

July 6th, 2023

CDI Leaders' Summit

Accelerating Sustainable Transition in Europe



CERN, Geneva

Agenda

01

About today

02

About us

03

Our partners & speakers

04

Innovation 4 Change

05

CDI Leaders' Summit

06

Team

07

Notes



Welcome to the CDI Leaders' Summit!



About today

Over the last five years, we have already been subject to major global shocks through the Covid-19 pandemic and the war in Ukraine. As a direct consequence of these and other stress factors, global supply chains and systems are fragmenting towards a multipolar world order that is likely going to define this upcoming decade.

We have all been looking into strategies towards effective and sustainable development within these increasingly chaotic and complex times and thus would like to act upon what we believe is one of the most effective strategies towards dealing with this instability - *collaboration*.

Collaboration is a key opportunity for long term sustainable development of industry and institutional ecosystems. It is also a very effective short-term measure for the current demands and stresses affecting the European industry.

If there is one thing we wish from you for today, it would be to leave with optimism for the future of Europe and share this potential of collaboration, especially across excellences.

Collaboration, when managed with trust and dedication, can be a key lever for European Industry and Institutions towards leading global sustainable development.

Lastly, this collaboration across sectors and industries will be the key to be more successful, unlocking new sustainable value chains, and decreasing the increasing risks of this complex world by working together.

Welcome!

Collaborating for a better future

Future with tech & talents

MORNING

The morning session focuses on accelerating the sustainable transition through talents and education. Through the expo of *Innovation 4 Change*, our collaborative future laboratory for corporates, institutions and top multidisciplinary postgraduate talents in Europe, participants can get an insight into the futuristic solutions to support the UN Sustainable Development Goals.

Moreover, this will be complemented by insightful panels and keynote speeches from our partners to understand how global challenges in decarbonisation can be tackled. We are looking forward to and invite you to engaging and exchanging with the present institutions on sustainability and related topics.

In the afternoon, we put the spotlight on the topic of decarbonisation in an industry context. Therefore, we dedicate our session to introducing the decarbonisation landscape from a research point first and follow with a C-suite panel on strategic roadmaps from selected companies to discuss the different approaches to such a complex topic from an entrepreneurial perspective.

We want to give room to actionable initiatives and kindly invite our participants to exchange and discuss on projects with the other companies to create collaborative opportunities along the respective value chains.

Decarbonisation with industry leaders

AFTERNOON

Agenda of the Day

FUTURE WITH TECH & TALENTS

- 09:00 ● **I4C 2040 Expo at CERN**
Expo by PhDs & MBAs
- 10:30 ● **Welcome - CERN & CDI**
Dr. Nordberg & Ms. Petocchi
- 10:45 ● **Institutions & Industry Collaborations**
Panel from CERN, ESA, EIA
- 11:15 ● **I4C Demo Day & Award Ceremony**
3 projects addressing UN SDGs presented with Q/A & feedback from jury
- 11:45 ● **An Exchange Between Current & Future Leaders**
Chat with Mr. John Elkann, Dr. Fabiola Gianotti & Dr. Amelie Schoenenwald
- 12:30 ● **Networking Lunch**
Networking on Companies Decarbonisation Projects

DECARBONISATION WITH INDUSTRY LEADERS

- 14:00 ● **Industry Decarbonisation Landscape**
Contextualization by CDI of the European Decarbonization Challenge
- 14:15 ● **Strategic Decarbonisation Opportunities & Risks**
A cross-sectors dialog between Industry Leaders + Q&A
How companies can prepare for the transition: a dialogue cross-industry of strategic decarbonisation roadmaps
- 14:45 ● **Actionable Decarbonisation Initiatives & Projects - An interactive Executive Discussion**
Facilitating companies decarbonisation journeys through innovation and collaboration & sharing business opportunities from selected executives' perspectives.
- 15:15 ● **Collaboration pitches by 6 Companies - 5 min. each**
Sharing collaboration opportunities from selected partners
- 15:15 ● **Interactive Discussion - Meet & Exchange with the 6 pitching companies at dedicated hightables**
Discussing on the business opportunities presented & exchanging executives' perspectives.
- 15:55 ● **Wrap-up**
Companies and executives sharing and summarizing learnings & main outcomes
- 16:00 ● **Networking Aperitif**
- 17:30 ●

About us



CDI

Collège des Ingénieurs (CDI) is an independent institution that was founded in 1986 in Paris. CDI later expanded to Munich in 1996 and to Turin in 2009, underlining the internationality of the institution.

Based on our philosophy *Learning through Action*, our mission is to enable future leaders and organisations to face the challenges of the future through collaboration. CDI's mission is expressed through our programs on Talent and Innovation Management, offering both a dedicated MBA for STEM backgrounds and innovation advisory services.

CERN

CERN, the European Council for Nuclear Research, is one of the world's largest and most respected centres for scientific research. With a focus on breakthrough research in physics, CERN is home to the world's most powerful particle accelerator - the Large Hadron Collider.

The Globe of Science and Innovation embodies CERN's message to society in the fields of science, particle physics, cutting edge technologies and their applications in everyday life.

IdeaSquare is the innovation space at CERN, fostering collaboration and creativity to ideate solutions for the future of humankind.

Partners & Speakers

Dr. Fabiola Gianotti

Dr. Gianotti is the DG of CERN. She received her Ph.D. in experimental particle physics from the University of Milano in 1989, and has been a research physicist at CERN since 1994. Her research is focused on detector R&D, construction, software development, and data analysis in CERN. She was the spokesperson for the ATLAS experiment from 2009 to 2013, and became the first female Director-General of CERN in 2016.

Dr. Markus Nordberg

Dr. Nordberg is the Head of Resources Development of the Development and Innovation Unit (IPT-DI) at CERN. In addition to coordinating multi-disciplinary innovation projects at IdeaSquare at CERN, he also coordinates the EU-funded sensor and imaging R&D&I initiative ATTRACT aiming at both scientific and societal impact of disruptive co-innovation. He has a degree both in Physics and in Business Administration.

Dr. Pablo Garcia Tello

Dr. Garcia Tello is the Head of the CERN EU Office that develops new EU-funded projects and initiatives. He graduated in Physics from the Complutense University of Madrid, and has a PhD in Material Science. He was Postdoctoral Associate and Teaching Assistant of Semiconductor Processing Technology in the Department of Material Science and Engineering at the MIT.



Partners & Speakers



ESA

The European Space Agency (ESA) is Europe's gateway to space. Their mission is to shape the development of Europe's space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe and the world. Established in 1975, they work together with the 22 Member States to push the frontiers of science and technology, and promote economic growth in Europe.

Davide Coppola

Davide Coppola is Head of Space Applications Initiatives section at ESA Space Solutions. He has been with the European Space Agency for over 10 years and has a long standing experience as project manager. Davide has been in charge of more than 30 projects in various domains, including Energy, Health, Smart Cities, Maritime & Offshore, Safety & Security, and others.

Dr. Amelie Schoenenwald

Dr. Amelie Schoenenwald has a passion for science and technology and is currently working in the field of rare immunological diseases as a project manager in the medical department of a global pharma company. She is part of the 2022 European Space Agency Astronaut Group that was selected out of 23,000 applications from all over Europe.

Partners & Speakers

Exor

One of Europe's largest diversified holding companies controlled by the Agnelli family. Its portfolio is principally made up of companies in which Exor is the largest shareholder: Ferrari, Stellantis, CNH Industrial, Iveco, Juventus FC, The Economist, GEDI Gruppo Editoriale and SHANG XIA.

John Elkann

John Elkann is the CEO of Exor. In addition, he is serving as Chairman of Stellantis, Ferrari, the Giovanni Agnelli Foundation and GEDI Gruppo Editoriale; he is also a member of MoMA and of the JP Morgan International Council. In 2004, Mr. Elkann took the leadership of the family business and oversaw crucial deals such as Fiat's 2009 M&A operations with Chrysler and subsequently with PSA (2021) forming the current Stellantis Group. Besides his roles with Exor's portfolio, Mr. Elkann is the founder of the investments management company Lingotto and supports early stages organizations through Exor Ventures and Vento, a startup origination program involving Italian aspiring entrepreneurs.



Partners & Speakers

The Economist

The Economist is one of the globe's most prestigious and influential weekly publications, renowned for its in-depth analysis of global news, politics, and economics. Their focus on delivering insights, intelligent perspective, and objective reporting sets it apart in the world of journalism.

Catherine Howe

Catherine Howe is the Head of Content and Programmes, Custom Events at The Economist. She received her M. Phil. in Screen Media and Cultures from the University of Cambridge and has been working as a cross-sector journalist in different institutions, covering topics in pharma, mining, and aerospace.

Edward Glanville

Edward Glanville is a Senior Programme Editor & Head of Sustainability Events Programming at The Economist. He has 7 years of experience working in project management of multiple industry-leading large scale international events, scaling to 10,000+ attendees delivering new processes and tech to reach goals

Partners & Speakers

European Innovation Council

The EIC is Europe's flagship innovation programme to identify, develop and scale up breakthrough technologies and game changing innovations. It has been established under the EU Horizon Europe programme and has a budget of €10.1 billion to support innovations throughout the lifecycle from early stage research, to proof of concept, technology transfer, and the financing and scale up of start-ups and SMEs.

A unique feature of the EIC is that it provides funding for individual companies (mainly startups and SMEs) through both grants and investments. The investments currently take the form of direct equity or quasi-equity investments and are managed by the EIC Fund.

Francesco Profumo

Francesco Profumo is an EIC Board Member and President of Fondazione Compagnia di San Paolo. He was Minister of Education, University and Research from November 2011 to April 2013 and President of the National Research Council (CNR), from August 2011 to January 2012.

In 2003, Francesco Profumo became dean of the Faculty of Engineering at the Polytechnic University of Turin, a university of which he was rector between 2005 and 2011 where he is currently Full Professor of Electrical Machines and Drives, while he is Adjunct Professor at the University of Bologna.





Innovation 4 Change

Demo Day 2023





What is I4C?



Developed by CDI, CERN IdeaSquare and Politecnico di Torino in 2016, Innovation 4 Change is a collaborative future laboratory for corporates, institutions and top multidisciplinary postgraduate talents in Europe towards the common goal of building a sustainable future together.

During this intensive, 5-month programme, the participants develop innovative and scalable business ideas and practical solutions to respond to the important challenges presented by the partners, that are always related to social, economic and environmental problems of today, supporting the United Nations' Sustainable Development Goals.

I4C aims to train the Future Innovators of Europe by challenging talented MBAs & PhDs to resolve global problems identified by industry & organisations within a European program at CERN through proven scientific methodologies on tech, innovation & change management.

In the 2023 edition, the participants are tackling 10 challenges from the food, health, education, energy, and materials sector, both from Italian and global corporates and institutions.



Challenge #1

Grimaldi



e-Chlora



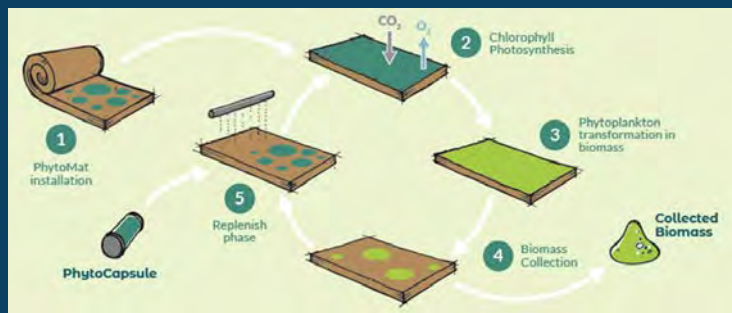
Challenge Statement

How to make a terminal's resources useful for the local community?

Tech Collaborations

Knowledge Transfer/ CERN connections

- SMIL
- SNIFFIRDONE
- LASinAFuel



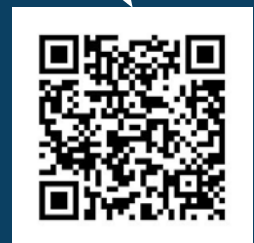
1 m² = 34 CO₂ absorbed by a fully grown tree

Solution Statement

PhytoMat is a simple, transparent, and scalable solution for effective CO₂ capture and climate change mitigation.

It leverages the capability of an cyanobacteria species to photosynthesize to bind CO₂ and produce biomass for further valorization.

To learn more about e-Chlora, scan the QR code!

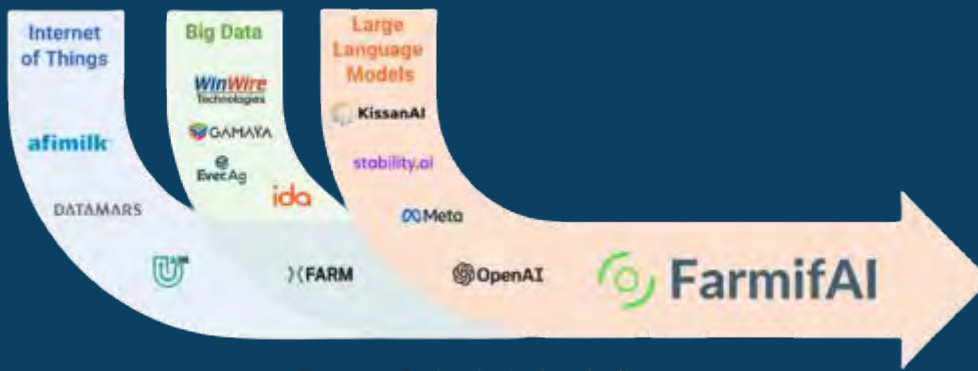


FarmifAI



Challenge Statement

Implications of open AI systems to speed up Innovation in Animal Nutrition and Health (ANH) for more sustainable global food production systems



Tech Collaborations

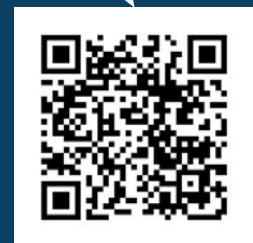
Knowledge Transfer/ CERN connections

- CernVM-FS
- C2MON
- Root

Solution Statement

FarmifAI is an assistant which provides different stakeholders with an ecosystem of knowledge and data-powered services in agricultural animal health.

To learn more about FarmifAI, scan the QR code!



Challenge #3

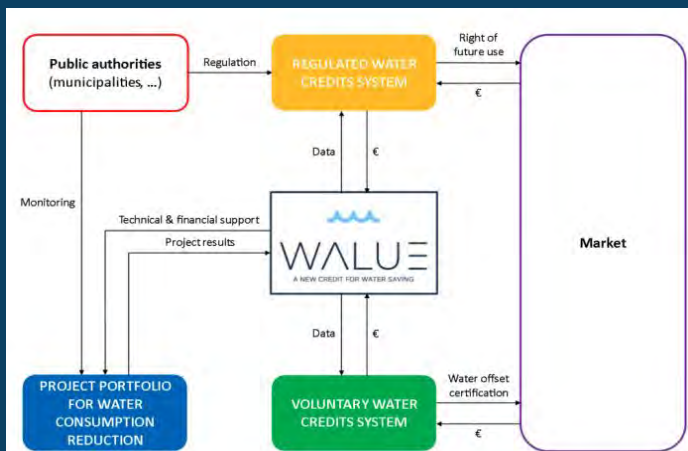
CNH Industrial



Value

Challenge Statement

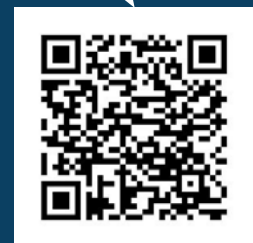
How can we support our farmers in creating a resource-conscious and sustainable agriculture ?



Solution Statement

Water Credit system that incentivizes water conservation through Regulated and Voluntary Credits, financed by non-essential usage fees and impact investment. The platform aims at connecting water off-setters and water-neutrality aspiring stakeholders, starting from agriculture as a sector with direct implications of water scarcity and drought risks.

To learn more about Value, scan the QR code!



WEEE FEST

Challenge Statement

Solve the problem of identifying, collecting and sorting Waste from Electrical and Electronic Equipment (WEEE)



Tech Collaborations

Knowledge Transfer/ CERN connections

- *ATTRACT*

Solution Statement

An eco-conscious festival, as an approach to e-waste management, fostering responsible disposal, recycling, and sustainable resource recovery. The solution touches upon the concept of innovation not being just in technology, but also innovating community engagement. But it's just the beginning.

To learn more about WEEE Fest, scan the QR code!

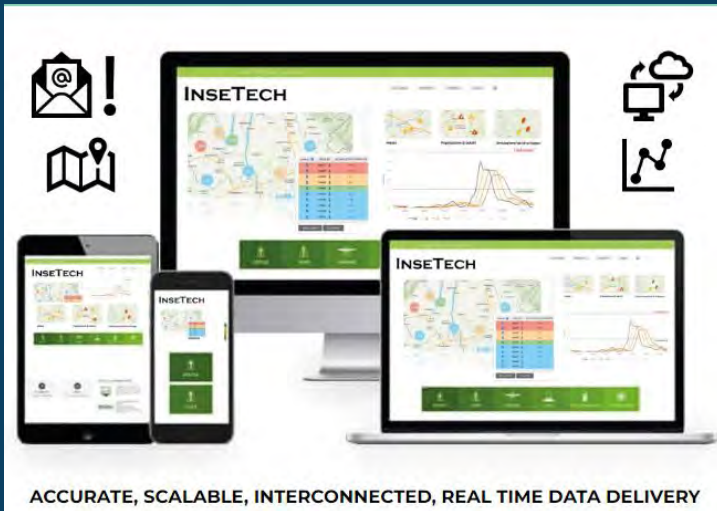


Insetech



Challenge Statement

How to integrate novel pest control approaches into agriculture?



Tech Collaborations

Knowledge Transfer/ CERN connections

- *Cern VM-FS*
- *Root*
- *NextMR-IAA*
- *PERSEFONE*
- *SNIFFDRONE*
- *SENSEI*
- *ULTRARAM*

Solution Statement

The Google Maps of pest prediction - a holistic and interconnected, AI-backed pest-forecasting system coupled with targeted pest control monitoring measures to prevent invasion and increase production yields.

To learn more about Insetech, scan the QR code!



SoilSoul

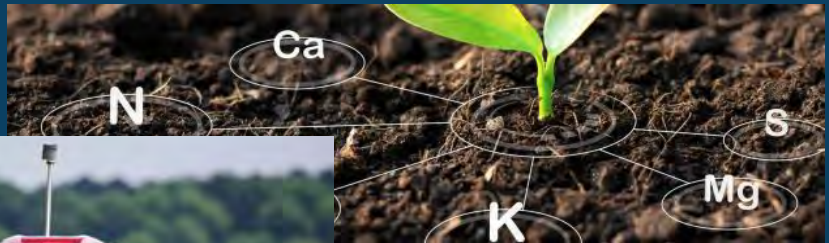
Challenge Statement

How to accelerate global sustainability with Edge Data Centers

Tech Collaborations

Knowledge Transfer/ CERN connections

- *AHEAD*



Solution Statement

Crabby is an autonomous robot leveraging edge computing to continuously analyze soil parameters in agricultural fields, enhancing crop productivity and sustainable farming practices.

To learn more about SoilSoul, scan the QR code!



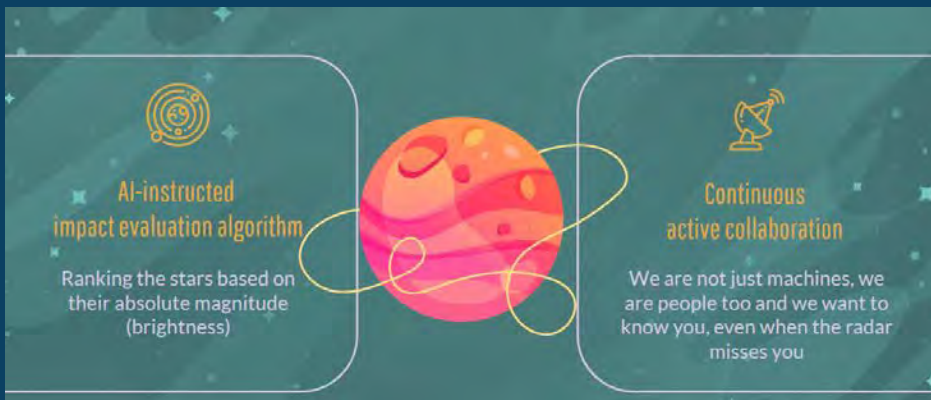
Il cielo itinerante



LA GALASSIA ABBANDONATA

Challenge Statement

How to reverse the data on school dropouts?



Solution Statement

A platform empowering non-profit associations to foster collaboration and enhance their ability to implement impactful initiatives. Through the provision of a range of services for people that want to get involved as well as for associations, the Galassia project builds bridges between important stakeholders of education.

To learn more about La Galassia Abbandonata, scan the QR code!

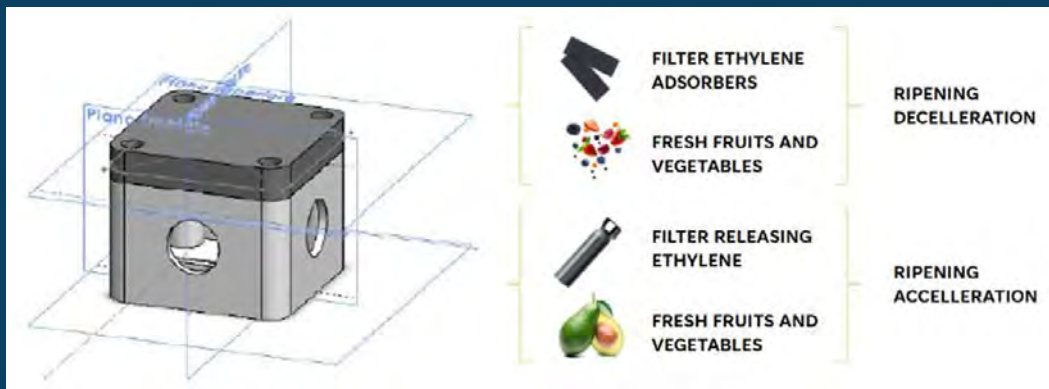


UNripe



Challenge Statement

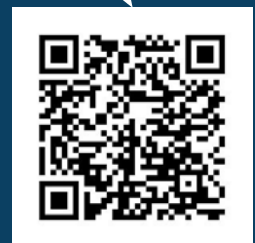
Creating Value from Bio Waste: the example of the ITCILO Campus



Solution Statement

UNripe, featuring an innovative ethylene-controlling box, extends the shelf life of fruits, significantly reducing food waste and promoting sustainability. It can be utilized to both accelerate and decelerate the ripening process, giving more control to consumption times of fruit and vegetables.

To learn more about UNripe, scan the QR code!



CATAPULT

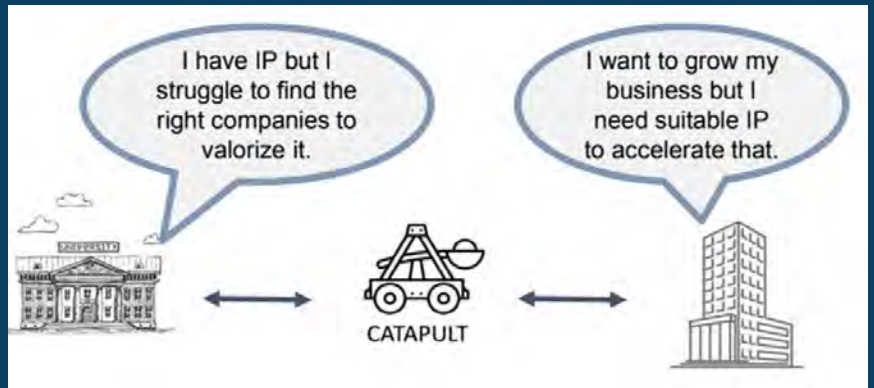
Challenge Statement

How might we create a metrics-driven solution that helps impact investors quantify health security risks associated with funding emerging biotech?

Tech Collaborations

Knowledge Transfer/ CERN connections

- *Invenio*



Solution Statement

CATAPULT (CAtalyzing Technology Advancement through Patent Utilization and Licensing) is a platform facilitating tech transfer by connecting IP owners with IP seekers and enabling Technology Transfer Offices to present their patent portfolios adequately.

To learn more about CATAPULT, scan the QR code!



Juventus Football Club

4whatitsworth

Challenge Statement

How to engage fan bases for community development



Solution Statement

4whatitsworth is a Juventus branded initiative to aggregate, disseminate, fund and implement social projects. Based on ESG concerns, a call to action is launched for the submission of projects from Juventus-related stakeholders, such as fan clubs and academies. The best projects are selected and uploaded in our platform where users can contribute in terms of skills, money and time based on their interests and follow the periodic updates provided by the project owners.

**To learn more about
4whatitsworth, scan the QR code!**





CDI Leaders' Summit 2023



Our participants



Alta Scuola Politecnica

Alta Scuola Politecnica is a multidisciplinary and unique international honour program created by Politecnico di Milano and Politecnico di Torino. It selects 150 exceptionally talented and motivated students to their Masters programs in Architecture, Design, and Engineering and one of the two universities.



Automar

Automar S.p.A., founded in 1974 in Italy, is a leading company in integrated logistics for the automotive industry, thanks to its cooperation with the world's leading manufacturers. The company stands out for its experience and know-how in logistics management and vehicle transportation, guaranteeing highly professional and efficient services.



Baosteel

Baosteel Group Corporation is a state-owned sole corporation of the Chinese State and the 3rd largest steelmaker on the globe. Their products are used in different sectors, from automotive to marine and consumer goods.



Baomarc Automotive Solutions

Started out as a company that designed and manufactured industrial machinery (roll-forming lines and bending equipment) having acquired technological know-how and expertise, Baomarc Automotive Solutions SpA is a producer of component parts for the automotive industry and has become a leader supplier to the major car makers.



Biocentis

Biocentis is an Imperial College London spin-out on a mission to develop eco-friendly genetic solutions to effectively and safely control the dangerous insect species that spread disease to humans, reduce biodiversity, or threaten food security, leveraging CRISPR to develop self-limiting gene drive technologies that are suitable for a broad range of applications.

Our participants

Bloom Biorenewables



Bloom Biorenewables is breaking down biomass to provide a cost-competitive route to source molecules from plants. Their products can be used as a building block for various products such as cosmetics, functional textiles, or bioplastics .

Camera di Commercio Italiana in Svizzera



The Chamber, promoter of the Italian system, is a key reference point for the development of Italian economic activities in Switzerland, fosters profitable business and personal relationships by enhancing the Italy brand in every context.

Claris Ventures



Claris Ventures is the first VC firm in Italy with focus on biopharma projects ready to start clinical studies in 12-24 months, particularly in oncology, immunology, rare diseases and other therapeutic areas with limited treatment opportunities.

CNH Industrial



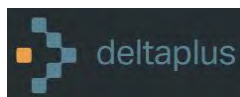
CNH Industrial is a world-class company specialized in equipment and services for Agriculture and Construction. The Company operates through its brand portfolio including Case IH, New Holland Agriculture, CASE and New Holland Construction Equipment.

Cubogas



Cubogas, a wholly-owned subsidiary of Greenture, is an international leader in the design, development and production of technological solutions for the supply of natural gas, biomethane and hydrogen for automotive use.

Our participants



DeltaPlus Venture

DeltaPlus Ventures is an advisory company dedicated to deep tech entrepreneurship in Europe that is relentlessly focused on discovering ambitious talents in scientific and deep tech space.



Edison Next

Edison Next supports businesses with a transformation process that combines sustainability and competitiveness. The company aims to be partner of with its customers, along the decarbonization journey, from carbon footprint analysis to the design and implementation of solutions, continuously monitoring the results.



EHL Group

EHL Group is the global reference in education, innovation and consulting for the hospitality and service sector. Ecole hôtelière de Lausanne (EHL) is an ambassador for traditional Swiss hospitality and has been a pioneer in hospitality education since 1893. It has created a unique professional community of over 25,000 hospitality managers.



Fameccanica

Fameccanica is an International Group specialized in Automation and Robotics for the consumer goods industry. It is part of Angelini Industries, a leading Italian multi-business industrial group active in 26 countries with 5,700 employees.



Ferrari

Ferrari's story officially began in 1947 with its first road car, the 125 S. The company has travelled a long way since then, but its mission has remained unaltered: to make unique sports cars that represent the finest in Italian design and craftsmanship, both on the track and on the road. Ferrari is the definition of excellence and sportiness, with numerous Formula One titles won. Every car is unique in design, technology and luxurious styling.

Our participants

Ferrovie dello Stato Italiane

FSI is one of the largest Italian company at the center of the Italian mobility system, leader in rail passenger and freight transport. FSI is contributing to a multimodal mobility of people and goods with an increased focus on sustainability, safety and operational excellence, not only in Italy but also through a consolidated international presence.



Fondazione Compagnia di San Paolo

Founded in Turin in 1563, is today one of the largest private foundations in Europe aiming to achieve three major objectives: Culture, People, Planet. With his contributions and projects, Fondazione Compagnia San Paolo promotes culture, the support of people within a more inclusive society and the protection of the planet in a perspective of innovation and sustainability.



GHS Fund

The Global Health Security Fund is a Geneva-based nonprofit association supporting impact investment in global health security innovations. The GHS Fund is designing and implementing a model for innovation ecosystem development that identifies and helps scale the most promising solutions creating financially sustainable impact in their own communities.



Goldbeck Solar

Goldbeck Solar is an international company specializing in the turnkey construction of industrial and large-scale photovoltaic power plants. Its services cover the entire value chain. Starting with project development, engineering, construction, operation and maintenance of the plant during the entire operating life to the financing of selected projects or the sale of energy as a service.



Grimaldi Group

Established in 1947, Grimaldi is a fully integrated multinational logistics Group specialising in maritime transport of cars, rolling cargo, containers and passengers, wholly owned by the Grimaldi family. It has branches and subsidiaries in over 25 countries.



Our participants



Heidelberg Materials

Heidelberg Materials is one of the world's largest integrated manufacturers of building materials and solutions, with leading market positions in cement, aggregates, and ready-mix concrete. They have more than 51,000 employees at almost 3,000 sites in over 50 countries. They are also opening up new opportunities for customers through digitization services.



Il cielo itinerante

Il cielo itinerante aims to bring girls and boys in situations of educational poverty and/or social hardship closer to the study of STEM subjects by experimenting with innovative training methods, both in the areas of intervention and in the methods of operation.



Iren

Iren was born on July 1, 2010 from the merger of Enìa into Iride. The Group is active in electricity, gas, thermal energy for district heating, management of integrated water services, environmental and technological services, as well as providing other public utility services (public lighting, traffic light services, facility management, energy planning and consulting).



International Training Centre of the ILO

The International Training Centre of the ILO (ITCILO) is an advanced technical and vocational training institution in Turin, Italy. Founded in 1964 by the International Labour Organization and the Government of Italy, the Centre's mission is to achieve decent work for all women and men. It provides practical, needs-based training and learning, and assists the ILO's pursuit.



IVECO Group

Iveco Group N.V. is home to 8 unique brands: IVECO for heavy, medium, and light-duty trucks; FPT Industrial, for powertrain technologies in different sectors; IVECO BUS and HEULIEZ, bus and coach brands; IDV, specialised defence and civil protection equipment; ASTRA, large-scale heavy-duty quarry and construction vehicles; MAGIRUS, firefighting vehicle and equipment manufacturer; and IVECO CAPITAL, the financing branch.

Our participants

Juventus Football Club

Founded in 1897, Juventus is one of the most popular and successful football clubs on the planet. Tradition is at the heart of one of the oldest Italian football club, but with that comes the will to innovate, and Juventus prides itself on its ability to set the tone both on the pitch and beyond, combining its on-field objectives with off-field growth.



Lane Digital Consulting

LANE is a digital transformation consulting firm specialized in business efficiency. Its mission is to help companies reclaim time by optimizing and systemizing the way they work thanks to leading digital tools, connecting with both enterprise and startup companies worldwide.



Leonardo

Leonardo is a global high-tech player in Aerospace, Defence and Security, playing a strategic role in the industrial development of the countries in which it operates, with a direct presence in five domestic markets (Italy, the UK, the US, Poland, and Israel) and a commercial network extending worldwide. Innovation, research, digital industry and sustainability are the cornerstones of its business worldwide.



LU-VE

LU-VE Group is one of the major manufacturers in the world in the heat exchanger field. It operates in various segments of the market: refrigeration (commercial and industrial); process cooling for industrial applications and power generation; air conditioning (civil, industrial and close control); glass doors and closing systems for refrigerated counters and cabinets.



MAN Energy Solutions

MAN Energy Solutions enables its customers to achieve sustainable value creation in the transition towards a carbon neutral future. Addressing tomorrow's challenges within the marine, energy and industrial sectors, we improve efficiency and performance at a systemic level. Leading the way in advanced engineering for more than 250 years, we provide a unique portfolio of technologies.



Our participants



Marelli

Marelli is one of the world's leading global independent suppliers to the automotive sector. With a strong and established track record in innovation and manufacturing excellence, our mission is to transform the future of mobility through working with customers and partners to create a safer, greener and better-connected world.



Nestlé

Nestlé is the world's largest food and beverage company offering products and services with a portfolio that covers almost every food and beverage category – offering products and services for all stages of life, every moment of the day, helping people care for themselves and their families.



Newcleo

Privately funded and headquartered in London, Newcleo was launched in 2021 – and since raised a total of EUR 400m – to be an innovator in the field of nuclear energy. Its mission is to generate safe, clean, economic and practically inexhaustible energy for the world, through a radically innovative combination of existing, accessible technologies.



New Holland Agriculture

New Holland is a world-leading agricultural equipment brand with over 125 years of experience. The brand is the partner that farmers and growers can rely on to provide innovative, efficient, and sustainable farming solutions. New Holland offers the broadest choice of easy-to-operate agriculture equipments complemented by advanced Precision Land Management solutions.



NHOA Energy

NHOA (formerly Electro Power Systems – Engie EPS), is a global player in energy storage, e-mobility and electric vehicles fast charging infrastructure. We develop technologies enabling the global transition towards clean energy and sustainable mobility.

Our participants

Politecnico di Torino

The Politecnico di Torino is one of the most important universities in Europe for engineering and architecture studies, strongly committed to collaboration with industry. Politecnico is a research university that participates at the highest levels of international scientific research.



Prima Industrie Group

Prima Industrie heads a leading Group in developing, manufacturing and marketing of laser systems for industrial applications, sheet metal processing machinery, industrial electronics, laser sources, and additive manufacturing solutions.



Prysmian Group

Prysmian works to be the sustainable link to the future. For more than 150 years, the company has been leading the industry of high-technology cables & systems for energy and telecommunications. They service emerging markets and communities across the globe with a diversified business model by portfolio and geographical area.



Seedstars

Seedstars has grown into a global community that believes in the innovative potential of emerging markets. We aim to contribute by running the Seedstars World Competition, Seedspace hubs, various acceleration and growth programs and, investing in high-growth companies from Latin America, Africa, Middle East, Eastern Europe, and Central and South Asia.



Snam

Snam is Europe's leading operator in natural gas transport and storage, with an infrastructure enabling the energy transition. Snam operates a pipeline network of ca. 41,000 km in Italy, Austria, France, Greece and the UK and the company manages 3.5% of the world's gas storage capacity. With 80 years of experience in the management and development of networks and plants, Snam promotes the energy transition across territories, through investments in green gases (biomethane, hydrogen) and energy efficiency.



Our participants



Stellantis

Stellantis N.V., based in Hoofddorp, the Netherlands, is a leading European automobile manufacturer. The company comprises 14 brands, and is the fourth-largest automobile manufacturer in the world in terms of vehicles sold. Stellantis aspires to lead the change to sustainable mobility through new technologies to add value for their stakeholders.



Switzerland Innovation Park

The park creates a new platform for research, development and innovation on the site of the Dübendorf airfield. It promotes cooperation and knowledge exchange between Zurich's universities and research institutions with the private sector with the aim of supporting and accelerating the translation of research findings into marketable products and services.



TechEnergy Ventures

TechEnergy Ventures is the Corporate Venture Capital of the Energy Transition Division of Tecpetrol, part of Techint Group. The venture invests globally in early-stage to growth technology companies and support our investments with critical scale-up capabilities.



Università di Scienze Gastronomiche di Pollenzo

UNISG is an international reference point for study, research, transmission, and innovation in Gastronomic Sciences, with a particular conceptual focus on the relationships between food, ecology, and sustainability. The university, founded in 2004 by the international non-profit association Slow Food in cooperation with the Piedmont and Emilia-Romagna, is a ministerially recognized, private non-profit institution.



World Health Organization

The WHO is the United Nations' health agency. The World Health Organization's mission: to promote health, keep the world safe, and serve the vulnerable. Working through offices in more than 150 countries, WHO staff work side by side with governments and other partners to ensure the highest attainable level of health for all people.

Pathway to decarbonisation

Key learnings from our previous events

Integration between key technology clusters

Closing gaps along and across different value chains

These are the main challenges to tackle

23 March

3 Key Tech Clusters emerged



Hydrogen



Carbon Capture, Storage & Utilisation



Renewables & Electrification

11 May

What we took as a next step

Deep-dive workshops on emerged clusters with 15+ companies

Need for cross-industry collaboration in between these clusters underlined

How to connect offtakers and producers of Hydrogen?



How can CO2 be valorized?



How can collaborative electrification decarbonize multiple industries?



Action Points from the thematic discussions

23 March

The first CDI Leaders' Summit aimed at assessing the decarbonisation potential across different industries and value chains through an interactive roundtable. The participants came from over 10 different companies, spanning industries from manufacturing and automotive to oil & gas and energy.

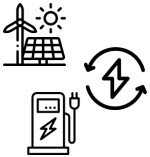
Together with them, our team evaluated and discussed the outcomes from the precedent research, that included a survey answered by 50+ people from diverse sectors,

and opened up an in-depth discussion about gaps and challenges in industrial decarbonisation.

Through the framework of a Decarbonisation Value Tree, participants assessed the importance of different technologies in the decarbonisation environment.

Complementary to this, two matrices regarding the maturity and investments into different technologies supported the workshop.

Takeaways



Across **all industries**, higher maturity and >40% of investments are associated to **renewables, energy efficiency, and electrification**.

Mobility and Energy (most representative*) seem to define transversal tech maturity across clusters.



Storage technologies make up **20%** of investments in the **telecom, energy, and mobility** industry.

Newer technologies (Alternative Fuels, CC & Smart Grid) are less invested into (<20%) across fewer industries (3 out of 7).



The workshop participants **confirmed** most **maturity** levels, but perceived **Renewables** as **only medium-high**, and **Electrification** as **medium-low** maturity.

Similarly, the participants **confirmed** the **strong investment** focus for **Renewables**, but saw **H2 projects** (Storage & Alt. Fuels) and **CC** as important **future investments**.

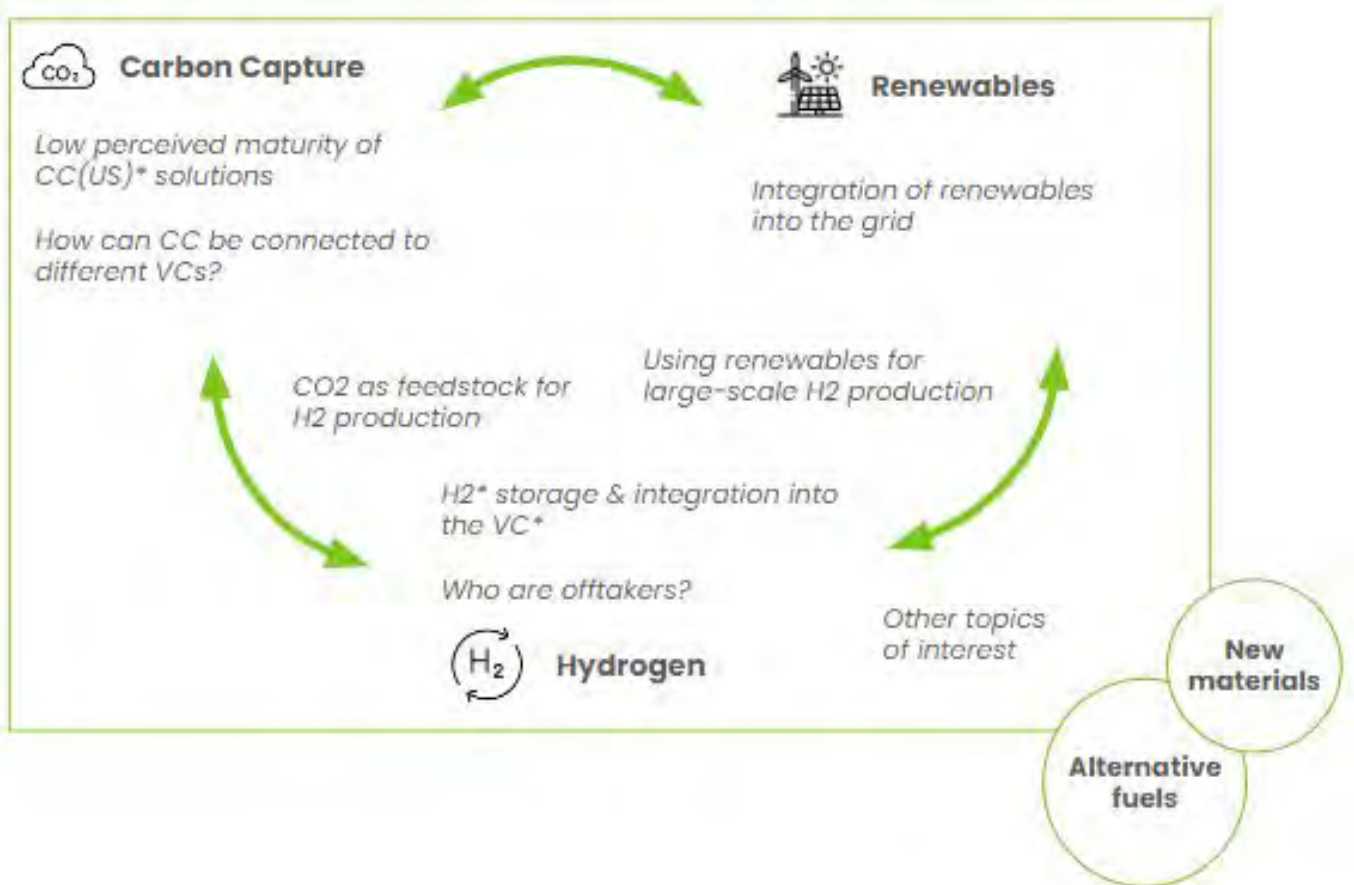
As a result from the first Leaders' Summit, three main tech clusters emerged that were of special interest across different industries: Carbon Capture, Storage & Utilisation, Renewables, and Hydrogen. These clusters are also interconnected, as shown in the diagram below. Industry Executives underlined the importance for integration between the clusters and along different value chains.

The gaps and open questions were a starting point to deepen and establish collaboration between industries during this series of events.

From these outcomes, we focused the preparation of the second event on these three verticals and deep-dived current developments and market trends with experts in these fields.

To prepare the following second event, we brought together the outcomes of the event and included feedback from participants as well as input from other clients regarding the topic of industrial decarbonisation.

Open points & potential connections



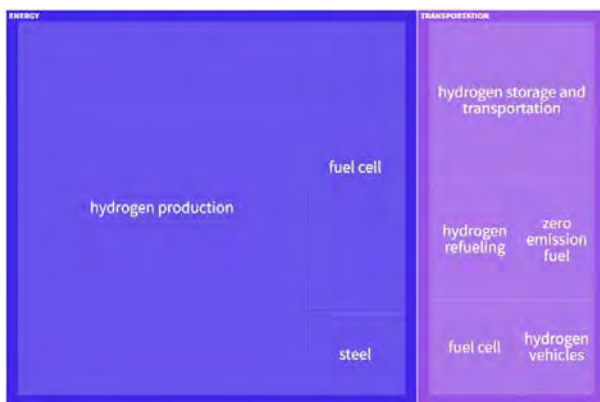
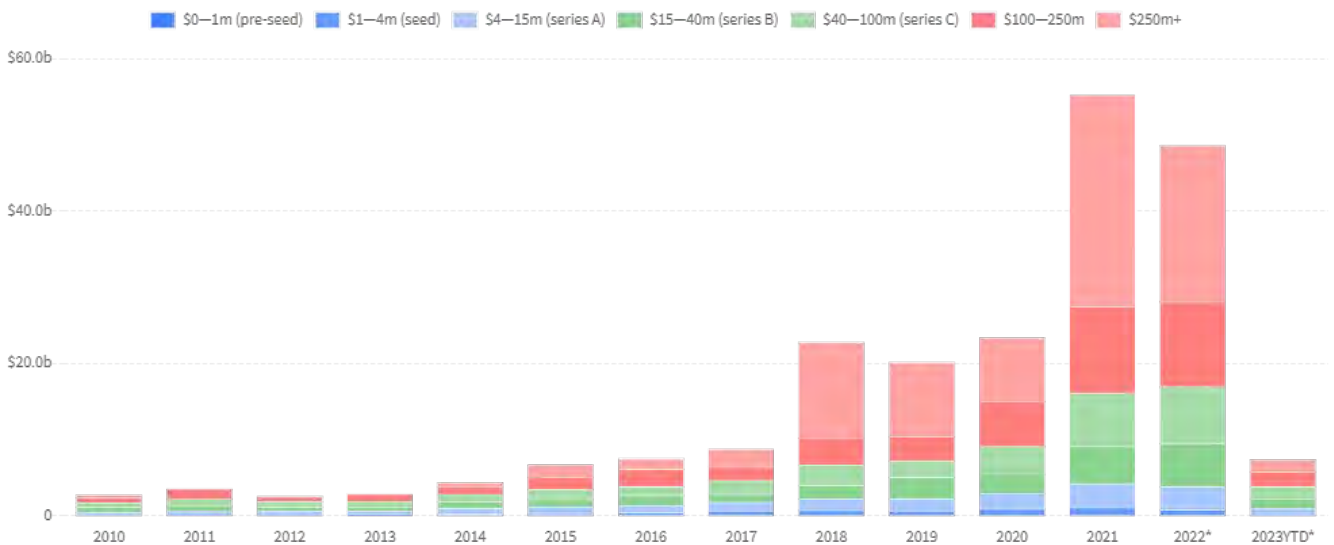
11 May

The second, virtual, Leaders' Summit was structured to ensure both data-based input regarding the three verticals as well as giving participants a platform to exchange in dedicated breakout rooms on these three topics. Therefore, we partnered with Dealroom and Eurotran to present key tech developments and

investments into the verticals in an European context. Below, the main points are summarized. The participants then discussed and established first connection points between industries along the verticals.

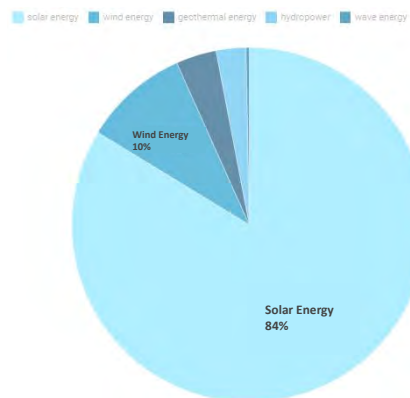
Takeaways

Venture capital investment in climate tech increased massively in 2021-2022 with more than \$50B yearly: \$14.8B in renewables, carbon management and H2 in 2022.



Hydrogen production has attracted the biggest share of VC funding.

Solar attracts 84% of renewables VC funding. Wind, geothermal and hydropower follow.



Source: Dealroom

Pathway to decarbonisation

How are we going forward?

Cross-industry collaboration is central to tackle decarbonisation challenges.

Connections are needed on **multiple levels**: along and across value chains, technologies, and industries,

Key Learnings from our Leaders' Summits

Actionable Steps forward that we as CDI are taking

Facilitate and support collaborations and new connections among our network.

Create bridges together with new actors where we see gaps in value chains.

Join us on this path and become part of our network!

Reach out to our team:
alissa.bauer@it.cdi.eu
alessandro.magny@it.cdi.eu

Team



**Silvia
Petocchi**



**Knut
Stannowski**



**Erika
Vaniglia**



**Raghu
Movva**



**Oliver
Freitag**



**Alessandro
Magny**



**Piera
Della Porta**



**Massimo
Pescarollo**



**Gianluca
Gariani**



**Francesco
Cavallo**



**Alissa
Bauer**

**With the support of Alumni from the CDI
ecosystem**

Team I4C



**Markus
Nordberg**
CERN



**Pablo
Garcia Tello**
CERN



**Tuuli
Utriainen**
CERN



**Catarina
Batista**
CERN



**Silvia
Petocchi**
CDI



**Anna
Bosco**
CDI



**Maurizio
Migliore**
CDI



**Raghu
Movva**
CDI

Our I4C Mentors



**Alessandro
Zanchetton**



**Edoardo
Degli Innocenti**



**Alberto
Uberti**



**Andrea
Balestra**



**Giuseppe
Augelli**



**Alessandro
Casasola**



**Marco
Arese**



**Tobia
Piovesan**



**Marco
Gallo**



**Alessandro
Pantina**



Notes





Notes





Notes





Notes



CDI – IT

Collège des Ingénieurs

Via Giuseppe Giacosa 38

10125, Turin, Italy

Tel. (+39) 011 0268 047

CDI – FR

Collège des Ingénieurs

215 boulevard Saint

Germain

75007, Paris, France

Tel. (+33) 1 49 54 72 60

CDI – DE

Collège des Ingénieurs

Möhlstrasse 6

81675, Munich, Germany

Tel. (+49) 89 600 399 10