getloris.com</u>

Loris connects, secures, and captures data from industrial job sites using proprietary batterypowered, portable, temporary light-towers which provide WIFI, security (motion sensors + 360° cameras), and automatic site capture.

#### **#prevention #contech**

#### NatureMetrics (UK) - <u>www.naturemetrics.co.uk</u>

NatureMetric's nature performance monitoring service uses environmental DNA technology to generate comprehensive data, rapidly and cost-effectively. These robust data sets are converted into decision- useful metrics for companies to report on regulatory and voluntary commitments.

#### #environment #data

#### **OpenSpace (USA)** – <u>www.openspace.ai</u>

OpenSpace provides next-generation reality capture software, powerful integrations, and the smartest analytics tools in the industry. The solution is dedicated to monitoring construction sites and tracking construction progress.

#### **#productivity #contech**

Our team has reviewed and enquired more than 180 companies this year. Around our CATALYST selection, we would like to highlight those 10 other solutions which will serve the specific and direct demands from the VINCI's group entities:

- **Soletaire Power** (Finland): The solution integrates CO2 capture within a building's HVAC system, capturing CO2 from the air and reducing HVAC load, energy cost, and emissions from the building.
- **Rod Radar** (Israel): a patented Radar imaging technology which enables real-time and on-site detections of buried utilities during excavation operations.
- **Versatile** (USA): Mounted under the hook of any crane, this technology offers production data on any job site including information on materials, redundancies, construction progress, and crane utilization.
- **Energy Robotics** (USA): Energy Robotics provides an end-to-end solution for autonomous robotic inspection in capital-intensive industries such as oil & gas, chemical and energy.
- **Mechasys** (Canada): Mechasys has developed an innovative laser projector that displays construction plans on a real scale on any job with 3mm accuracy.



- **Villari** (Finland): Villari provides a revolutionary approach for the permanent monitoring of fatigue crack propagation in steel structures using cutting-edge wireless sensor technology.
- **Illumagear** (USA): A 360-degree personal lighting solution with foreign voltage and fall detection solution dedicated to enhancing safety of field operators.
- **Built Robotics** (USA): Built Robotics transforms heavy equipment into autonomous robots for the \$1 trillion earthmoving industry.
- **Mesh** (Switzerland): Mesh Mould is the world's first technology to combine formwork and reinforcement within a digital fabrication process.
- **Cad makers** (Canada): cmBuilder.io democratizes 4D construction site logistics with fast & easy cloud-based workflows, powerful sequencing simulation capabilities, and unparalleled real-time collaboration.



# **INTRAPRENEURS Program: 7th cohort**

10 projects selected

- Ten projects carried out by employees of VINCI Group companies,
- All ventures were initiated by employees based in France, Germany, UK, Canada, Colombia,
- 64 projects supported since 2017, of which 17 have become new VINCI activities or business units.

#### **Biological carbon capture (Colombia)**

BioCCap has as its purpose to capture between 5% to 70% of CO2 generated by our operations on site (Construction, Airports, Highways, and Buildings) using microalgae as a natural bioreactor.

#### **#carboncapture #environment #jobsite #construction**

#### DGR Digital twin (France)

Use of a structural digital twin to study, monitor and anticipate the behavior of nuclear waste storage infrastructures in geological layers.

#### #digitalization #digitaltwin #nuclear #wastemanagement #safety

#### **Geoheat (France)**

Equip underground structures, in urban areas, with geothermal systems to produce heat for the operation of these structures or for district heating needs.

#energy #environment #geothermal #districtheating

#### **ICONA (Germany)**

Smart construction site management, deployment planning of machines and equipment as well as personnel

#### #productivity #digitalization #planning #construction

#### Nakina (Canada)

Tool which allows to prioritize, review and qualify leads with minimal time and effort by sorting through planning & development applications using smart filters and by categorizing the site-specific geological profile.

**#AI #productivity** 

#### Nuvia Blockchain (France)

Use of the blockchain to facilitate, make reliable and secure exchanges and ensure better traceability of radioactive waste throughout its processing. **#nuclear #blockchain #wastemanagement** 

#### Calogena (France)

Nuclear micro-reactor solution for district heating and cooling networks. **#energy #nuclear #districtheating** 



#### **Recyclable Formworks (France)**

Digital manufacturing system for optimized reinforced concrete beams. Thanks to a 3D printing system of recyclable material, the beams are made to measure with a minimal environmental impact.

#### **#construction #material #software #optimization #structures**

#### Transformer heat recovery (UK)

Waste heat recovery for re-use by coupling a heat pump or absorption chiller to the radiator circuit of a transformer.

#energy #environment #efficiency

#### VINCI Road Services (France)

Outsourcing of services for public or private road infrastructure operators based on existing core competencies as a road infrastructure operator (accident management, roadside maintenance, de-icing, toll collection, traffic management...)

**#infrastructure #services #operations** 



## Al Program: 4<sup>th</sup> cohort 14 projects selected

- More than 120 employees of VINCI Energies, VINCI Construction and VINCI Concessions companies are involved in the new batch of AI endeavours
- 9 projects are initiated by teams based in France, 3 projects internationally, 2 are a collaboration between 2 countries
- This year, Leonard has trained 8 data scientists from VINCI Energies and VINCI Construction in order to create decentralized competence centers in several countries (France, Austria, Portugal, Canada)

Since 2020, AI has been mobilized by Leonard in the following use cases:

- Predictive maintenance for public transportation systems, with VINCI Energies
- **Predictive maintenance for industry and infrastructure operation,** with VINCI Construction, VINCI Concessions, VINCI Energies
- Optimization of aircraft carbon emissions, with VINCI Concessions
- Construction site productivity analysis, with VINCI Construction
- **Prediction of business drift, financial forecasting and competitive positioning,** with VINCI Energies and VINCI Construction
- Generative design for industrial design and civil engineering, with VINCI Energies and VINCI Construction
- Logistics optimization, with VINCI Energies
- Geophysical soil analysis, with VINCI Construction
- Optimizing operations on telecom infrastructures, with VINCI Energies
- Operational safety improvement, with VINCI Construction and VINCI Energies
- Conceiving overhead cables' catchblock system automatically for maintenance purposes, with VINCI Energies
- Building optimized CVC networks automatically, with VINCI Energies
- Optimizing a press' intensity for animal food production, with VINCI Energies
- Optimizing retail store operations and revenues with customer behavioral analysis, with VINCI Energies
- **Building a customizable predictive maintenance platform for industrial machines**, with VINCI Energies
- Building a solution to manage maintenance in complex luggage handling system in airports, with VINCI Energies
- Digitize industrial documentation by automating data extraction and processing in maintenance and inspection engineering, with VINCI Energies
- Detecting and counting safety equipment on roads and construction sites automatically, with VINCI Construction
- Improve the sourcing of commercial leads, with VINCI Construction
- Automate ground monitoring through satellite data, with VINCI Construction
- Improve the efficiency of IT ticket resolution, with VINCI Energies

11