

Guilherme Johnston  
**Head of Global Partnership**



# SMALL BUSINESSES FOR URBAN RESILIENCE




Connected Places Catapult

# Innovation Solutions for Global Urban Challenges

**CATAPULT**  
Connected Places







The Connected Places Catapult  
**accelerates smarter living** and  
travelling **in and between the**  
**places of tomorrow.**

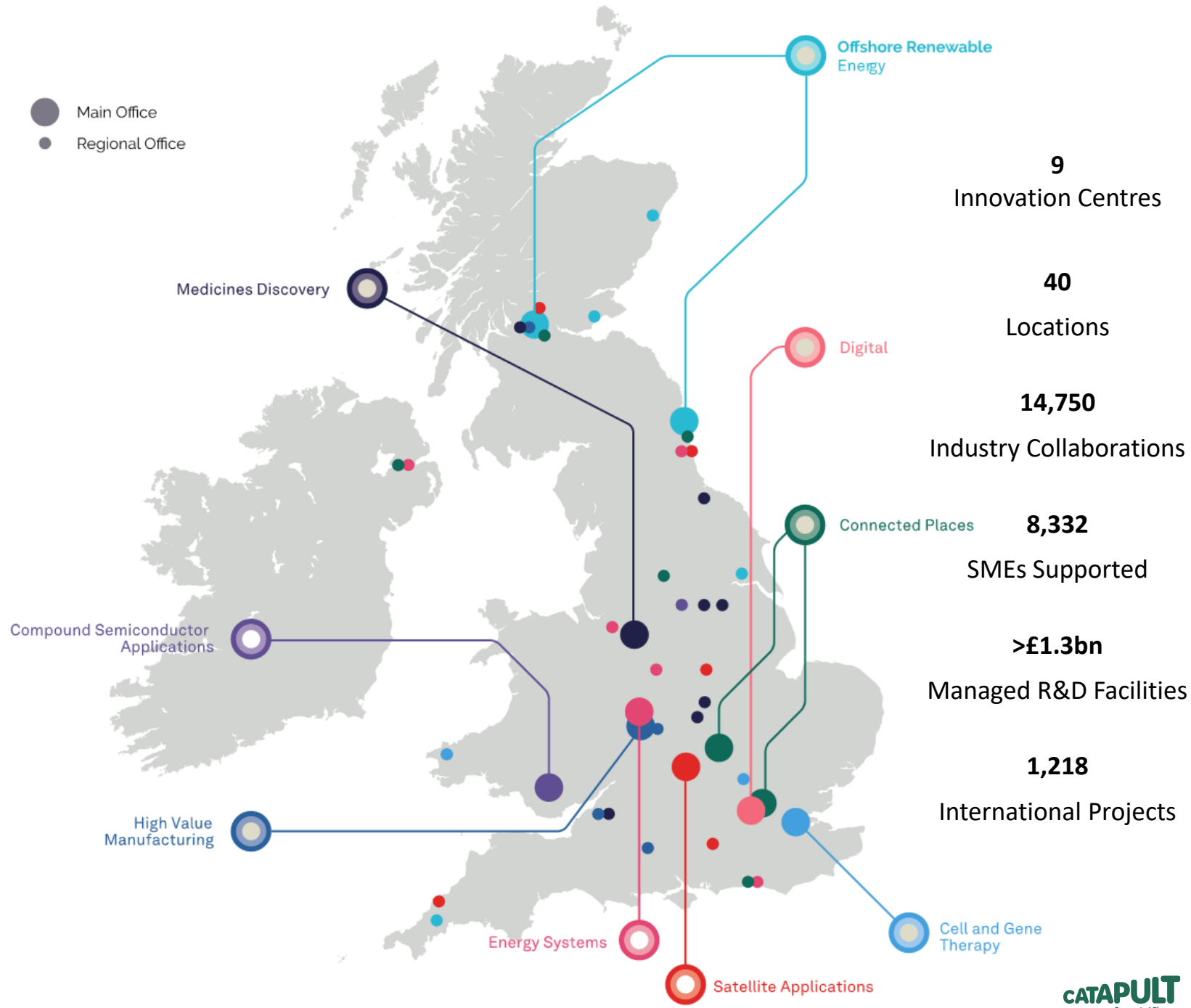
We focus on growing businesses  
with innovations in mobility services  
and the built environment that  
enable **new levels of physical,**  
**digital and social connectedness.**

# The Catapult Network

## A World-Leading national capability

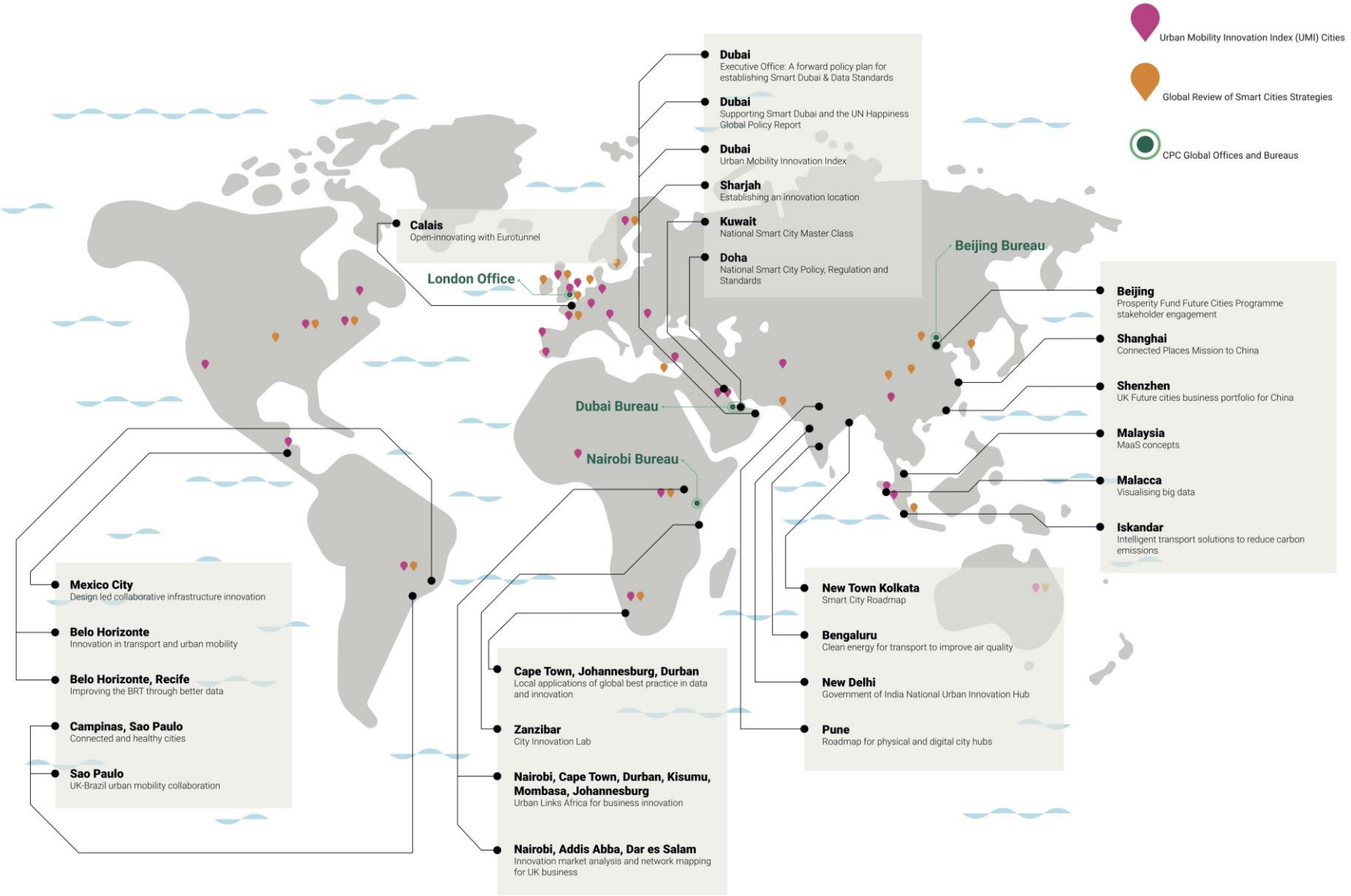
We are a network of Nine world leading Technology and Innovation centres established and funded by the UK Government. We work with businesses, academia and Innovative organisations transforming great ideas into valuable products and services

Catapults are independent private non-for-profit organisations delivering impact across the UK economy and enabling business to thrive in global markets.

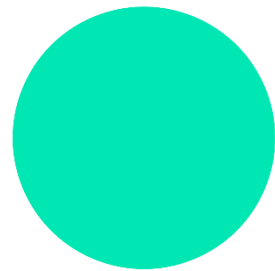




# Connected Places Catapult International Projects

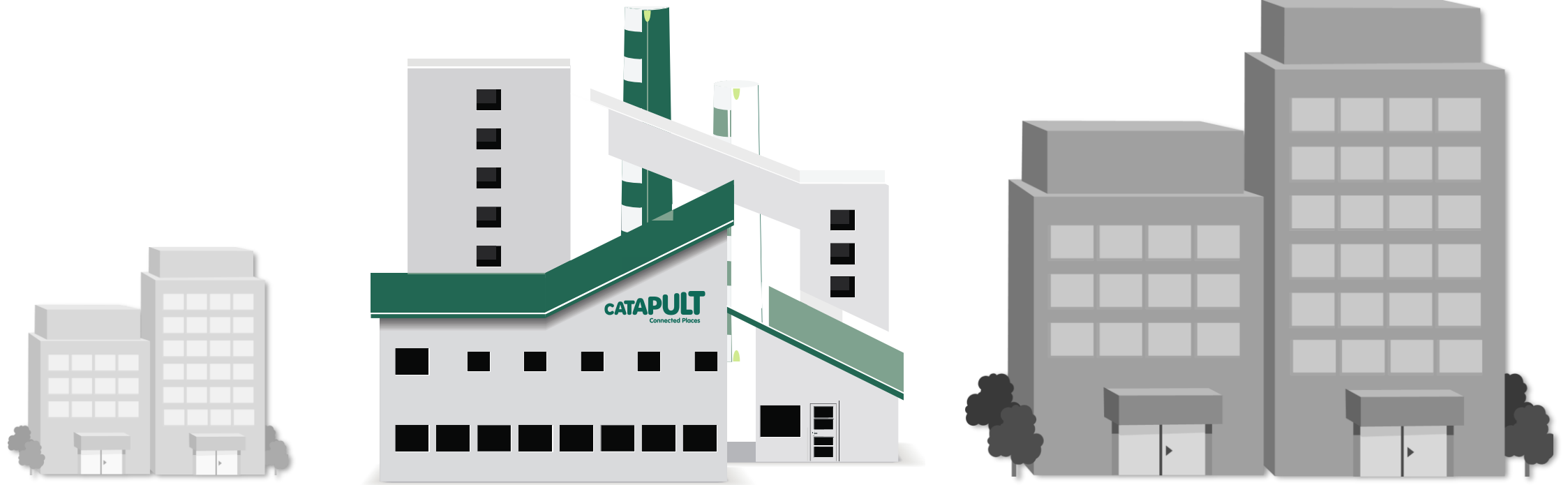


How innovation places  
can contribute to local  
economies that  
demonstrate resilience  
and Inclusivity?



- SMEs are key players.
- Tech is not always the answer.
- Hubs of innovation are important.
- Local governments are enablers
- Placed based innovation and economic recovery goes together.

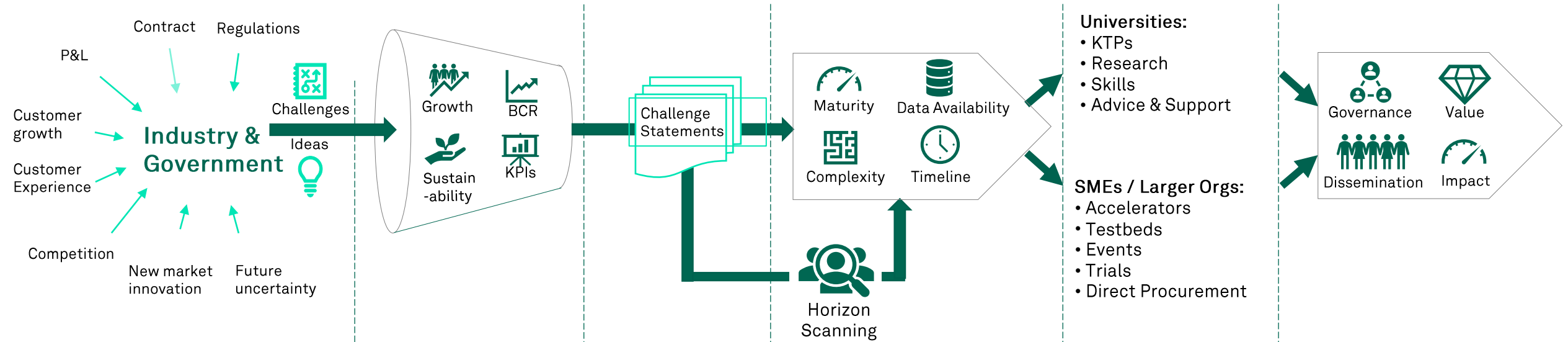
# Innovation factory



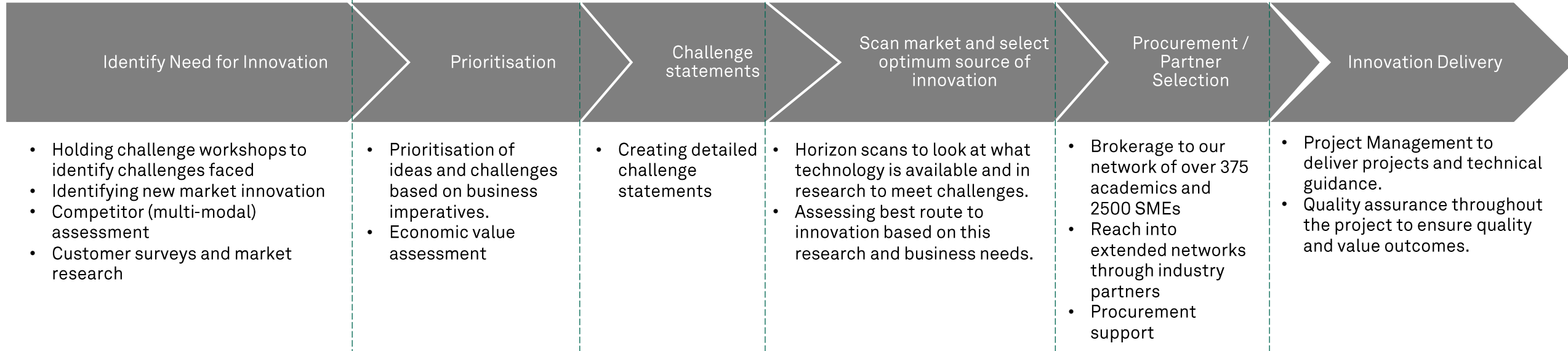
Programmatic Innovation that removes market barriers to innovation for the benefit of SME and academic innovators and government and industry.



# How the Innovation Factory Works



## Catapult activities to support Industry



# Innovating for Clean Air (IfCA)

June  
2019

**Identified market opportunities via extensive engagement activities and workshops with Indian stakeholders**

October  
2019

**Launched an open call to find SMEs who could deliver innovative solutions**

February  
2020

**Testbed locations selected via experimental design sessions with each SME**

May  
2020

**Testbed set up and identification of implementation partners**

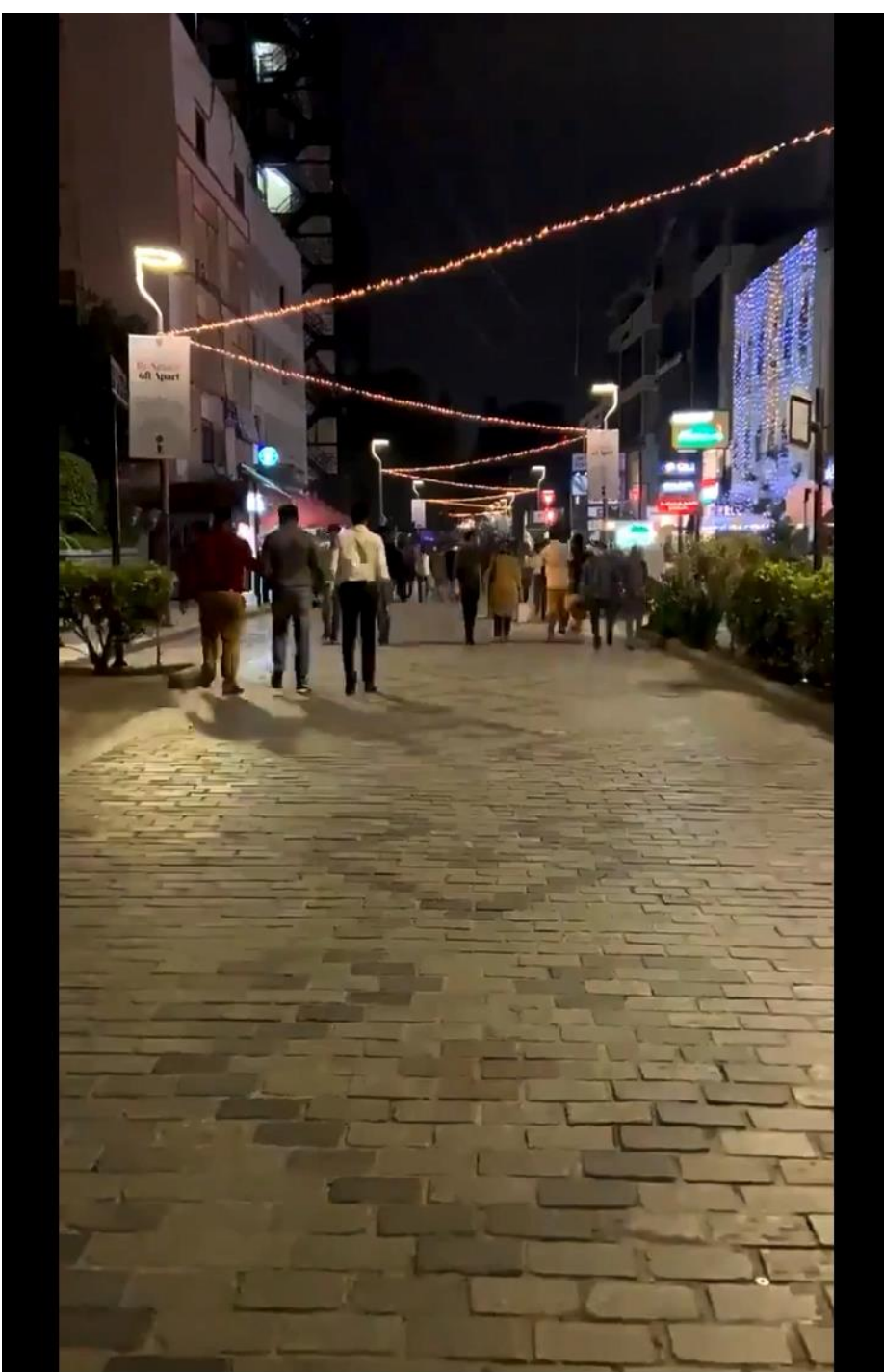
October  
2020

**Clean Air Testbed experimentation period**

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Energy Systems





## Innovating for Clean Air - India

Back in 2019-2020, as part of our [Clean Air Testbed activities in India](#), the CPC collaborated with the [Directorate of Urban Land Transport \(DULT\)](#), the [Indian Institute of Science \(IISc\)](#) and [Urban Morph](#) to transform one of the central streets in Bengaluru into a 'Clean Air Street'. The initiative was set to create a healthy, citizen-centric street environment, which prioritises green and active forms of transportation while encouraging sustainable behaviours.

airhead

O X T O  
E N E R G Y

energeo

arbnco

GreenEnco

Yellow  
COLLECTIVE

EV TECHNOLOGY

cityEV



### 1 SCOPING PHASE

Interviews with stakeholders in India to capture the challenges and opportunities around the electric vehicle transition and air quality



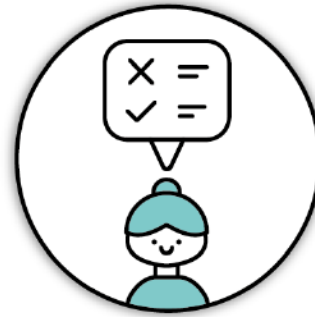
### 2 CHALLENGES AND OPPORTUNITIES

Findings from the scoping phase presented at validation workshops with stakeholders in India. Preparation of reports to highlight the challenges and opportunities



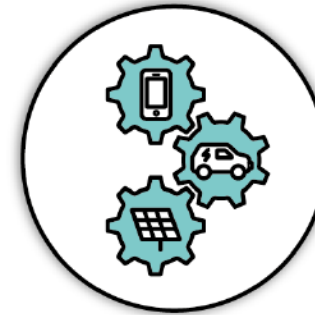
### 3 KNOWLEDGE TRANSFER

Workshops, webinars and reports throughout the project to share knowledge between the UK and India, strengthen bilateral relationships and build capacity



### 4 CHALLENGE CALL

Based on the findings, challenge call launched to identify UK and India companies to build partnerships and showcase their expertise



### 5 PILOT PROJECTS & ZERO EMISSION ZONES

Support to UK and Indian businesses to enable pilot projects across the city and deployment in the Zero Emissions zones



SME/start-up cohort

GreenEnco  
Maximising Asset Values

cityEV  
chargersanywhere.com

EV TECHNOLOGY

atmospheric sensors  
aurita

OXTO  
ENERGY

URBAN MORPH  
TRANSFORMING URBAN SPACES —

airhead  
ALTIGREEN  
DRIVE ELECTRIC

Yellow  
COLLECTIVE

buymyEV

arbnco

TRANSAHAN

everythingECO

Greendzine Technologies

prkruti  
know your air

ambee

TECHNOLOGY ACCELERATORS

techUK  
FOR WHAT COMES NEXT

STEP  
CENTER FOR STUDY OF SCIENCE, TECHNOLOGY & POLICY

C40  
CITIES

Climate Centre for Cities

HSBC

UK INDIA  
BUSINESS COUNCIL

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ  
KARNATAKA STATE POLLUTION CONTROL BOARD

WORLD RESOURCES INSTITUTE

CII  
Confederation of Indian Industry

mt-b  
ज्ञानमुत्तमम  
Lithium

CiFoS  
Citizens For Sustainability

INDIAN INSTITUTE OF SCIENCE  
भारतीय विज्ञान संस्थान

QUANZEN

FIELDS  
of VIEW

DIRECTORATE OF URBAN LAND TRANSPORT  
UDL Government of Karnataka  
shaping the way cities move

SHELL

ARAI  
Progress through Research

Foreign, Commonwealth & Development Office

NITI Aayog

ISGF  
India Smart Grid Forum

enzen

Clean Air Platform  
BENGALURU

ARMI  
ENERGY TRANSFORMED

IESA  
India Energy Storage Alliance

sensinglocal

Partner organisations

GBI  
GLOBAL BUSINESS INROADS  
CONSULTING EXCELLENCE DELIVERED

SELCO Foundation

SHAKTI  
SUSTAINABLE ENERGY FOUNDATION

EY  
Building a better working world

# Thank you

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