



GREEN FINANCING FOR URBAN DEVELOPMENT

Economic feasibility and financial sustainability of urban transformations

October 3, 2022

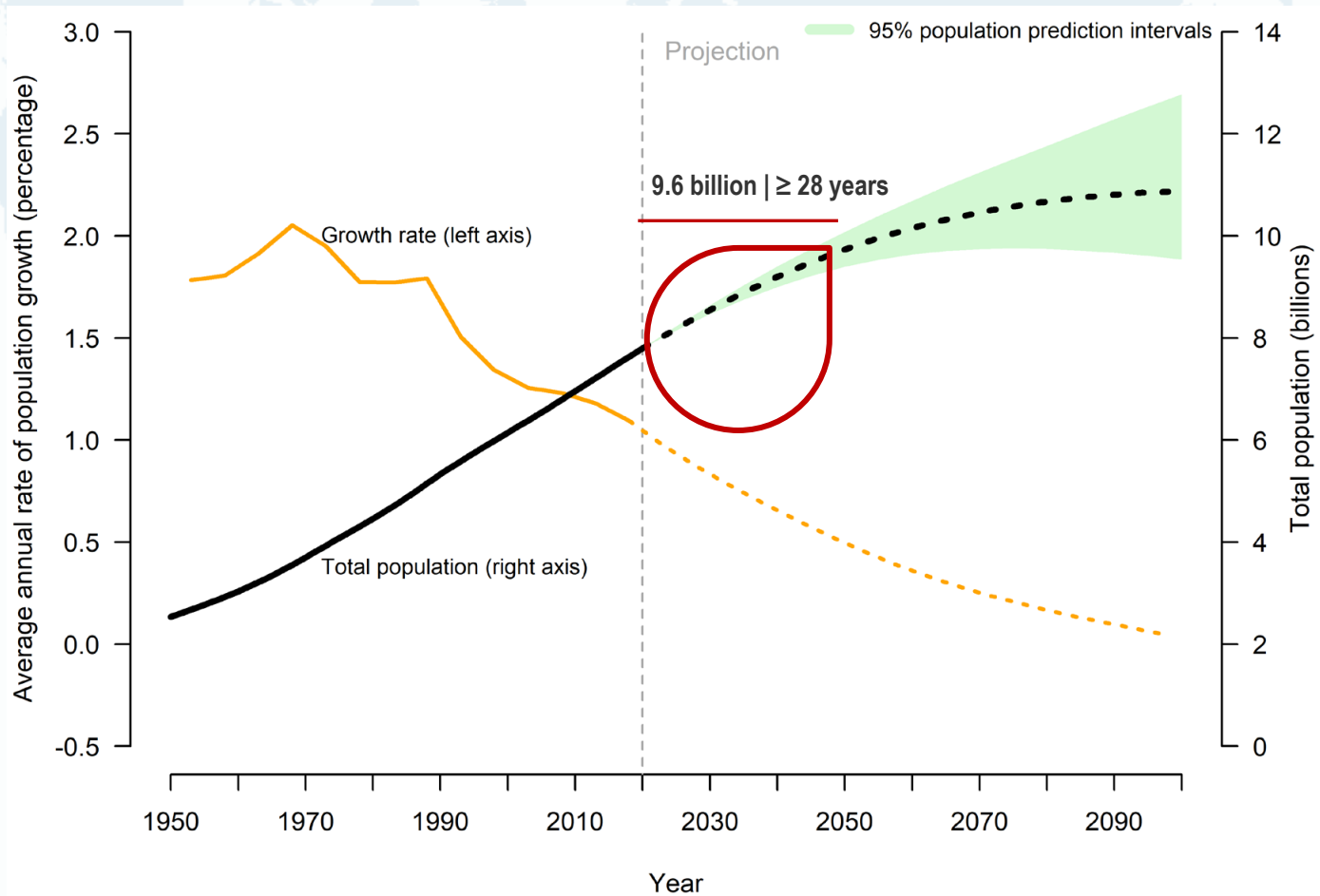
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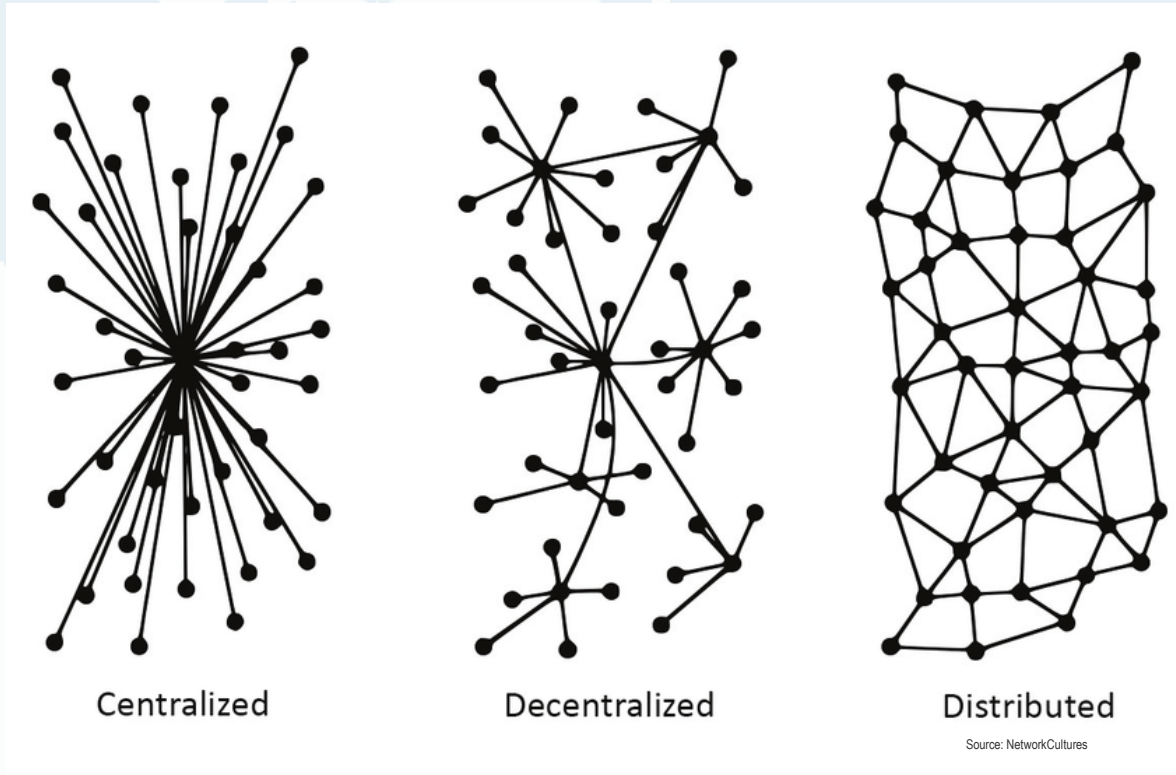
Global population. Global population growth

Figure 1. Population size and annual growth rate for the world: estimates, 1950-2020, and medium-variant projection with 95 per cent prediction intervals, 2020-2100



Data source: United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019*.
Integration: BambagioniG

New paradigms of urban development | what will the city of the future look like ?



The concepts of mobility and logistics (within the city and in function of the city and neighboring territories) will have to be reorganized according to the characteristics of the cities: smart and sustainable, more ecological, with more efficient public services and with efficient infrastructures.

Quality of life, urban sustainability, resilience, performance and new development paradigms need to be evaluated on the basis of internationally *super partes* methodologies.

1. Measurement to know the situation

Relying on Key Performance Indicators for Smart Sustainable Cities

U4SSC indicators have been developed to provide cities with a consistent and standardised method to collect data and measure performance and progress to:

- (i) achieving the Sustainable Development Goals (SDGs)
- (ii) becoming a smarter city
- (iii) becoming a more sustainable city

Each indicator forms a part of a **holistic view of a city's performance in three dimensions: Economy, Environment, Society and Culture**. Each of these dimensions provides a separate view of progress and when reported together provide a holistic view of a smart sustainable city.

2. Programming and implementing on the basis of UNECE Urban policies, and international standards

Including “**San Marino Declaration on principles for sustainable and inclusive urban design and architecture** in support of sustainable, safe, healthy, socially inclusive, climate-neutral and circular homes, urban infrastructure and cities”.



The case of Italy | The planning and design process of the investments

Guidelines for the drafting of a technical and economic feasibility project to be used as the basis for the award of public works contracts of the PNRR and PNC (July 2021)



Consiglio Superiore dei Lavori Pubblici

(i.e.: National plan of recovery and resilience (PNRR) and, National plan for complementary investments (PNC))

PHASE 1 > WHAT ?

Definition of the infrastructure project

(Project phase)

Ex-ante assessment of requirements
REQUIREMENT PREDICTION

FDPA | Feasibility document for project alternatives

PHASE 2 > HOW?

Designing the works

(Design phase)

Project design guidelines

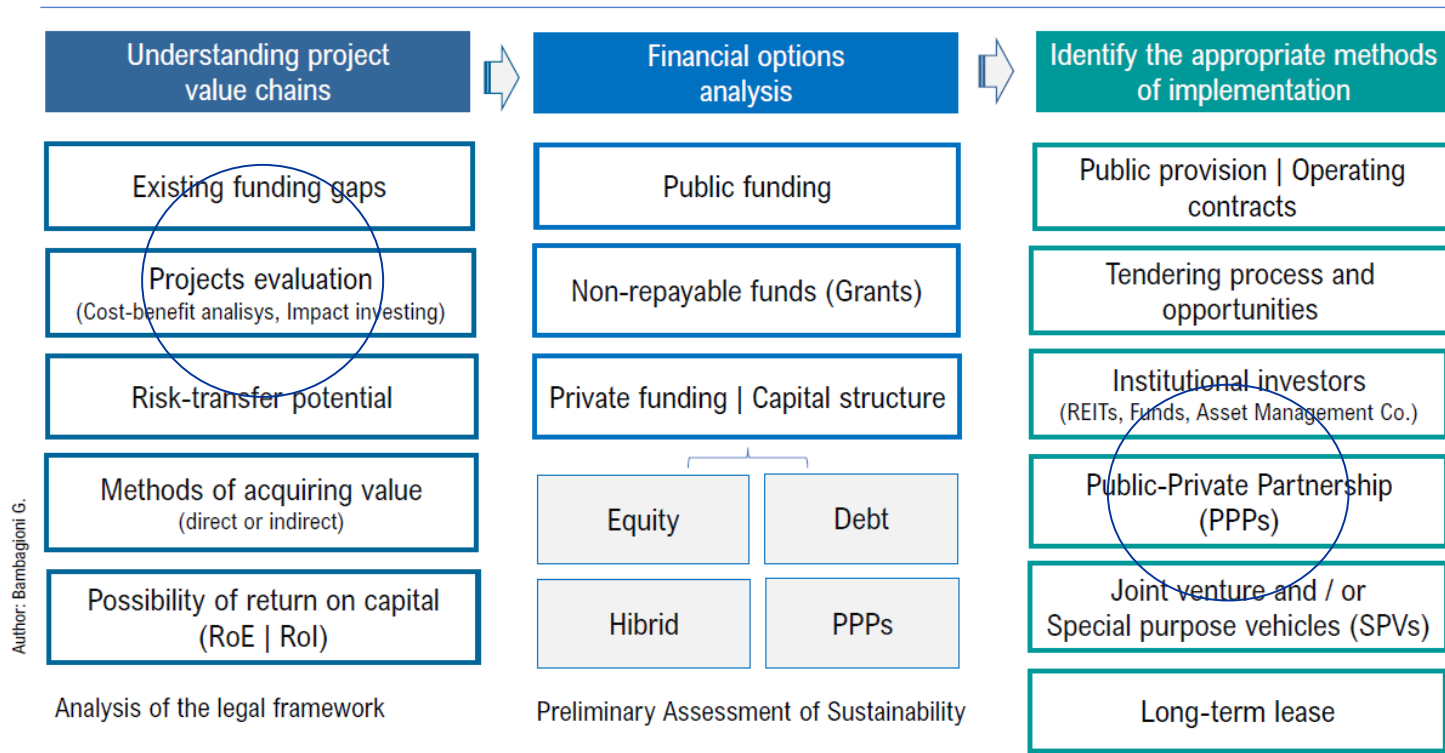
TEFP | Technical and Economic Project Facility

The **requirement prediction** is highlighted during the **first phase** in terms of the requirements for the economic and social context, related objectives, and performance indicators.

How to transform ideas into green projects? | Identification of appropriate financial resources

Planning sustainable initiatives from every point of view: including the financial one therefore, in compliance with the sustainable finance regulations ((i.e. (EU) 2020/852)) and with the ESG risk evaluation | **Added value: PPPs**

Buildings and Infrastructures | Conceptual scheme for developing financially sustainable projects



Source: Bambagioni G. (2021), Sostenibilità del valore nel finanziamento immobiliare. Maggioli Politecnica.

In this rapidly changing context, with phenomena increased by the Covid-19 pandemic and the energy crisis, it is important:

- Designing and implementing innovative green projects for **smart and green building, cities transformations and resilient and green infrastructures.**
- Public-private partnership (PPP), as well as the **implementation at national level of the UNECE urban policies.**
- **Systematic adoption of the “San Marino Declaration** on principles for sustainable and inclusive urban design and architecture in support of sustainable, safe, healthy, socially inclusive, climate-neutral and circular homes, urban infrastructure and cities”.
- **Economic feasibility and financial sustainability** of programme and projects.
- **Sustainable finance** linked to **Environmental Social and Governance (ESG)** factors.
- **Public and private capital** (including green bonds) for long-term investments (urban regeneration, redevelopment of the building stock in a smart and green perspective).