

# New investment models for urban innovation ecosystems.

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# Outline & key steps in the research project

STAGE 1: Analysis of 5 case studies across Europe.

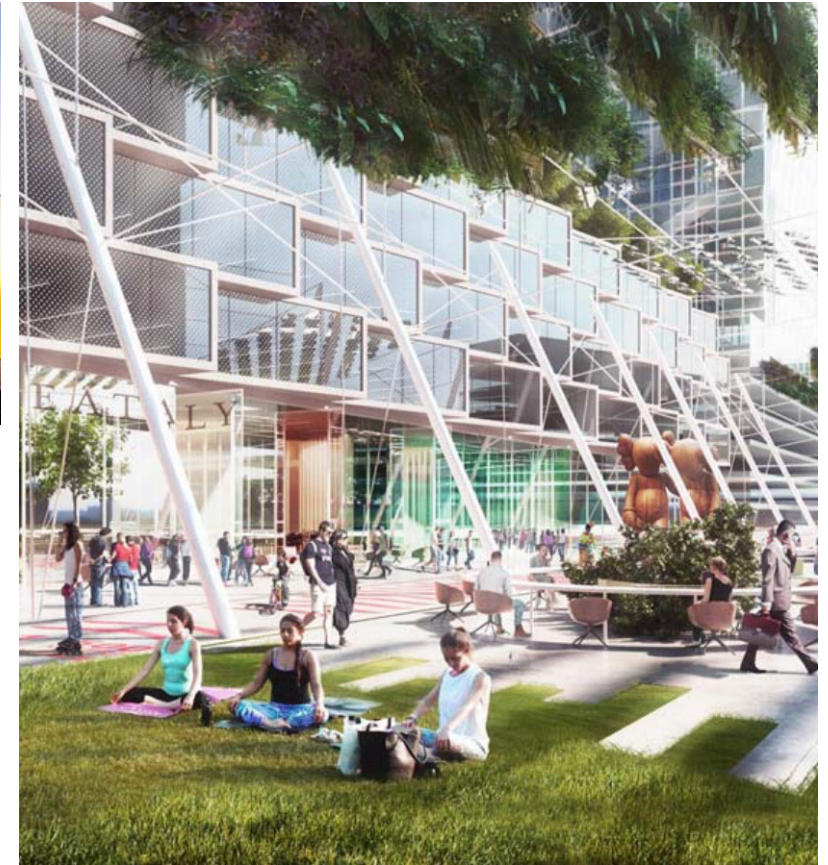
STAGE 2: Analysis of Public and Private sectors perspectives and roles.

- *What is the value generated by such projects?*
- *What are the difficulties in developing them?*
- *What are the interests, benefits and setbacks for both parties?*
- *How do we translate the lessons learnt into a scoring framework & a set of assessment criteria (for public policy/attribution of private investment or future funding applications)?*

STAGE 3: Drafting guidelines for supporting measures.

- *Which kind of dedicated funding frameworks, policy and partnerships are needed?*





## 5 Case Studies

*WISTA, Adlershof, Germany.*

*Thess- INTEC, Thessaloniki, Greece.*

*Brainport, Eindhoven, Netherlands.*

*22@ Barcelona, Spain.*

*MIND, Milan, Italy.*

# Methodology

- We **collected data from** our experts for each of the **5 case studies**.
- We analyzed the data and **compared the 5 cases** under some specific lenses.
- SWOT analysis for each case & **Key Lessons Learnt**.
- **Workshop & round tables** to collect opinions and insights from the workshop with key stakeholders from the private sector.
- **Preliminary suggestions** for investment & policy frameworks.



# Location: Thess-INTEC



**Area: 0.76Km<sup>2</sup>;**  
**Expected users: Phase 1: 75 companies and 17 R&D labs of Universities and Institutes (no residential). >1000 employees**  
**Development: 4 phases. Started in 2018.**



- Currently a greenfield;
- close to the airport and facing the sea;
- the innovation park builds on the legacy of Thessaloniki Technology Park (1992) that was located elsewhere;
- Phase 1 under construction; Phase 2 under planning with PPP mode.

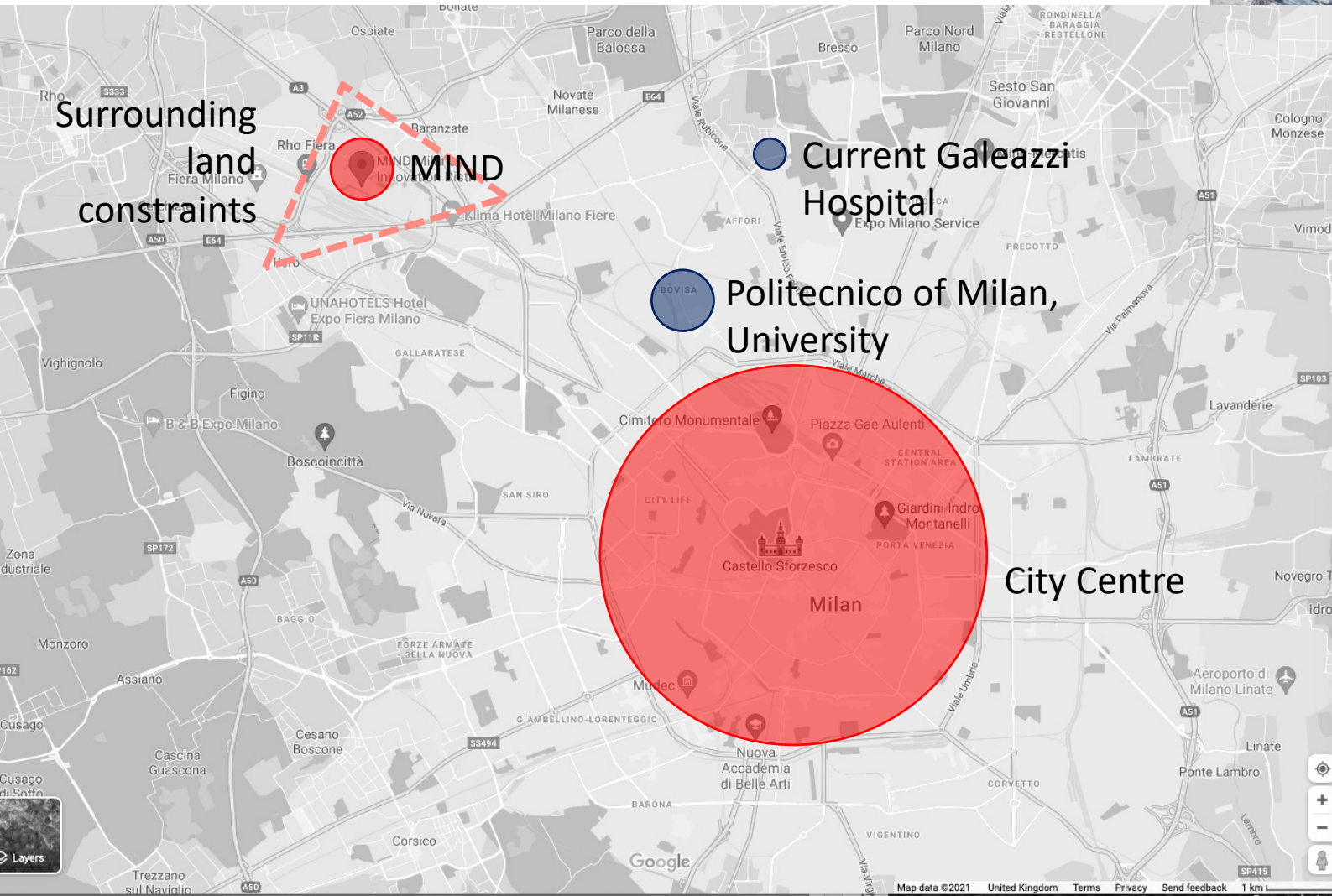


## Location: MIND, Milan

Area: 0.95 Km<sup>2</sup>.

Expected population: 70,000 with 1500 new jobs.

Phasing: project started in 2020 – exp. completion 2029.



- Former EXPO2015 site
- The site reuses the pavilions and structures left after the EXPO
- €1.5bn public investment for infrastructure and connectivity for EXPO
- Relative proximity with Politecnico University (Bovisa campus), Fiera Milano & several motorways.



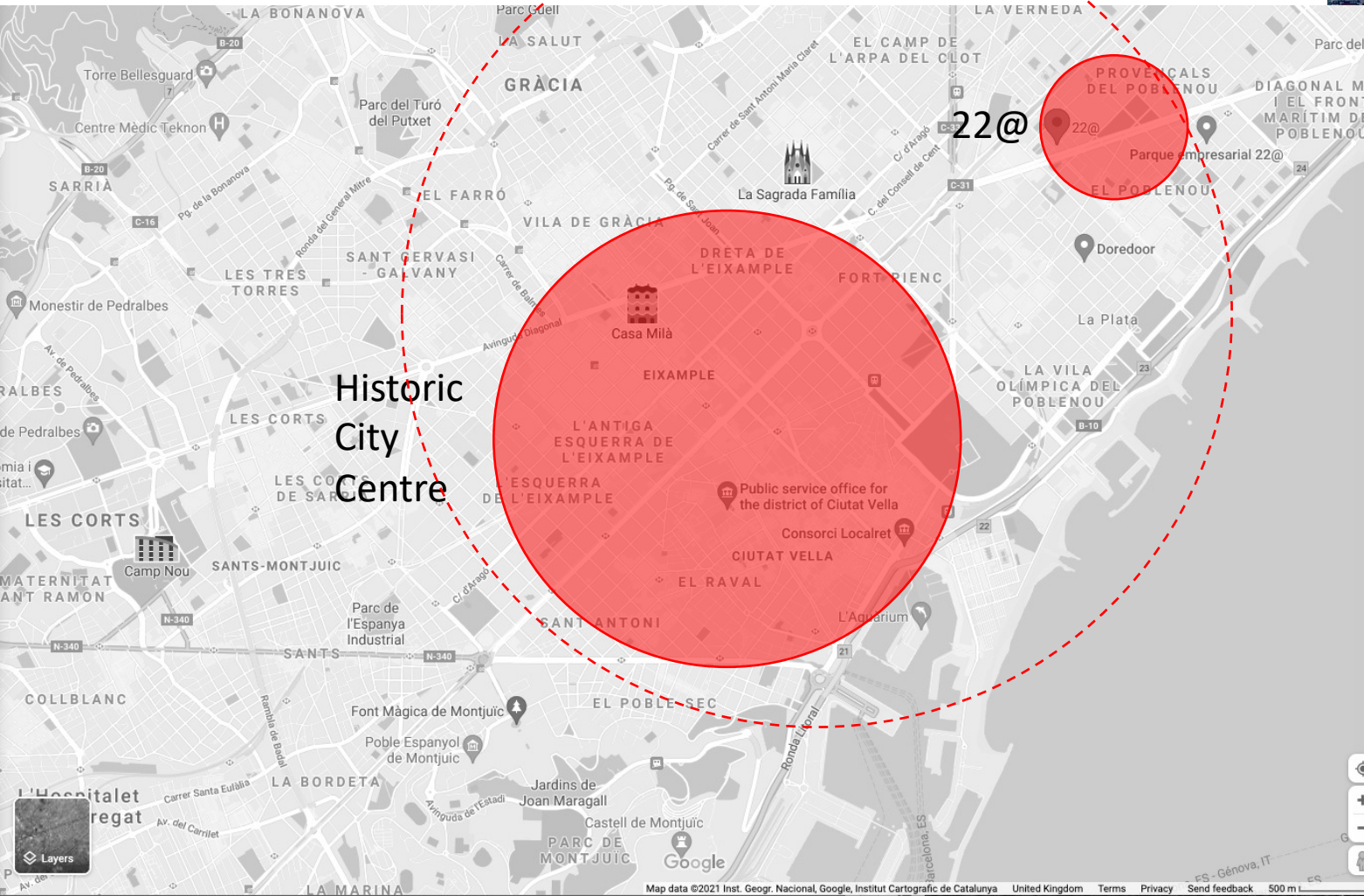
# Location: 22@ Barcelona

Area: 1.98 Km<sup>2</sup>;

800,000 new housing units; 113,526 inhabitants in the 22@ district area in 2018.

8,223 companies & 93,000 professionals.

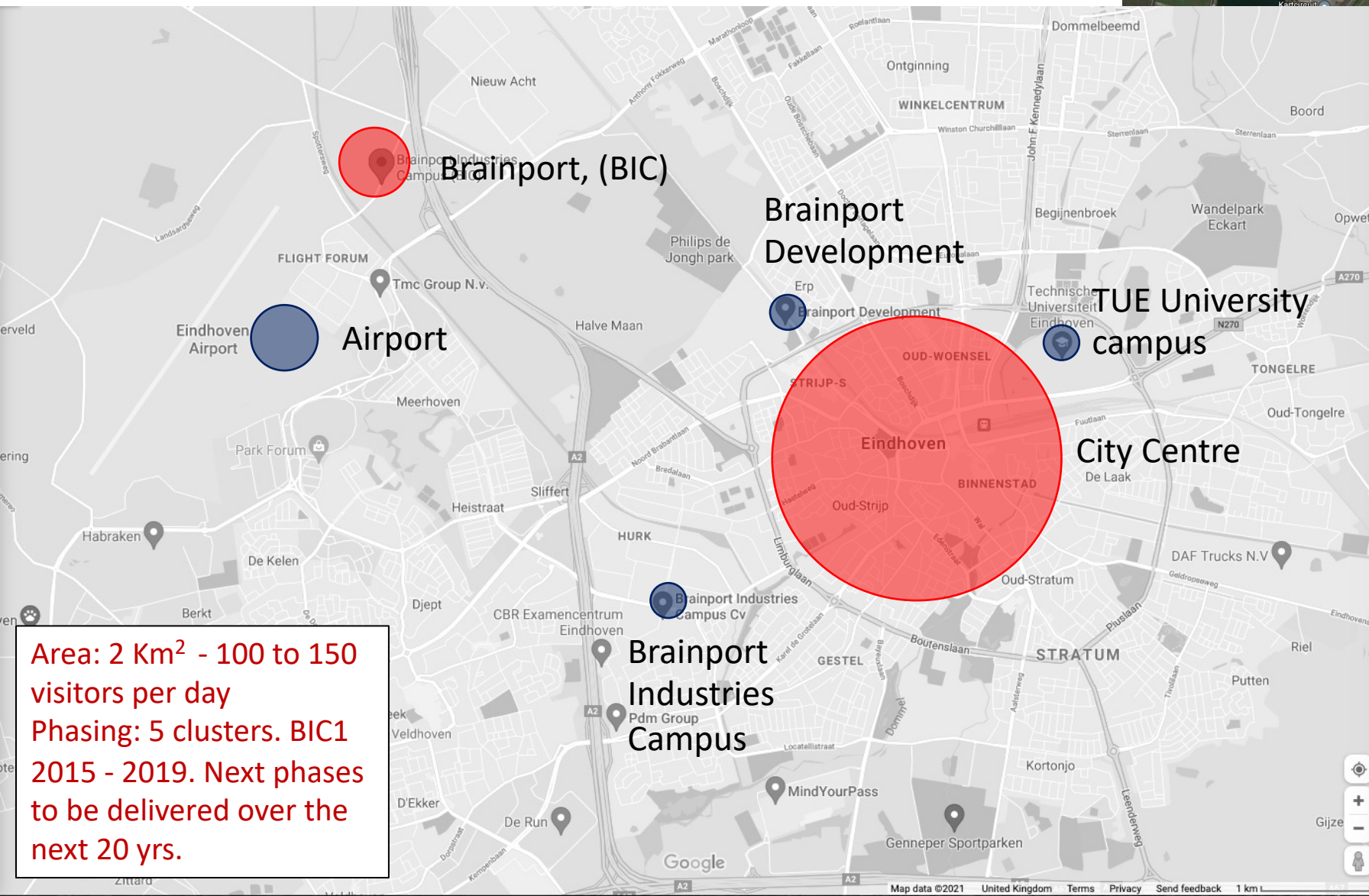
Phasing: works started in 2000 and are still ongoing.



- A former textile district
- building on legacy from 1992 Olympic games & 2004 Forum de les Cultures (works started in 1999); both events contributed to the urbanisation of the area.
- A very urban innovation park, quite integrated in the urban fabric of the city, it's now a fully functioning neighborhood of Barcelona
- Proximity to the seaside and the museum hub of Poblenou.



# Location: Brainport (BIC), Eindhoven



Area: 2 Km<sup>2</sup> - 100 to 150 visitors per day  
Phasing: 5 clusters. BIC1 2015 - 2019. Next phases to be delivered over the next 20 yrs.

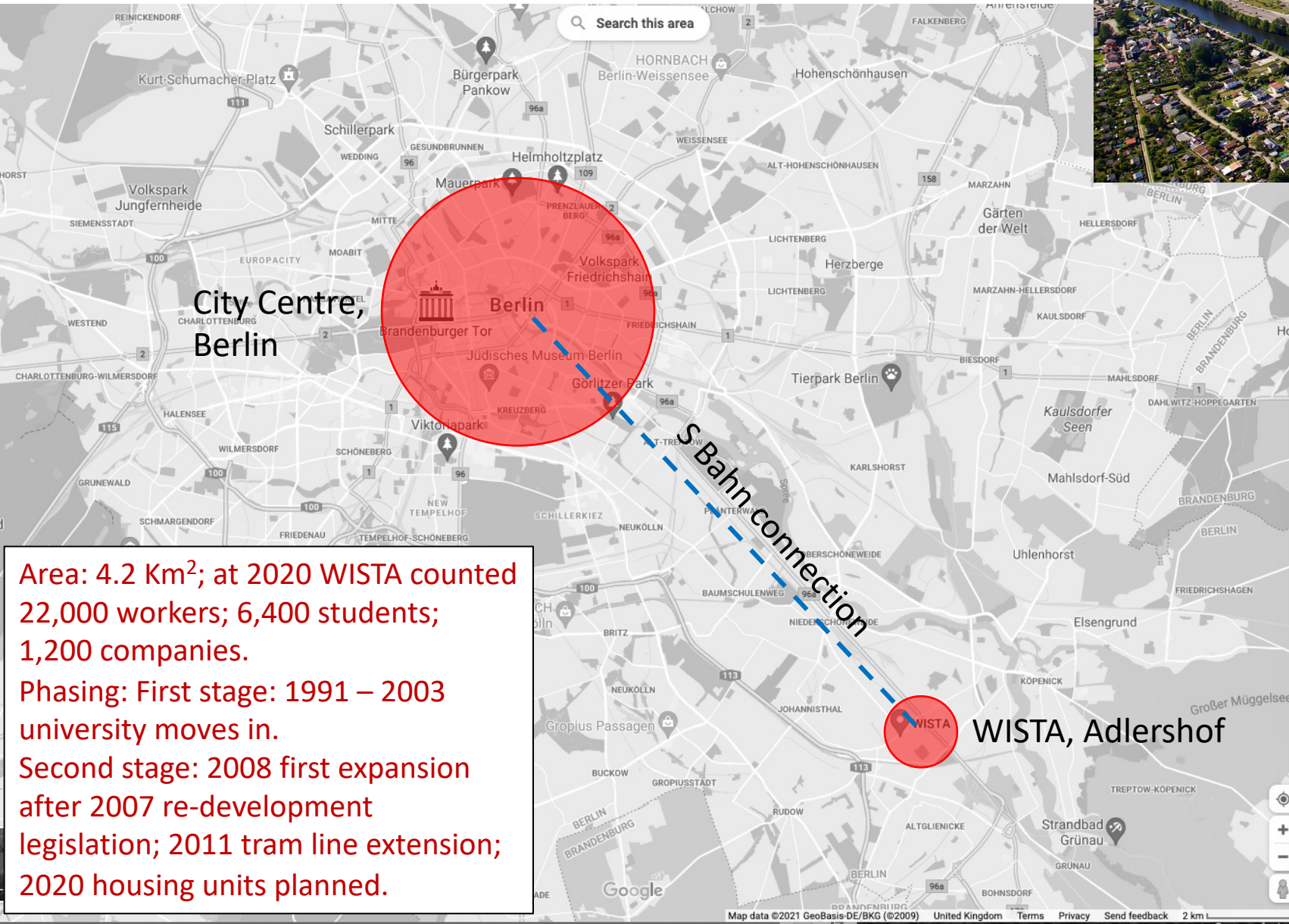


- Brownfield area near Eindhoven Airport and A2 Highway.
- Private ownership and capital example.





# Location: WISTA Adlershof, Berlin



- Peripheral location – around 40 mins from the city centre by public transport;
- Builds on hundred years legacy of being a technological district of Berlin (started with Johannisthal Air Field in 1910s)
- Then, the site was occupied by the Academy of Science of the GDR.

Area: 4.2 Km<sup>2</sup>; at 2020 WISTA counted 22,000 workers; 6,400 students; 1,200 companies.

Phasing: First stage: 1991 – 2003 university moves in.  
Second stage: 2008 first expansion after 2007 re-development legislation; 2011 tram line extension; 2020 housing units planned.

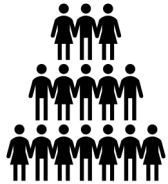
# Main Criteria for the comparative analysis



LOCATION



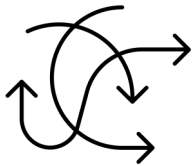
STAKEHOLDERS & SHAREHOLDERS



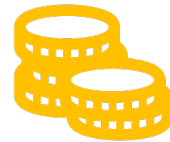
SIZE & POPULATION



RELATION TO UNIVERSITIES &  
RESEARCH CENTRES



PHASING



VALUE CREATION, FUNDING &  
INVESTMENTS



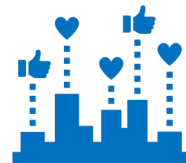
OWNERSHIP,  
REGULATORY & LEGAL  
FRAMEWORK



SOCIAL & ENVIRONMENTAL VALUE  
CREATED



KEY DRIVERS,  
REGIONAL ECONOMY &  
SECTORS



INNOVATION CREATION



# Key Lessons Learnt:

## MIND, Milan

**i) investments (both public and private) in the innovation ecosystems** (preliminary tenancy contracts secured) that have driven real estate value.

**ii) Environmental & social value framework of the project.**

**iii) Successful place branding strategy.**

**iv) Connections to the regional economy.**

**v) Effective PPP conditions.**

## 22@District, Barcelona

**i) Successful urban planning law that was able to retain land for social housing and amenities.**

**ii) Urban location.**

**iii) Successful place branding strategy.**

## Thess INTEC, Thessaloniki

**i) Landscape & design value added.**

**ii) Importance of securing foreign investments and diversify** the offer of educational tenants before the implementation of the project.

**iii) Excessive reliance on the public sector funding** puts under threat later phases.

## WISTA, Adlershof – Berlin

**i) Successful urban planning law for long-term infrastructure delivery.**

**ii) solution were place-based**, to account for local peculiarities & regulatory frameworks.

**iii) Successful place branding** strategy and local legacy.

**iv) Need to monitoring** the innovation park and continue investing in R&D.


## Brainport, Eindhoven

**i) Emerging real estate investment sector**, less engaged in regeneration of the surrounding territory.

**ii) An entirely private initiative offers less opportunities to create shared value** unless key conditions are established since the beginning and lasting over time.

**iii) When is the saturation point** for demand in the region reached?

# Key findings



**Multidisciplinary skills are required: real estate, economic development and planning are intertwined.**

## LOCATION & CONTEXT

- Peripheral locations vs urban context & branding.
- Policy will need to be place-based.
- The offer needs to be tailored on the local scale, high-quality & high-profiling to keep up with competitiveness
- Pre-existing infrastructure and easy accessibility to the site are always necessary

## UNIVERSITIES AND RESEARCH CENTRES

- Involving universities and research centres is key.

## LEGAL FRAMEWORK AND PLANNING REGULATIONS

- Planning for a mix of : new employment & investment opportunities in real estate & other sectors.

## FUNDING & INVESTMENTS

- Relying on public subsidies might hamper completion of later phases.
- Attracting private investors will ensure a longer-term success of the project.
- The public sector should set regulatory tools to kickstart and monitor the project.
- R&D expenditures need to be maintained over time. IDs need to adapt and be flexible to absorb new technologies and labour changes.

## VALUE CREATION

- Environmental and social value to lift the profile of the ID & attract better tenants.
- Connecting with the regional economy and sectors.

## OWNERSHIP AND LEGAL FRAMEWORK – PUBLIC PRIVATE PARTNERSHIPS

- PPP are too long-term commitments. Other mechanisms exist.
- The strategic vision of the local institution is key in imposing long term goals

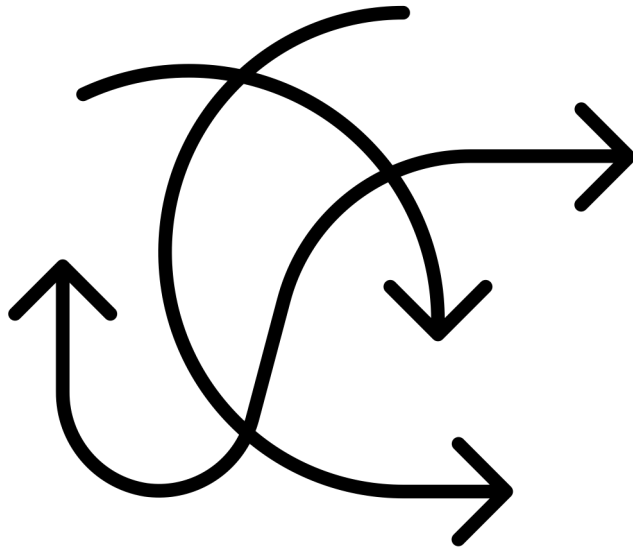
# Initial qualitative assessment points for innovation districts

*There is a necessity of investing in public sector capabilities & skills to set-up, manage and monitor those projects.*

High-level criteria for evaluation frameworks for innovation districts:

- **Regional economy** features and local critical mass;
- Assessment of the **location** and **proximity to amenities**;
- Quality of local **infrastructure**;
- **Use of technology** and smart cities solutions for the management;
- Presence of a **branding strategy**;
- Indicators should vary according to the **stage of maturity** of the project.





**There is difference between:**

- 1) setting up a new innovation district &**
- 2) expanding or investing on an existing one.**

# Private and Public Sector Interests

## MIND, Milan

### **PUBLIC INTERESTS:**

regenerate area of Milan, optimise infrastructure investment from EXPO legacy

### **PRIVATE INTERESTS:**

Capitalise on investment, test new area of RE market

- testing new business model for real estate that value innovation ecosystem and ESG
- pilot for development and application digital twin for planning and managing the site (creation of a dedicated prop-tech company: Podium).

## 22@District, Barcelona

**PUBLIC INTERESTS:** urban regeneration of the area

### **PRIVATE INTERESTS:**

Agglomeration effects and economic advantages, concessionary model of 22@Law for (re)development.

## Thess INTEC, Thessaloniki

### **PUBLIC INTERESTS:**

boost R&D capacity, employment opportunities and attracting FDI.

### **PRIVATE INTERESTS:**

- Unlocking housing developments; participation in international value chain.
- Participating in physically collocated clusters on emerging technologies.

## WISTA, Adlershof – Berlin

### **PUBLIC INTERESTS:**

- WISTA Management GmbH is a no-profit, all profits need to be reinvested in the STP
- WISTA plan: monetary profits from selling the land.

### **PRIVATE INTEREST:**

- Real estate investors, mostly short-term goals of build to sell (few build-to-rent)
- SME user investors, more longer term goals of economic externalities from the agglomeration.

## Brainport, Eindhoven

### **PUBLIC & PRIVATE INTERESTS:**

- economic development and improve the competitiveness of the Dutch manufacturing industry
- Agglomeration effects in the region.

*Which kind of place-based policy & funding frameworks?*



# SUGGESTED SCORING & ASSESSMENT CRITERIA

## Public Funding for new projects.

### ECONOMIC VALUE OUTPUTS

- Business case & **projected economic outputs**
- **Venture capitalists** attracted.
- Number of **companies** attracted.
- Demonstrable **linkages with existing regional activities & sectors**.
- **New infrastructure delivery**.
- **Use of technology** & smart cities solutions.
- **Alignment with EU funding** goals & policy objectives.

### SOCIAL VALUE

- **Multi stakeholder governance** and management.
- Projected number & type of new **jobs**.
- **Training** opportunities & agreements secured with research institutions.
- **Start-up incubation** and acceleration services offered.
- Provision of **social infrastructures**.
- **Integration with the context**.
- Share of **social housing** included.
- **Local population mix** and diversity.

### ENVIRONMENTAL VALUE

- **Net-zero carbon targets** and energy efficiency.
- Delivery of **green spaces**.
- **Soil de-contamination costs or flooding mitigation costs**.
- Contribution to **circular economy** goals.
- Local mobility.
- **Alignment with new EU regulation**.

# SUGGESTED SCORING & ASSESSMENT CRITERIA

## Public Funding for Existing districts

(Expansion projects, monitoring and management purposes)

### ECONOMIC VALUE OUTPUTS

- Monetary income generated since delivery.
- Taxes collected in the area.
- Cost efficiency of project.
- Number of registered firms.
- Number of patents.
- Firm retention & start-up acquisitions rate.
- Volume of international taxable capital attracted.
- (Additional) Infrastructure delivery and digitalization outputs.
- Data generation & collection.

### SOCIAL VALUE

- Multi stakeholder governance and management.
- Number and type of jobs generated.
- Registered improvements on local socio-economic baselines.
- Training opportunities and research agreements secured.
- Number of new firms registered in the area through incubation services.
- Provision of additional social services and amenities.
- Social housing units delivered.
- Social infrastructures delivered.

### ENVIRONMENTAL VALUE

- CO2 emissions performances and energy ratings.
- Delivery of green spaces.
- Flexibility and resilience of buildings & mobility.
- Green deals secured with local tenants & stakeholders.
- Alignment with new EU regulation.

**Adopting a wider notion of  
value creation**  
(environmental, social and  
monetary)

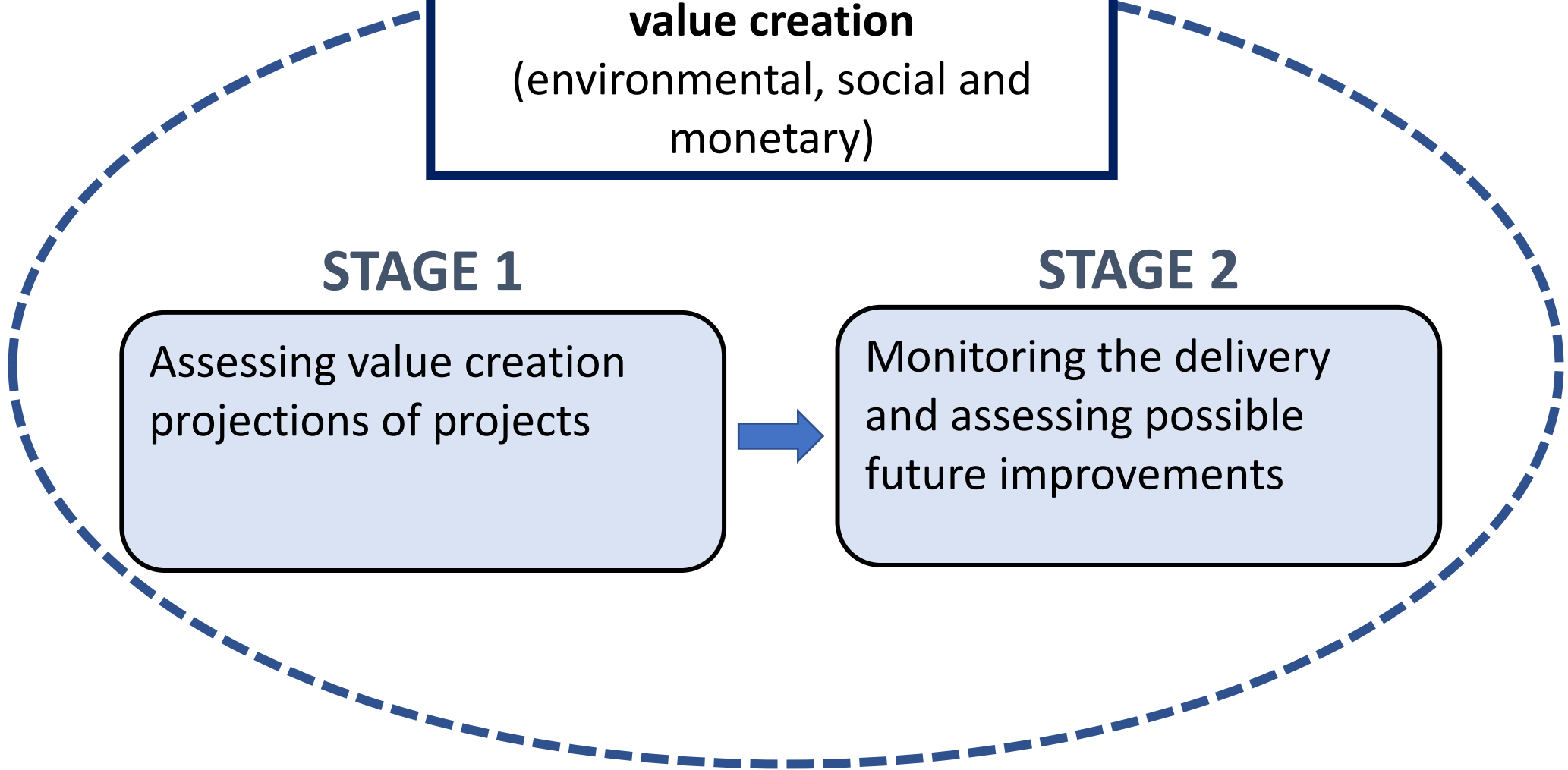
**STAGE 1**

Assessing value creation  
projections of projects



**STAGE 2**

Monitoring the delivery  
and assessing possible  
future improvements



*Which kind of private sector engagement?*



# Viability assessment criteria for investors in innovation districts

## ECONOMIC GOALS

- Profit margins generated
- Use of preexisting (or publicly funded) infrastructures
- **Opportunities for public funding contributions & access to EU dedicated funding frameworks**
- Use of public land and assets
- Possibility of **capitalization on regional economies** and key strength sectors
- Pioneering access to an emerging investment sector
- Possibility for further negotiation with public sector
- **High profile tenants' attraction.**

## ENVIRONMENTAL AND SOCIAL GOALS

- Possibility of attracting high profile tenants & community buy-ins
- Institutional support and buy-in
- More resilience over time of business investment and revenues
- Possibility of spillovers effects and of securing other deals in the region/nation
- Better sustainable and environmental outputs and cut of potential climate change mitigation action costs
- Establishing an international profile & possibility for building a (conscious) reputation in the sector
- More effective branding strategies
- Upskilled workforce
- Attraction of international talents (and therefore additional investments)

# KEY ISSUE EMERGED: Logics for profit making in real estate are different than in the start-up and innovation world



## REAL ESTATE & INFRASTRUCTURE

- Project promoters lack experience in financing, with increased risks.
- Overcoming uncertainties associated with early-stage financing is key, i.e. lack of market information and difficulty to assess risk.
- **Risk management is a challenge.**
- Public sector funding critical in early stages to provide key infrastructure.
- **Local policy framework, tax regimes, incentives and site assembly issues.** Private sector investors prefers to deal with one stakeholder i.e. special purpose vehicle agencies.



## INNOVATION & PRIVATE EQUITY

- Knowledge gap between innovation & traditional real estate investors.
- Need to monetize future innovation revenue streams (cf. IP licensing, innovation district data use, etc.) for longer-term goals.
- More data storage for monitoring start-ups & revenue generation;
- Technology might help
- Convergence and collaboration between stakeholders is needed to succeed.

# Key Concerns and emerging issues in Engaging in the delivery of ESGs

## PRIVATE SECTOR

- **There is no defined, clear and accountable framework to measure social and environmental impacts**
- **Private sector approach: What are the rewards for reaching impact?**
  - ESG is an imperative, the public sector should acquire capability to score them.
  - Sustainability is a win-win proposal: many studies show that sustainable assets attract better tenants, further investors and leads to higher asset value. It is only a longer-term process.

## PUBLIC SECTOR

- Divergence between **EU Taxonomy** and the models for innovation: lack of capability of the public sector to deal with complexity and to translate it into investment models.
- **The public sector should shift from subsidies to results models.**
- EU Taxonomy provides a common ground and language to everyone: the real innovation of the EU Taxonomy is that it is science-based.

# Conclusions

- Context and location is very important for IDs: **policy should be place-based** to avoid failures.
- Consider the **complexity of stakeholders**. What is a failure and for whom?
- Funding frameworks should **adopt a wider notion of value** and take into account the **maturity of the district**.
- There will be **competition among IDs** & with established locations. Critical mass is needed to succeed
- Is a new breed of investors developing that look beyond financials? **ESG/SDG/impacts to factor in** outcomes of innovation districts.
- **Are innovation districts as distinct asset class?** Not (yet), it is very early days, but they might become one.



**THANK YOU**  
**Any Questions?**

