Cities' Challenges Pitch Session
22nd November 2022

ACCIÓ
Catalonia & Trade & Investment

Generalitat de Catalunya

Fem avui l'**empresa** del demà
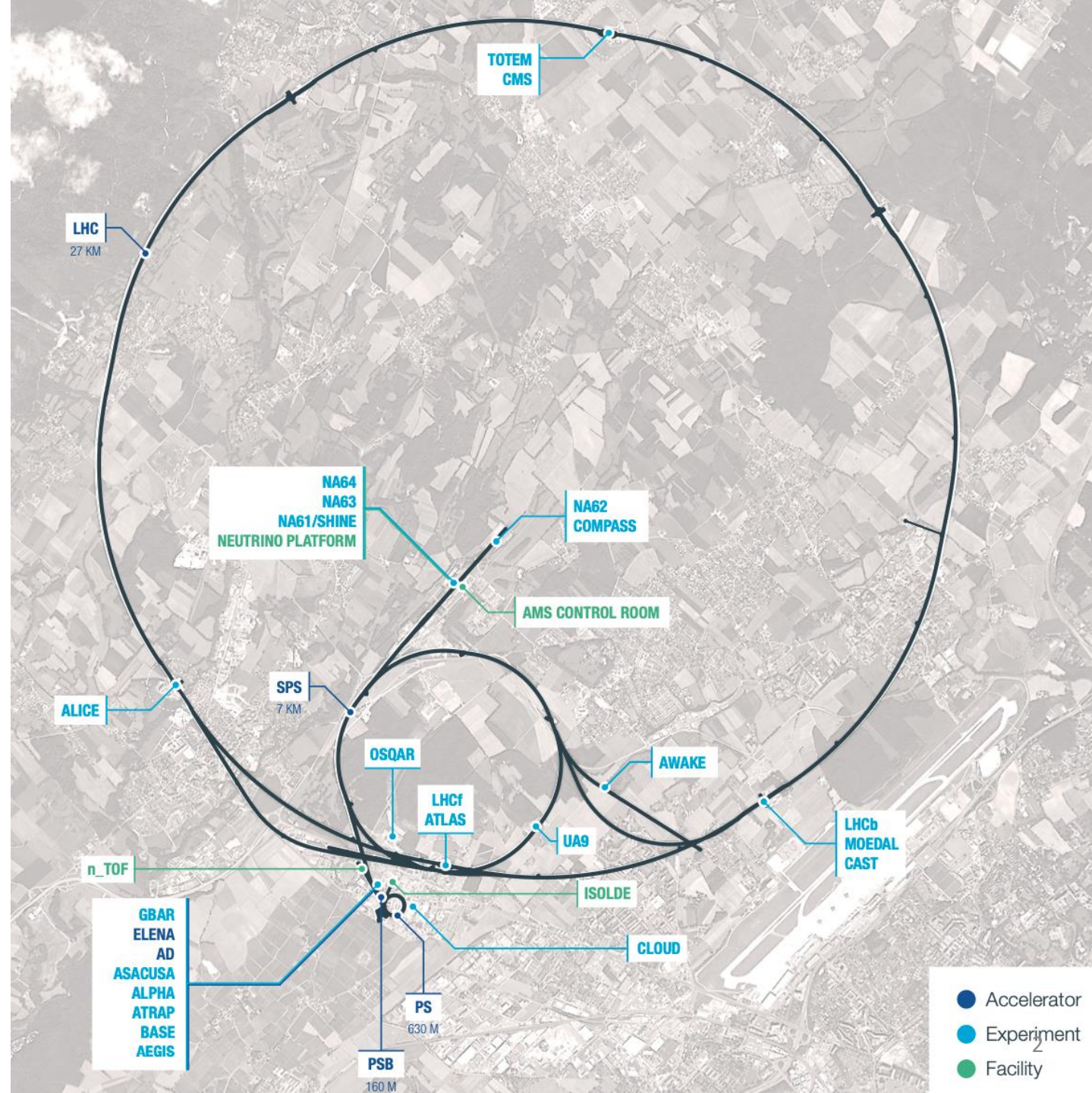
CERN GREEN VILLAGE

Faezeh Abbasi

SMART CITY CHALLENGES
November 2022

11/21/2022

CERN

- 23 Member States
- 3600 employees
- 12'500 scientists (110 nationalities) using the Laboratory's facilities
- 35 Non-Member States with Co-operation agreements with CERN
- 1200 MCHF annual budget

THE INITIATIVE

The Green Village is a visionary initiative linking **CERN's environmental roadmap** with **industrial solutions for sustainability** and the **talent of young innovators**.

ENVIRONMENTAL ROADMAP

TARGETS 2025:
- **GHG Emissions** -> Reduction by 28%
- **Energy Consumption** -> Limit raise by 5%
- Increase the **recycling rate** and reduce waste production.

SUSTAINABLE SOLUTIONS

Examples:
- Smart energy
- Green mobility
- Waste prevention and management

TALENT OF YOUNG INNOVATORS

IdeaSquare:
- +800 students yearly
- +90 projects yearly, driven by young innovators addressing **UN's Sustainable Development Goals**
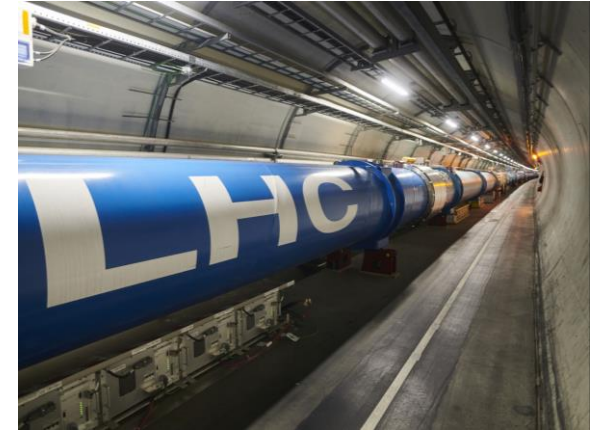- Collaboration with key NGOs

GREEN VILLAGE VALUE PROPOSITION

FROM SOCIETY TO CERN TO SOCIETY

- Enabling <u>rapid access to CERN campus as a test site</u> for solutions linked to environment and sustainability

- <u>Accelerating the commercialization</u> of ideas, technologies and prototypes

- <u>Involving Young Innovators</u> to find new ideas for unforeseen applications

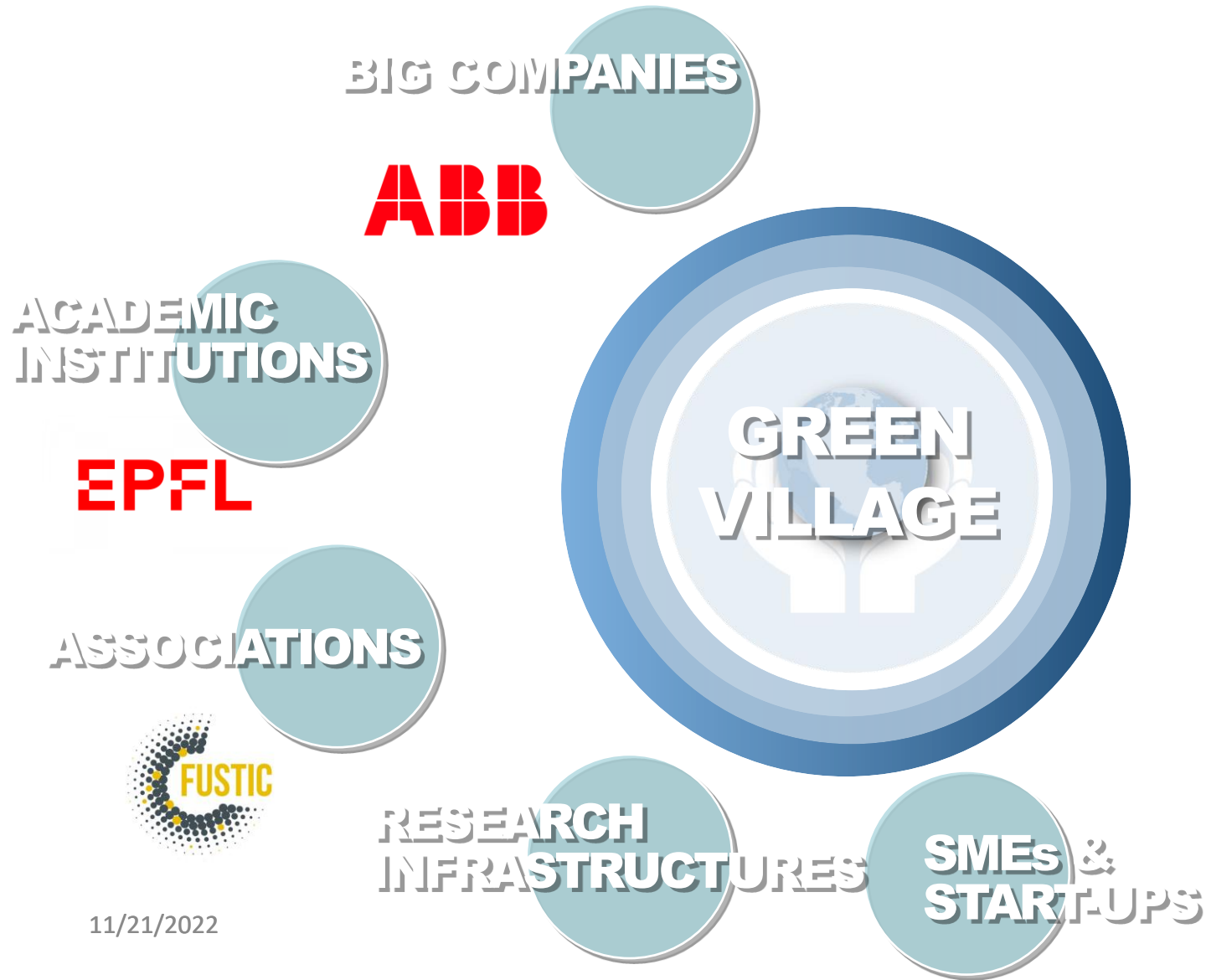# CERN CAMPUS: THE PERFECT TESTBED

- 590 ha (220 fenced)
- 2 main sites and 15 satellite sites
- 670 buildings from 10 m^2 to 20.000 m^2
- 65% built before the 70's
- 70 km tunnels and 80 caverns
- 30 km roads
- 1000 km technical galleries and trenches

- 9000 persons/daily
- 490 hostel rooms
- 8500 working places
- 4300 parking places in Meyrin, 1400 in Prévessin
- 25000 daily movements to- and inter-sites
- Public transport links in CH, not in FR
- 150000 visitors /yearly

WHAT WE ARE LOOOKING FOR

SMART ENERGY

URBAN ANALYTICS

GREEN MOBILITY

CHALLENGES

OFFICE SPACE MANAGEMENT

WASTE COLLECTION

ZERO WASTE SOLUTION

WHO CAN APPLY

BIG COMPANIES

ABB

ACADEMIC INSTITUTIONS

EPFL

ASSOCIATIONS

FUSTIC

RESEARCH INFRASTRUCTURES

SMEs & START-UPS

GREEN VILLAGE

As a **FORWAD LOOKING INITIATIVE** GREEN VILLAGE is welcoming:

- Solutions in Development
- BUT NOT commercialized products

GREEN VILLAGE is open to **everyone** and appreciates the **diversity of partners** and **their solutions**!

WHAT CERN GREEN VILLAGE OFFERS

1. <u>Access to CERN's campus as a testbed</u> for developing and testing sustainable solutions
2. <u>Agility in implementation</u> in a self-governed entity
3. <u>Access to CERN's vast technology knowledgebase</u> and receive rapid and tangible feedback
4. <u>Scientific and technical collaboration</u> with CERN's expert personnel
5. <u>Students, researchers, and innovators</u> with the capacity to apply your ideas in different contexts, in turn helping you to increase their scope and scalability
6. <u>Partnerships for collaborative programs</u> and projects proposals

7. Allows the solution providers a **sort of sand box to test their solutions**, without CERN necessarily being involved in their projects

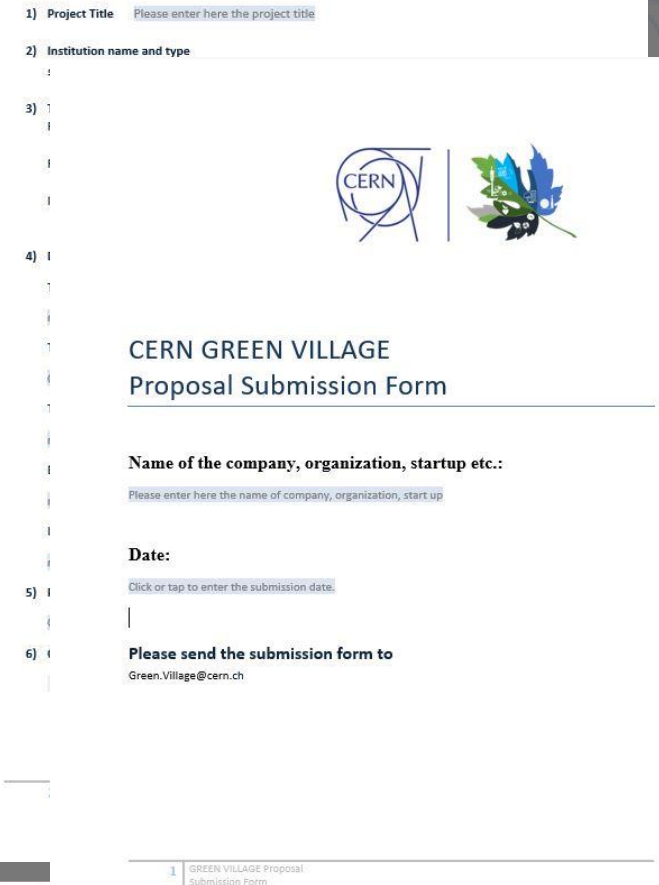8. Solution providers are allowed to **operate on CERN campus in a free way**

PARTICIPATION PROCESS

Proposal Submission Form

Conditions

1. The project must be **a pilot project in test phase**.

2. The project **addresses a clearly identified sustainability challenge(s)**

3. The project is **feasible in a reasonable time scale**/with reasonable amount of **resources**.

4. The project shall **accelerate a sustainable solution** if tested in a realistic city-like environment.

Contact: green.village@cern.ch

1) **Project Title** _Please enter here the project title_

2) **Institution name and type**

3)

4)

CERN GREEN VILLAGE
Proposal Submission Form

Name of the company, organization, startup etc.:
Please enter here the name of company, organization, start up

Date:
Click or tap to enter the submission date.

5)

6)

Please send the submission form to
Green.Village@cern.ch

1 | GREEN VILLAGE Proposal Submission Form

https://sce-dep.web.cern.ch/cern-green-village

Contact: green.village@cern.ch

CERN GREEN VILLAGE

Looking for a testbed for your early-stage sustainable solution or technology?

Discover how you can turn CERN's campus into your test area for your own sustainability solutions

WELCOME TO CITY LAB

TORINO CITY LAB

CITTA' DI TORINO

WHAT IS
TORINO CITY LAB

What is Torino City Lab

An "open laboratory"

Torino offers itself and its assets to test breakthrough solutions in any domain of public interest to shape the City of the future. Frontier technologies at the service of quality of life and environmental and social sustainability on the city scale.
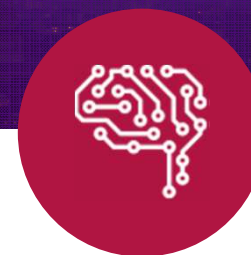
AUTONOMOUSLY
DRIVEN VEHICLES

DRONES

IOT
AND 5G

A.I
AND ROBOTICS

WHO CAN
PARTECIPATE

Who can partecipate

Open to any Company based in Italy or abroad

Other public or private organizations can join the efforts in testing, but only if in partnership with companies.

All subjects have to show requirements for contracting with the Public Administration.

WHAT
TO TEST

What to test

Innovative

solutions of

public interest

Solutions not available (or not fully respondent) on the market, at the pre-commercial stage.

Product / technology
organizational process / service or mix

A focus on urban living and a general aim to create positive "social &environmental impact" in the medium term.

GRATTACIELO INTESA SANPAOLO INNOVATION CENTER

What to test

In any domain
of the Smart City

ICT

Energy & Environment

Welfare and quality of life

Economy

Safety & Security
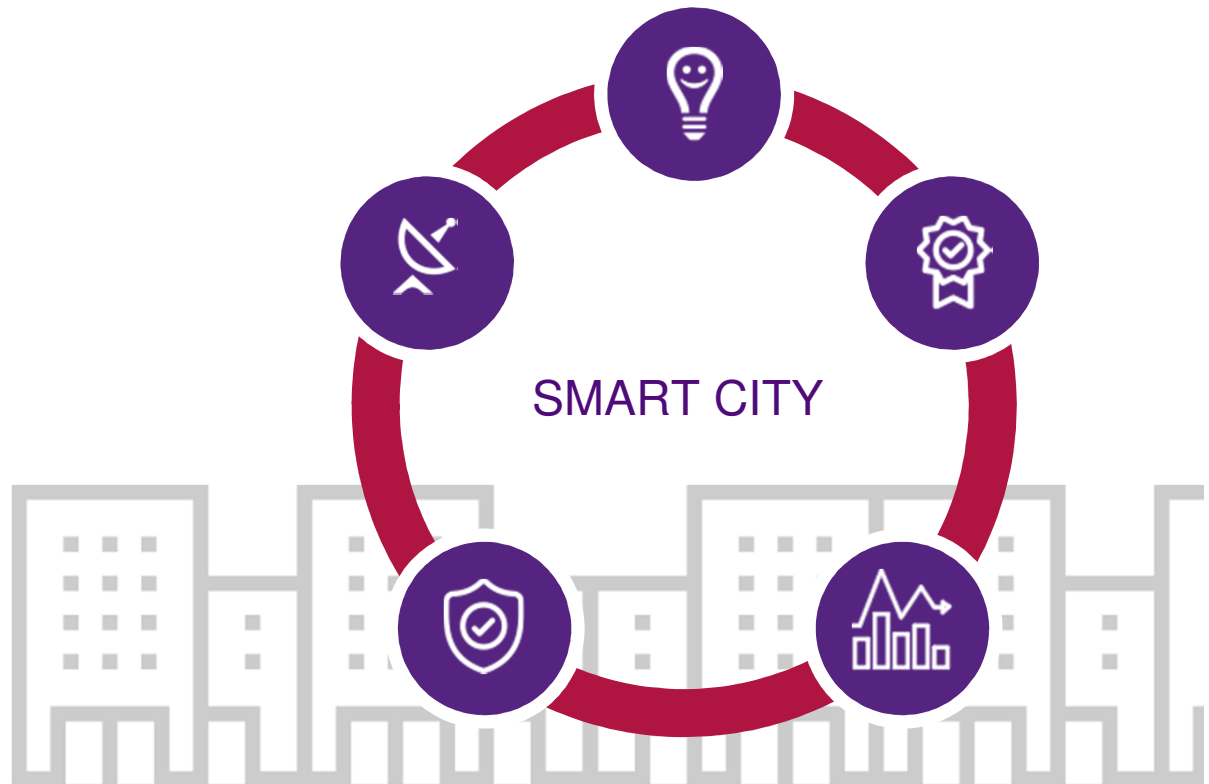
SMART CITY

WHAT
TCL OFFERS

What TCL offers

The City

1	The whole city area and its assets for testing
2	Municipal intangibles (people, processes, services and data).
3	A single internal contact point
4	Facilitated relationships within the local innovation ecosystem

GRATTACIELO INTESA SANPAOLO INNOVATION CENTER

What TCL offers

Tool
and Utilities

1 International networks to show and "scale the solutions"

2 Channels to involve interested communities of citiens/final users

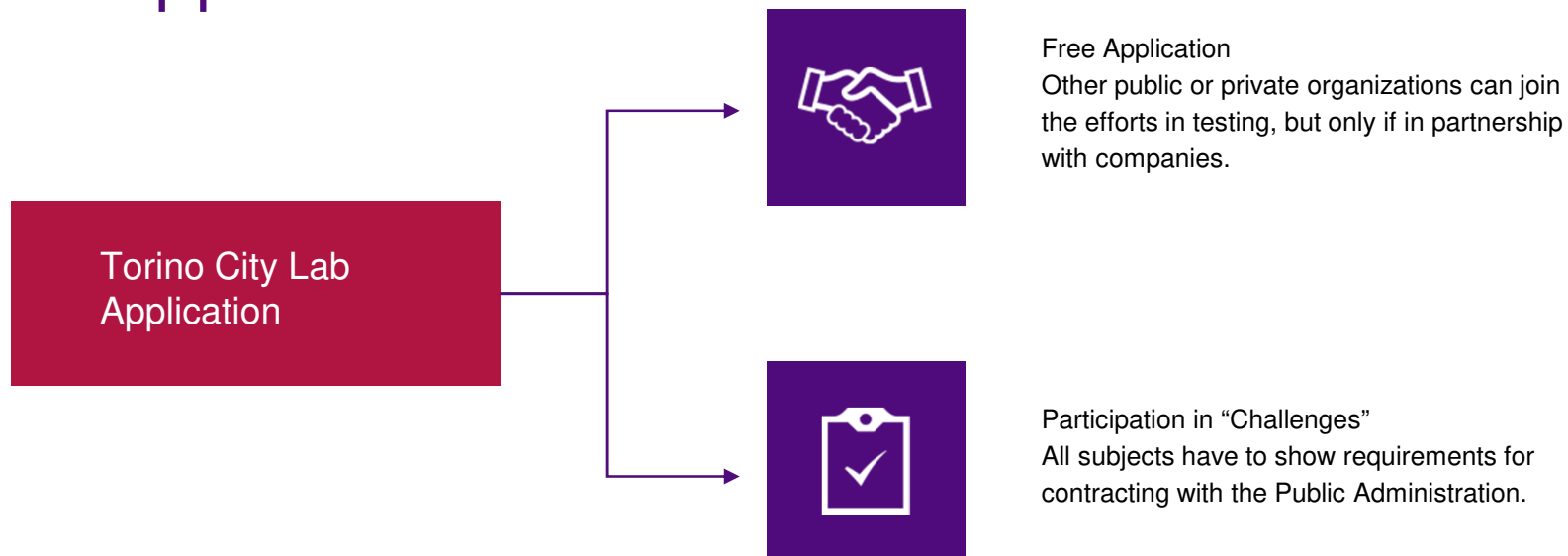**3** Monitoring tools to evaluate the societal acceptability and the expected impact

PARTECIPATION AND EVALUTATION PROCESS

Partecipation and evalutation process

2 different channels for application

Torino City Lab
Application

Free Application
Other public or private organizations can join the efforts in testing, but only if in partnership with companies.

Participation in "Challenges"
All subjects have to show requirements for contracting with the Public Administration.

Partecipation and evalutation process

How the proposal will be evalutated

Innovativeness

Technical feasibility

Economic and financial sustainability
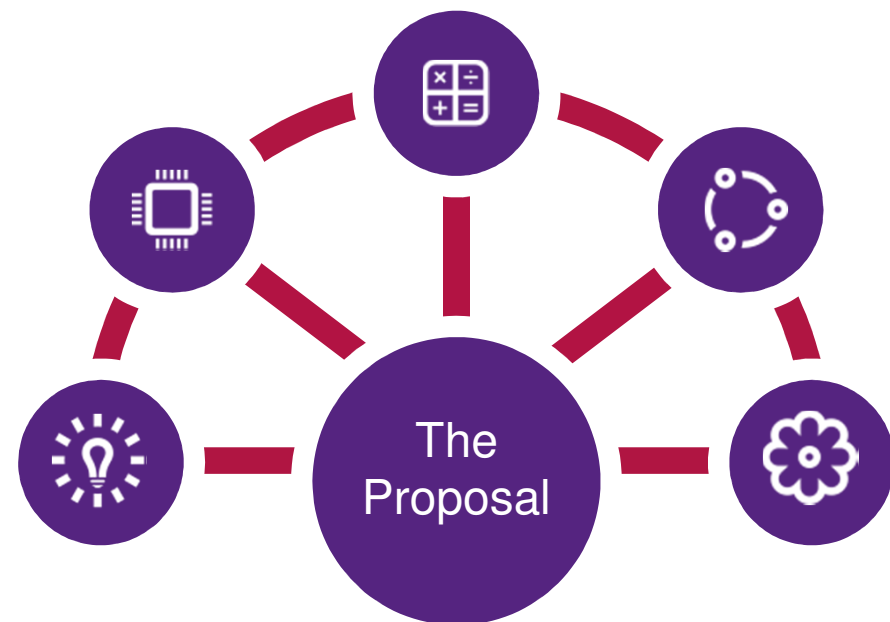
Involvement and social impact

Environmental Sustainability

The Proposal

CTE
>>> NEXT
Casa delle Tecnologie
Emergenti di TORINO

Technology
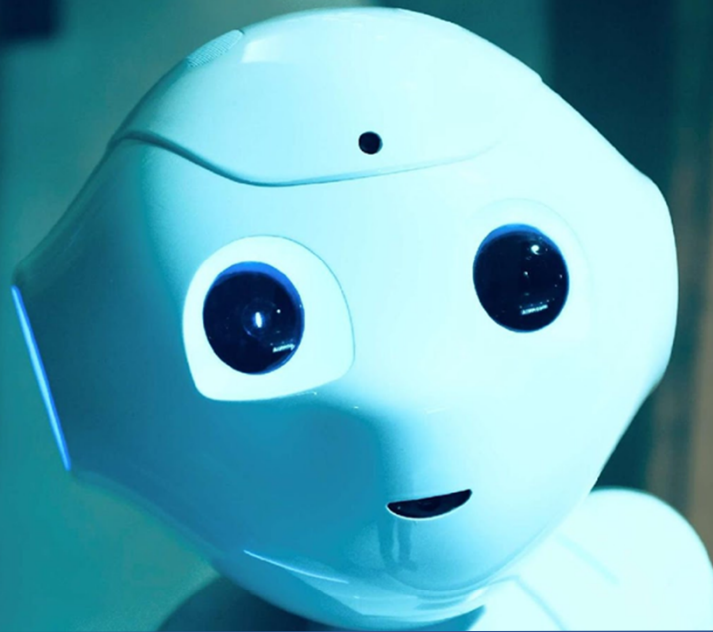lives here!

CTE >> NEXT

The Project

CTE NEXT is an acceleration and technology transfer hub started in 2021, funded by the Italian Ministry of Economic Development and co-funded by main actors of the local ecosystem.

Goals

CTE Next is aimed to support Startups, SMEs and aspiring entrepreneurs in developing, adopting, testing and/or going to market solutions based on emerging technologies.

Emerging Technologies

Internet of Things

Artificial Intelligence

Blockchain

enabled by 5G

Application Fields

Smart Road

connected vehicles, V2X infrastructure, autonomous guidance

Urban Air Mobility

monitoring and surveillance, city logistiscs, transportation

Industry 4.0

connected machines, extended supply chain, customer relationship and experience

Smart City Services

digital services, asset management, use of public spaces, cultural heritage and tourism

The «Service Catalogue» and available Skills

_WHO **start up e SMES** (from Italy and abroad)
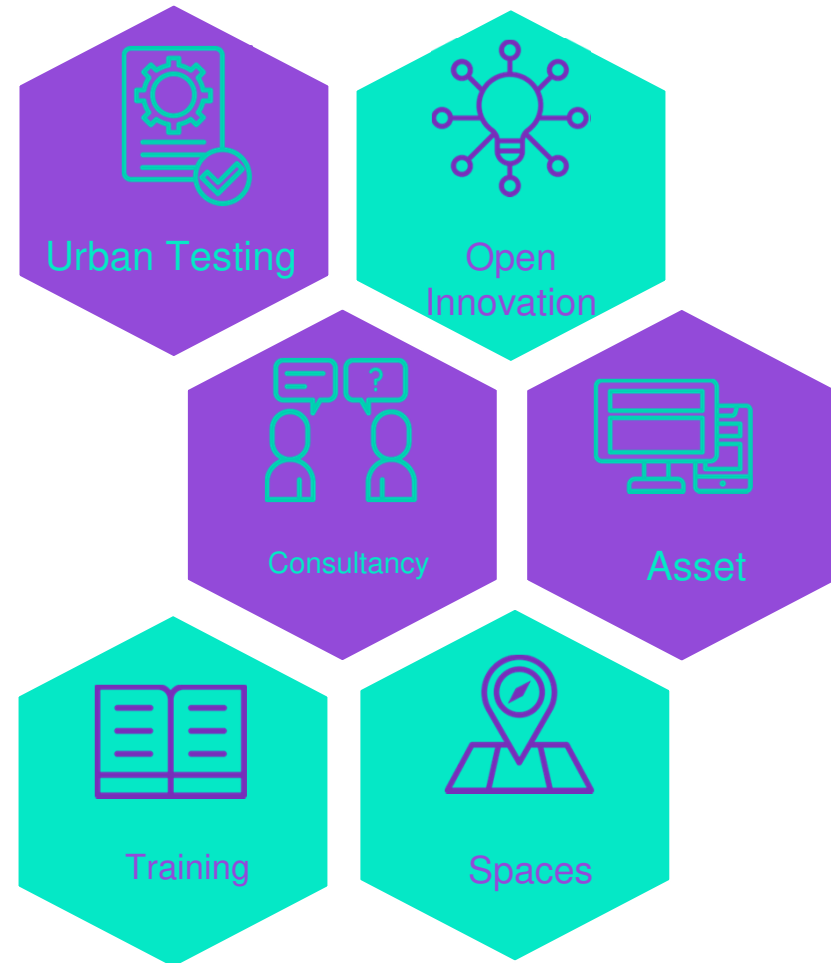**Aspiring Entrepreneurs**

_WHAT support for **the development, adoption, experimentation and / or marketing of innovative** solutions based on emerging technologies and enabled by 5G

_HOW **Open Access -** services and skills provided by the CTE partners
Calls (for testing, acceleration, open innovation, ideas): to access to programs that provide for even funding for the realization of their own projects and / or dedicated resources/assets of CTE NEXT
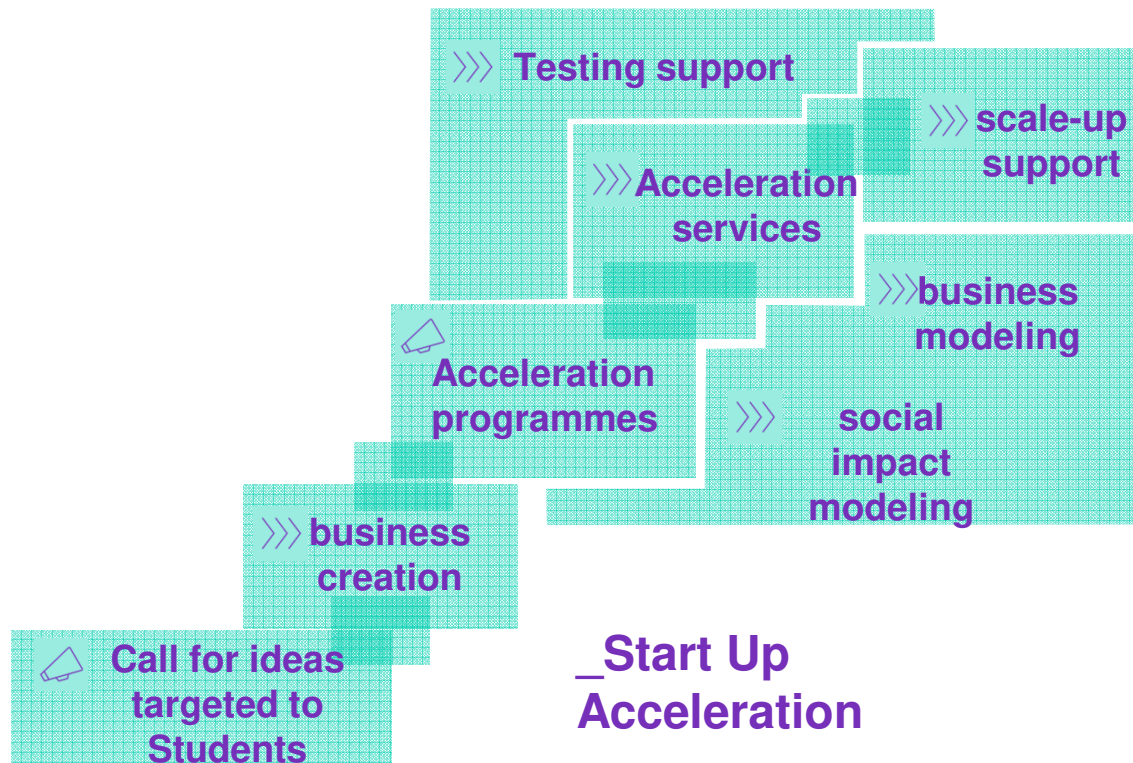
30+ **_ACTIVE SERVICES**

6 **_TYPE of SERVICES**
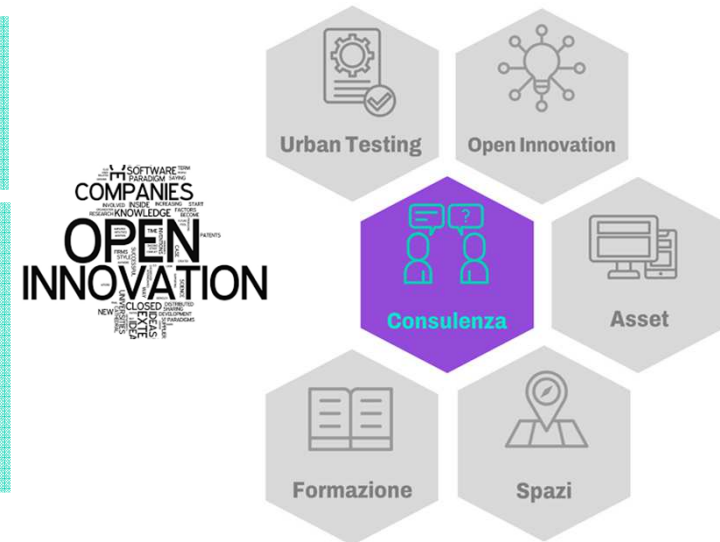
* With at least one company office in Italy

Urban Testing

Open Innovation

Consultancy

Asset

Training

Spaces

Technology and business development Services for Start Ups

Testing support

scale-up support

Acceleration services

business modeling

Acceleration programmes

social impact modeling

business creation

Call for ideas targeted to Students

_Start Up Acceleration

From business creation to the market

OPEN INNOVATION

Urban Testing

Open Innovation

Consulenza

Asset

Formazione

Spazi

DIGITAL MAGICS
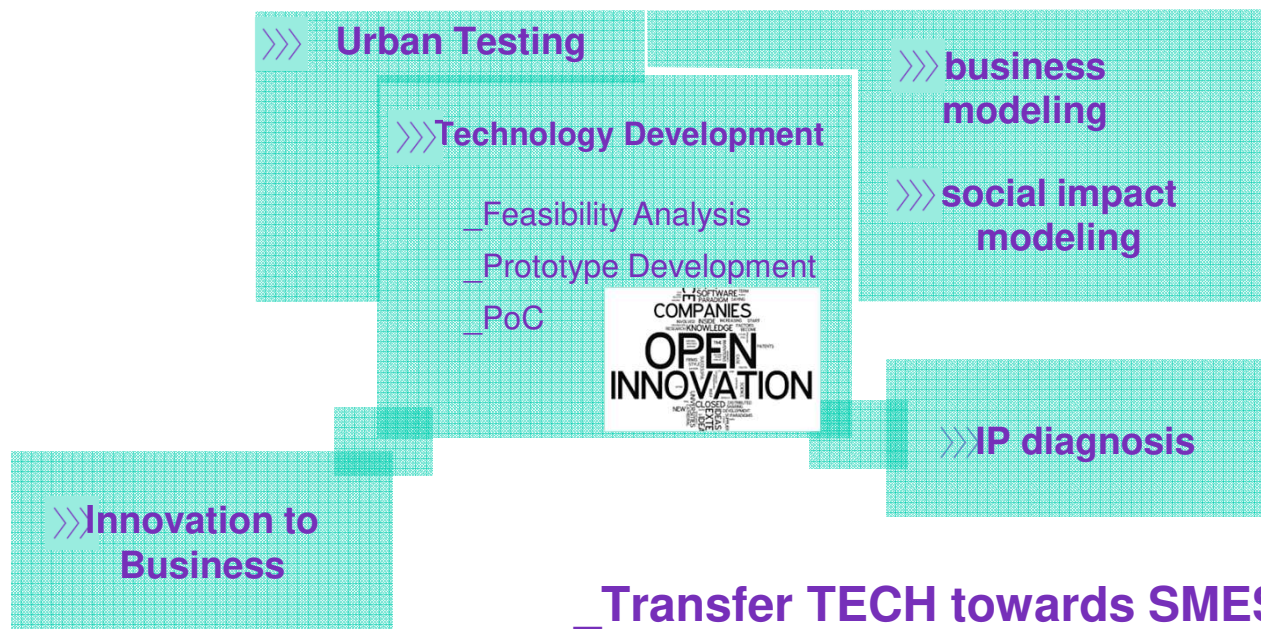
Politecnico di Torino

i3P INCUBATORE POLITECNICO DI TORINO

UNIVERSITÀ DEGLI STUDI DI TORINO

INCUBATORE IMPRESE 2i3T UNIVERSITÀ DI TORINO

Technology and business development Services for SMEs

Urban Testing

Technology Development

_Feasibility Analysis

_Prototype Development

_PoC

COMPANIES

OPEN INNOVATION

Innovation to Business

business modeling

social impact modeling

IP diagnosis

_Transfer TECH towards SMES

From research products discovery to products/process/service Innovation

Urban Testing

Open Innovation

Consulenza

Asset

Formazione

Spazi

UNIVERSITÀ DEGLI STUDI DI TORINO

Politecnico di Torino

links
PASSION FOR INNOVATION

+CIM 4.0

CSI
your digital partner

Open Urban Testing Programme «on demand»

CONTACTS

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