

An opportunity to innovate.

Italian cities facing the challenge of NRRP:
the case of Milan





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An opportunity to innovate **Italian cities facing the challenge of NRRP: the case of Milan**

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ABSTRACT

In May 2020, to cope with the effects of the pandemic crisis, the European Union unveiled the NextGenerationEU, a package of funds to support the recovery of member states, which are called upon to define national plans that focus on green and digital transition and reduce territorial disparities. In this framework, Italy - which is the largest recipient of European funds and loans - adopted its National Recovery and Resilience Plan (PNRR) in April 2021. The latter, multi-sectoral in nature, includes a series of reforms and the definition of six missions, which are articulated in investments on the Italian territory. A further element of complexity is the multilevel structure that the plan envisions, involving a large number of stakeholders and implementing entities. Given the breadth of the topic, it was decided to focus the research on territorial transformations and their subsequent management at the local level. The protagonists of these transformations are the cities, which assume a key role in the implementation and success of the plan itself. The work focuses on the strategies cities adopt to manage the funds in terms of governance and vision for future development. Among the various Italian centers, each characterized by its own organization, we chose to investigate the experience of Milan, a city known for its attractiveness and dynamism. With an analysis of the PNRR resources coming to the Milanese territory, it was found that about one-third of the resources are managed by the municipality that, for a variety of reasons, has mostly applied to projects that were already available, giving up on defining a more cohesive and strategic vision. Taking a closer look at some of the major planned projects, it becomes clear that the PNRR is for Milan a tool for carrying out extraordinary maintenance, long unfinished plans, or otherwise unfeasible projects. Considering that the research took place amid the process, some questions have been tried to be answered, but many still inevitably remain open. How will cities emerge from the implementation of this plan in 2026? Will the PNRR be able to restart the country and address disparities, or will it prove inadequate to overcome today's challenges?

ABSTRACT

Nel maggio 2020, per fronteggiare gli effetti della crisi pandemica, l'Unione Europea ha presentato il NextGenerationEU, un pacchetto di fondi per sostenere la ripresa degli stati membri, chiamati a definire dei piani nazionali che mettano al centro la transizione verde e digitale e riducano le disparità territoriali. In questo scenario, l'Italia, che risulta la maggiore beneficiaria dei fondi e dei prestiti europei, nell'aprile 2021 ha adottato il Piano Nazionale di Ripresa e Resilienza (PNRR). Quest'ultimo, di natura multisettoriale, comprende una serie di riforme e la definizione di sei missioni, che si articolano in investimenti sul territorio italiano. Ulteriore elemento di complessità è la struttura multilivello che il piano prevede, coinvolgendo un numero ingente di soggetti titolari ed enti attuatori. Data l'ampiezza del tema, si è deciso di concentrare la ricerca sulle trasformazioni territoriali - che il piano si limita a finanziare senza definirle a priori - e sulla loro conseguente gestione a livello locale. Protagoniste di tali trasformazioni sono le città, che assumono un ruolo fondamentale nell'implementazione e nella riuscita stessa del PNRR. Il lavoro si concentra sulle strategie che queste adottano per gestire i fondi in termini di governance e visione per lo sviluppo futuro. Tra i vari centri italiani, ciascuno caratterizzato da una propria organizzazione, si è scelto di indagare l'esperienza di Milano, città nota per la sua attrattività e dinamicità. Con un'analisi sulle risorse del PNRR che arrivano sul territorio milanese, si è riscontrato che circa un terzo soltanto delle risorse è gestito dal Comune che, per una serie di motivi, ha candidato per lo più progetti già a disposizione, rinunciando a definire una visione più coesa e strategica. Osservando più da vicino alcune delle principali progettualità previste, si evince che il PNRR per Milano rappresenta uno strumento per realizzare manutenzioni straordinarie, piani a lungo incompiuti o progetti altrimenti inattuabili. Considerando che la ricerca si è svolta nel pieno del processo, ad alcuni interrogativi si è provato a dare una risposta, ma molti rimangono ancora inevitabilmente aperti. Come usciranno le città dalla realizzazione di questo piano nel 2026? Il PNRR sarà effettivamente in grado di far ripartire il paese e affrontare le disparità o si rivelerà inadatto a superare le sfide di oggi?

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1.1 AN ON-GOING PLAN

Introduction to the research and a premise

The National Recovery and Resilience Plan is a timely and crucial issue for the future development of European countries and cities. To deal with the pandemic crisis, the choice made by the European Union to create a common debt among the member states to help the national economies turned out to be not only a new way of making policy - compared to 2008's austerity - but also a new vision of a more united and cohesive Europe.

Italy - which emerged from the crisis with considerable economic and social damages and was already showing signs of weakness in previous years - is one of the main beneficiaries of European funds. Despite its global relevance, Italy still has many points of weakness, starting from the deep territorial divides splitting the country in two and producing a socioeconomic polarization between urban and rural areas. Another aspect to recall concerns the digital transition, for which Italy is below the European average. Moreover, it is a country that has proven to be very fragile to climate change and where the green transition is still not considered enough. The arrival of European funds is, therefore, a unique opportunity for Italy, which is called upon to draw up an unprecedented plan, the success of which will be necessary for the success of the wider NGEU.

From an urban policy perspective, the PNRR represents an unavoidable issue that will be crucial in the coming years and at the center of a broader debate on the planning of cities themselves. The PNRR, therefore, calls for a new approach that is more oriented toward a strategic, flexible, and, above all, resilient direction. That is the context of the thesis research that began in early 2023, a crucial year for the plan's implementation, as it is the deadline for allocating funds among states. After an initial phase of European and national framing of the plan - to understand its complex functioning and multilevel organization - the focus then turned to the relationship between this instrument and the Italian cities. What is the role of cities? Are local authorities able to handle the heavy responsibilities entrusted to them? Is there a cohesive territorial vision capable of addressing the existing divides? These are just some research questions that guided the first part of the work. The need was then felt to go down in scale, thus choosing a case study to investigate in depth to observe the transformations and policy of the PNRR more closely. The choice fell on Milan, one of Italy's largest cities and among the most heavily funded by the plan. How did the city administration manage PNRR funds and investments? Was it possible to define a strategic

vision in the choice of projects? How important is the PNRR for a city as attractive and dynamic as Milan?

In addition, the work matured at a time when the ninth Urban@IT report was being finalized: it involves various national universities and aims at doing an initial survey of how cities are responding to the PNRR challenge, what projects they are implementing, what the difficulties and prospects. The thesis work fits into this context, benefiting from the exchanges and research taking place today to interpret this period of profound transformation, focusing on the opportunities and risks that can and are on the horizon.

A premise is necessary before proceeding: the research work refers to the Italian situation until August 2023. Two main reasons require this clarification: first, the research takes place in the middle of the six years involved in the PNRR, with a plan now defined but at the first steps of its implementation, and this allows mainly reflections on the plan's structure and organization. Second, it is good to specify the plan's work-in-progress nature, as it sees continuous changes depending on the country's political majorities and supervening external circumstances. To this latter concern, the main changes involved the governance structure

and the distribution of funds among the projects after the third installment in 2023.

The thesis is divided into three sections that follow a progressive in-depth study, starting with a framework at the European and national levels and ending with a focus on the Milanese case.

To approach a topic that is as broad as it is complex - due to its articulation, the levels involved, and the lack of assimilable precedents - the first chapter presents the context in which the plan was developed, investigating the motivations that prompted Europe to define the NextGenerationEU and how the funds were distributed among the member states. Moving on to the Italian case, the work traces the stages of defining the national plan, the governance structure assumed, and the strategic axes identified.

The next chapter opens with a reflection on the theme of resilience and its interpretation within the plan and then delves into the role of cities in this process. In this regard, the responsibilities entrusted to local authorities and the consequent difficulties encountered in the implementation of the plan are highlighted, providing, for example, two insights on governance ("A virtuous attempt to innovate: the case of ANCI Lombardia") and fund management ("A thorny issue: the case of nurseries"). The chapter then concludes with a look at the European

Chapter 1 - Premises

situation regarding the role of cities in the national plans of four other member countries.

The final chapter focuses on the case study of Milan and opens with a framing of the city and its recent trends. Particular attention is given to the issue of funds falling on the city, for which a collection of available data up to June 2023 and a consequent mapping of interventions was carried out. Following some reflections on the management of funds, the work then focused on an in-depth study of three major projects for the city of Milan:

- The Lambro - Via Rizzoli urban regeneration project, which involves the energy upgrading of social housing buildings and environmental upgrading for an area along the Lambro River,
- The construction of the new European Library of Information and Culture (BEIC),
- The Lambrate - Rubattino integrated urban plan, which allows the urban development of a city district lacking basic services for many years.

Finally, the paper concludes with final reflections regarding the PNRR instrument and lessons learned from the Milan case study.

1.2 A TIMELY AND RECENT ISSUE

Methodology and references

The thesis work has been carried out using several sources of information and methodologies. Dealing with a national urban plan, the official and normative documents were the starting point for the research, ranging from the National Recovery and Resilience Plan itself to the various decrees related to its implementation, and the institutional sites providing further information about the measures and the investments, both at the European and national level.

At the national level, the extensive debate surrounding the PNRR offered several points of view and reflections that contributed to the analysis. Due to the debate entity and relevance, an increasing number of papers and articles were published, representing the basis of the bibliography of this work. Few are still books and publications concerning this topic due to its recent and evolving nature. At the same time, conferences and congresses - organized by local entities and the research world - have been useful sources of information, offering several points of view. In the case of this work, it was possible to attend some of these events, both in streaming and in presence. They are all collected in chapter 5 with the references. One of the most interesting and valuable experiences was the participation in the

Congress "Missione Italia 2021-2026" organized by the National Association of Italian Municipalities (ANCI), in Rome in July 2023. In this context, employees and mayors of many Italian cities shared their experience in dealing with the PNRR, pointing out difficulties and best practices. This occasion helped understand the state of the art of the plan and hearing from those directly involved in it.

Besides, the periodic reports carried out by associations like ANCI or Fondazione IFEL represented other relevant sources to define an overall national picture. Due to a general lack of clear and transparent data, the elaborations and the data collected by private foundations like IFEL or Openpolis were fundamental tools.

Concerning the research about Milan and the funds it receives, many sources have been combined, as explained in detail at the beginning of chapter 4. In this case, the research implied the collection of data from various sites and a following phase of mapping the territorialized intervention in the Milanese territory. This activity allowed consequent reasoning on the distribution of the interventions at the Municipal level and among different implementing bodies.

To deal with the recurrent changes and novelties related to the PNRR, a daily check on the main

information means was required and accompanied all the research work.

Finally, interviews with various actors were an important tool involved in the research. Fourteen interviews were carried out, involving people from very different fields bringing various points of view on the matter. To provide some examples, questions were asked to employees of the PNRR task force of the Municipality of Milan, of the Metropolitan city, university professors, and architects to cover both transversal topics like the governance system or the distribution of resources and some specific themes related to the three chosen projects.

CHAPTER 2

GENERAL OVERVIEW

2.1 THE EUROPEAN RESPONSE TO THE CRISIS

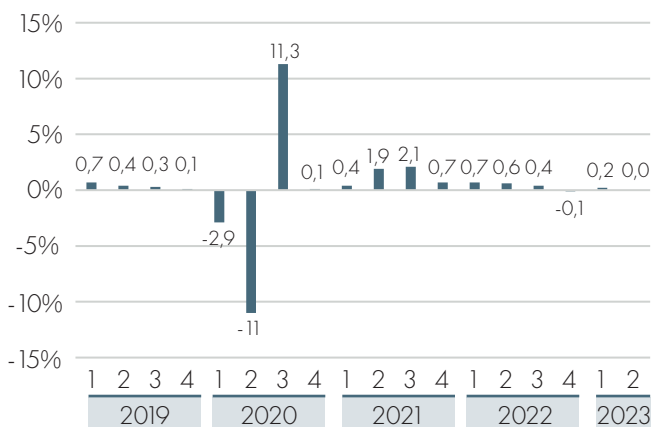
The genesis of the Next Generation EU Plan

In the first months of 2020, the health crisis of Covid-19 forced countries worldwide to abruptly stop, provoking a deep wound in the socio-economic context with long-lasting effects. The consequences of the pandemic – with different entities according to the countries – have strongly impacted national socio-economic conditions. In the first quarter of 2020, The Gross Domestic Product of the European Union fell by 11%, followed by a consequent decrease in the employment rate, which reached 70.7%. Another data that is worth mentioning to understand the entity of the crisis refers to the number of deaths, which in 2020 were almost 300,000 more than the yearly European

average¹. The Covid-19 pandemic has strongly destabilized whole countries, revealing the lack of resilience in the European system.

Faced with this dire socio-economic scenario, the European Union became aware of the necessity of deploying a joint effort to enable the member states to recover from the severe crisis. For this reason, it developed a coordinated response in economic and structural terms, in a very timely and cohesive way. While for the 2008 crisis, the European Union decided to take austerity measures to limit financial losses as much as possible, in this case, it was decided – not without the opposition of some

1. Quarterly GDP growth of the European Union



(Data source: Eurostat)

2. Quarterly employment rate of European Union



(Data source: Eurostat)

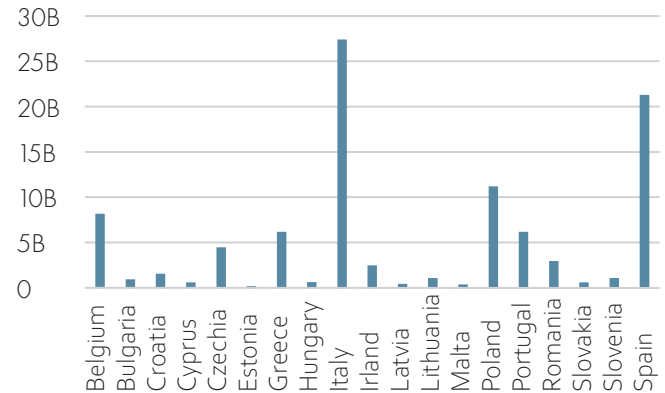
member states² - to create a shared dept among the twenty-seven countries, adopting both a short and long-term vision for the recovery (Brunazzo 2022) and providing help to the weakest ones.

On the 9th of April 2020 – just one month after the first lockdown in Italy – the Eurogroup proposed an initial funding package of 540 billion euros (2018 prices) destined for three main targets.

A first help is assured to workers with the creation of the SURE fund (Temporary Support to mitigate Unemployment Risks in an Emergency): as suggested by its label, it is a temporary support of loans granted at reduced interest to temporarily marginalize the high-risk unemployment and safeguard jobs, seeking to limit severe social and economic consequences. For this target, the European Union has allocated around 100 billion euros distributed among 19 member states, as shown in graph 3.

The second network involved in these tools of support is that of enterprises: the European Bank for Investment allocated 200 billion euros (2018 prices) to create a guarantee fund that small and medium-sized European companies can draw on. Finally, the European Union allocated 240 billion euros to directly support member states in the first phase of the crisis. Each state can draw on this credit up to a maximum of 2% of its GDP.

3. Distribution of the SURE funds among EU countries

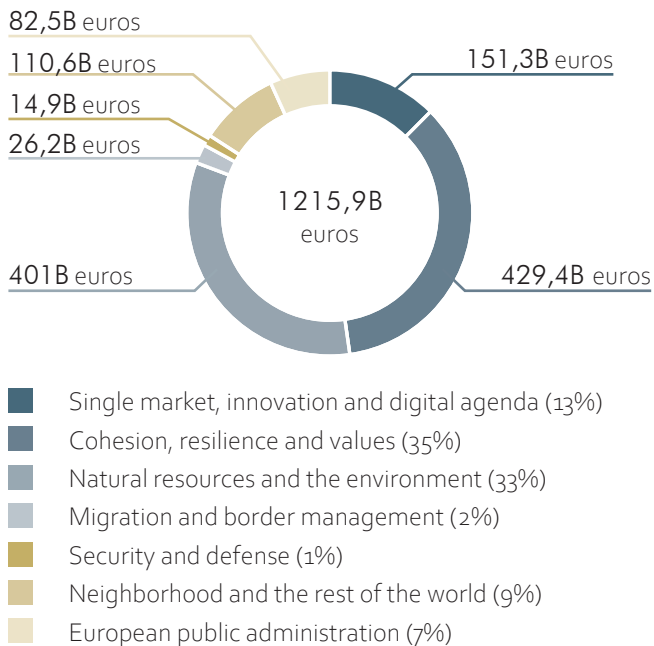


(Data source: European Union)

Apart from this first support measure, there is the **long-term budget**, which is an investment budget that aims at boosting the economic growth of the countries, especially in those sectors that are not under the exclusive jurisdiction of the states, aligning spending and ensuring proper budgeting at the European level. This multi-year package is renovated every seven years and it has been used since the '80s. In the beginning, it mainly concerned agricultural policies, then, from the '90s, it also included cohesion policies among countries. However, differently from the past, the long-term budget 2021-2027 - approved in 2018 before the pandemic - introduced new priorities focusing more on those sectors in which cohesion at the community level can significantly improve their performance: to give an example, 30% of the

investments involve education and research. It is worth 1215,9 billion euros (2018 prices), distributed among seven main expenditure sectors.

4. The programs of the long-term budget



(Data source: European Union)

Within these headings fall different programs, in parts funded by the latest instrument presented: the NextGenerationEU. Apart from suspending the Stability and Growth Pact³, on the 27th of May 2020, the European Commission unveiled the multi-annual plan for recovery, named Next Generation Eu (NGEU), which was later approved on the 21st of July of the same year. Explicitly oriented to the

future and its inhabitants, the NGEU is a temporary instrument aimed at boosting the recovery of the member states and complements the Long-term EU budget 2021-2027. Through these two devices, the European Union provides the countries with an unprecedented amount of funds that they can voluntarily draw on. In the conclusions of the special Meetings of the European Council, on the 21st of July 2020, this recovery effort is defined as:

*"(...) significant, focused, and limited in time. Significant because the effects of the crisis are far-reaching. Focused because it must target the regions and sectors that are most hit by the crisis. Limited in time because the MFF and the rules governing it remain the basic frame for the Union's budgetary planning and implementation"*⁴.

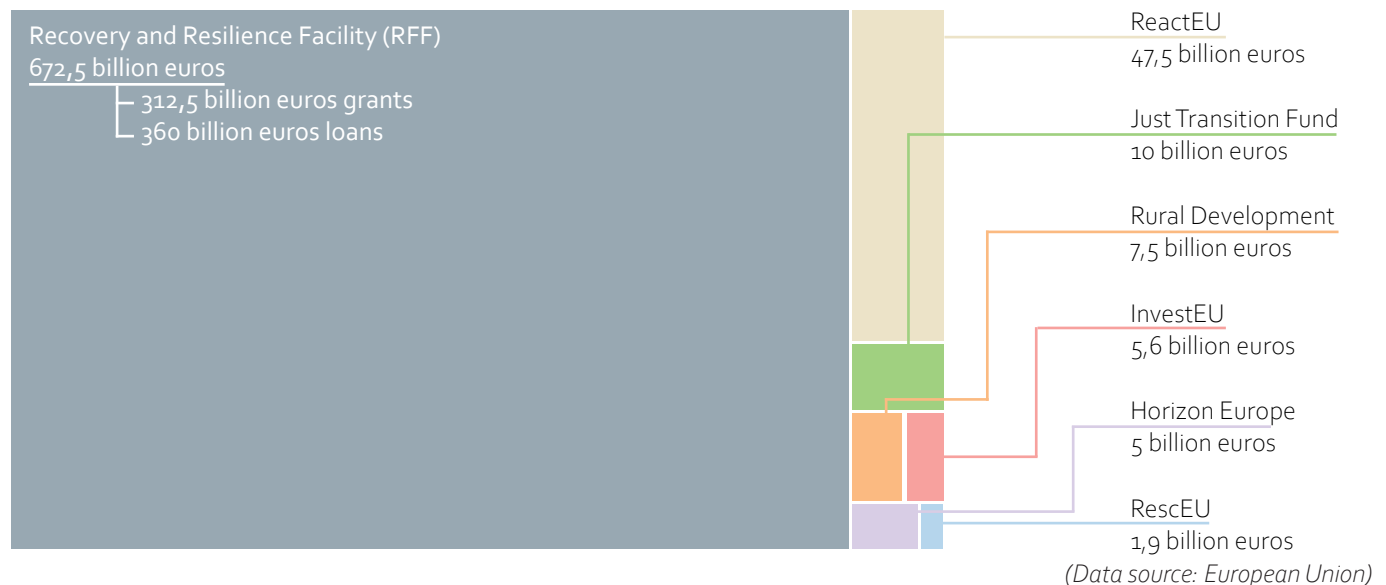
The NGEU is different in nature and entity from the long-term budget. The NGEU is worth 750 billion euros (2018 prices) in the form of investments and, differently from the long-term budget, is an innovative instrument that was created specifically for dealing with the worldwide emergency and imposes the use of the resources by 2026.

The NGEU funds are distributed among seven programs in the form of grants (390 billion euros) and loans (360 billion euros); the latter resources

have to be returned by the 31st of December 2058. The goal of these funds is to achieve a socio-economic recovery for the member states and, at same time, orient the future development towards a “greener, more digital, more resilient and better fit for the current and forthcoming challenges”⁵ Europe. It has been defined that the 30% of the total expenses related to these programs should be devoted to projects for climate; besides, they should be coherent with the goal of climate neutrality by 2050, the European goals for climate by 2030, and the Paris Agreement.

The seven programs the NGEU is composed of

5. The programs of the NextGeneration EU



have different targets and entities. The main fund is the Recovery and Resilience Facility (RRF), which is worth 672,5 billion euros, of which 360 billion euros are in form of loans. The remaining funds are then divided into the other programs: 47,5 billion euros for the ReactEU (“Recovery Assistance for Cohesion and the Territories of Europe”), 10 billion euros for the Just Transition Fund, 7,5 billion euros for the Rural Development, 5,6 billion euros for the InvestEU, 5 billion euros for Horizon Europe, and 1,9 billion euros for the RescEU. The legal agreements for these funds will be formalized by the 31st of December 2023, and the corresponding payments will be made by the 31st of December 2026.

Map 1. Distribution of NGEU funds among European countries

Austria

3,46 billion euros
0,86% national GDP
Plan approved in July 2021

Belgium

5,92 billion euros
1,17% national GDP
Plan approved in July 2021

Bulgaria

6,27 billion euros
9,23% national GDP
Plan approved in May 2022

Croatia

6,3 billion euros
11,01 % national GDP
Plan approved in July 2021

Cyprus

1,21 billion euros
5,15% national GDP
Plan approved in July 2021

Czechia

7,04 billion euros
2,95% national GDP
Plan approved in September 2021

Denmark

1,55 billion euros
0,46% national GDP
Plan approved in July 2021

Estonia

3,16 billion euros
0,97% national GDP
Plan approved in October 2021

Finland

2,09 billion euros
0,83% national GDP
Plan approved in October 2021

France

39,37 billion euros
1,57% national GDP
Plan approved in July 2021

Germany

25,61 billion euros
0,72% national GDP
Plan approved in July 2021

Greece

30,5 billion euros
16,68% national GDP
Plan approved in July 2021

Hungary

5,81 billion euros
4,65 % national GDP
Plan approved in December 2022

Ireland

0,99 billion euros
0,23% national GDP
Plan approved in September 2021

Italy

191,48 billion euros
10,79% national GDP
Plan approved in July 2021

Latvia

1,83 billion euros
5,56% national GDP
Plan approved in July 2021

Lithuania

2,22 billion euros
4,02% national GDP
Plan approved in July 2021

Luxemburg

0,09 billion euros
0,13% national GDP
Plan approved in July 2021

Netherlands

4,71 billion euros
0,77% national GDP
Plan approved in October 2022

Poland

35,52 billion euros
6,18% national GDP
Plan approved in XX

Portugal

16,61 billion euros
7,85% national GDP
Plan approved in July 2021

Romania

29,18 billion euros
12,15 % national GDP
Plan approved in October 2021

Slovakia

6,33 billion euros
6,52% national GDP
Plan approved in July 2021

Slovenia

2,48 billion euros
4,77% national GDP
Plan approved in July 2021

Spain

69,51 billion euros
5,77% national GDP
Plan approved in July 2021

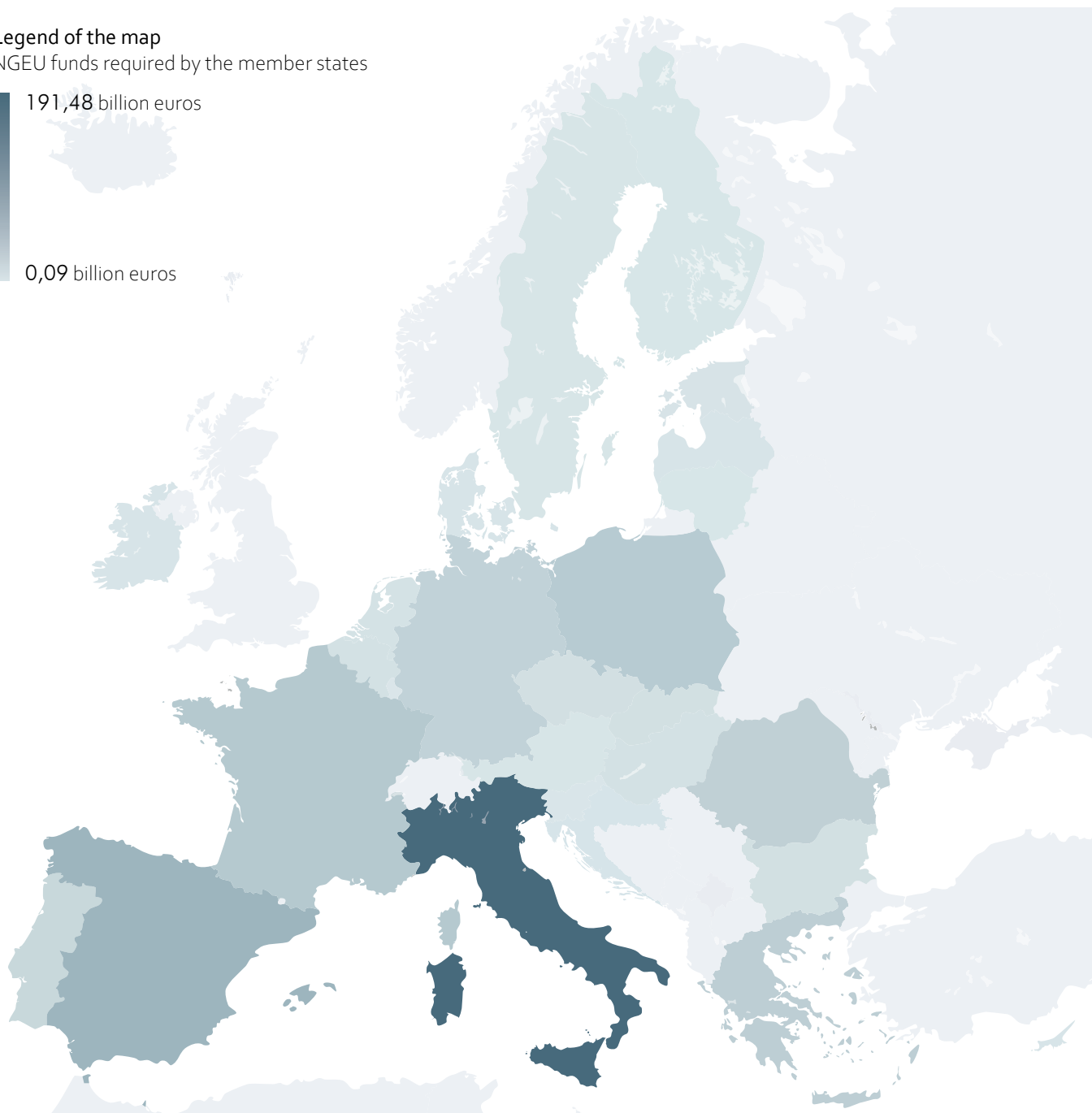
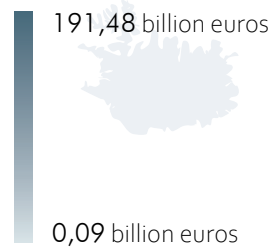
Sweden

3,29 billion euros
0,61% national GDP
Plan approved in May 2022

(Data source: European Union, Openpolis)

Legend of the map

NGEU funds required by the member states



Chapter 2 - General overview

The Recovery and Resilience Facility (RRF), as shown, takes almost 90% of the total resources, being the main instrument of the NGEU. To access the funds, the European Commission requires member states to develop a national plan showing how it can lead to national socio-economic recovery by 2026. Each plan, made of reforms, projects, and investments, should involve and be coherent to six pillars defined at the European level: they are ecological transition; digital transition; smart, sustainable, and inclusive growth; social and territorial cohesion; health, and economic, social, and institutional resilience; policies for next generation.

The plans, evaluated according to various criteria - like the attention given to digital and ecologic transitions, the growth rate forecast, and new job opportunities -, should be approved by the European Council by 2023 at the latest. To what concerns the distribution of these funds among the member states, some criteria have been established to define the maximum amount of grants each state can ask for. 70% of the total is given in 2021-2022 according to three indicators: the unemployment rate in the period 2015-2019, the inverse of GDP per capita, and the share of the population. The remaining 30% will be allocated by the end of 2023 according to the drop in the real GDP in 2020, the drop in the total real GDP in the

period 2020-2021, the inverse of GDP per capita, and the share of the population⁶. Each state, then, can decide on the amount of funds to ask for by providing a national recovery plan.

2.2 AN INNOVATIVE PLAN

The Italian Recovery and Resilience Plan (NRRP): origin and characteristics of the plan

The European Union's decision to allocate funds to support member states in addressing and recovering from the sanitary crisis has represented a great opportunity for Italy. After the approval of the NGEU program, in July 2020, Italy, led before by the Prime Minister Conte and then Draghi, developed its national plan. As recalled in the preface of the plan – and demonstrated by the amount of funds available for Italy – the country had been one of the most hit states from the recent crisis, also due to some structural weaknesses. Indeed, before the crisis, Italy had been showing signs of difficulty and weakness compared to many other European countries: it was one of the most economically fragile nations for its GDP growth rate, productivity trends, and low level of digitalization. In addition to this, it appeared particularly vulnerable to climate change, lacking the tools to address it. Other

worrying aspects concern the socio-economic situation. In 2020, the percentage of Italian people living in absolute poverty was 9.4%. Besides, it holds the record for the NEET rate (young people neither working nor studying), and the female employment rate is below the European average. Facing this situation, the government led by Draghi decided to ask the European Union for all the available funds, both grants and loans. The choice of requiring the loans was made by Italy – the state with the largest amount of funds – and only other five countries: Greece, Poland, Romania, Portugal, and Slovenia.

When writing down the plan, the Italian government had to follow and adhere to the European guidelines. The Recovery and Resilience Facility, as explained in the previous section, imposes the

6. Timeline of the definition of PNRR

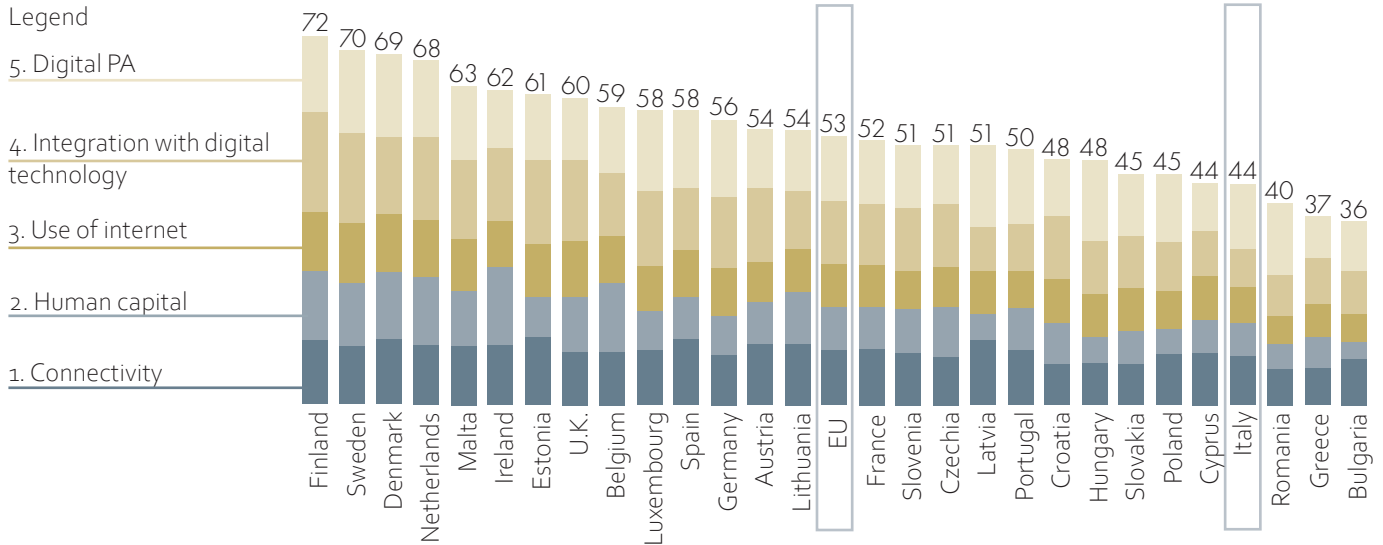


respect of six pillars that should guide the definition of each national plan. For the first pillar – ecological transition – the states should be able to explain how they would reduce gas emissions, through which reforms and interventions, keeping into account the environmental objectives fixed at the European level, like, for instance, the circular economy and the water resources protection. On the digital transition – the second pillar – each state should invest at least 20% of its total budget, working especially on the digitalization of the public administration sector. To what concerns the third pillar - smart, sustainable, and inclusive growth – countries should achieve a socio-economic recovery in a cohesive, inclusive, and resistant way, increasing productivity and a stronger competitiveness to reach economic stability. With the fourth pillar of social and territorial cohesion, the plan should aim at reducing disparities and inequalities, paying attention to the increasing divide between urban centers and rural areas. The fifth pillar - health, and economic, social, and institutional resilience – refers to a level of resilience the states should reach to enable them to adequately respond to future social, economic, and sanitary shocks. Finally, for what concerns the policies for the new generations – the topic of the sixth pillar – new measures should be able to improve kindergarten, school, and education systems.

Starting from these indications, the Italian national plan was developed according to three strategic axes.

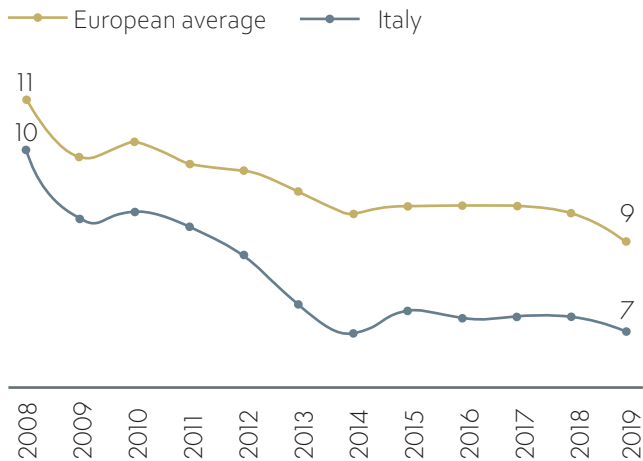
The first concerns the **digitalization**. The digital transition represents a great opportunity for the country's future to improve production, ensure innovation, and make it easier for the citizens to access some basic services. Despite efforts over the past decade, Italy remains far behind other European states in its digitalization rate. According to DESI, a report that compares the degree of digitalization of European states, Italy ranks 24th out of the 27 member states. With the NGEU funds, the government is committed to decreasing this technology gap, aspiring to create a fully digital society. First, it aims at increasing and maximizing connectivity in the country, for residents, businesses, and especially in major public institutions such as schools and hospitals, through the use of innovative digital technologies. Second, special attention is given to public administrations, many of which are still found to be very backward when it comes to digital. For this reason, the strategy adopted by the NRRP is cloud-first, which means the creation of a national cloud for all the country's public administrations. Finally, the government applies the concept of digitalization to two other important sectors: healthcare and industry. Digitalization will cover 25% of total resource allocations.

7. Digital Economy and Society Index 2020



(Data source: DESI)

8. Climate-altering gas emissions



(Data source: Eurostat)

The **ecologic transition** is the second axis. The effects of climate change, increasingly visible in recent years, have shown the weakness of Italy in facing them, as a particularly vulnerable and exposed country. Apart from NRRP, Italy is working to achieve climate neutrality by 2050, and in 2019, with greenhouse gas emissions dropping by nearly 20% in less than 15 years, it moved below the European average for climate-changing gas emissions. Despite this, the country still shows several vulnerabilities and issues, such as public transportation use, which is far lower than other major European countries. The ecological transition

is an important component of the NRRP, and it covers 37% of the total resources, which however represents only the minimum fixed at the European level.

The third strategic axis is **social inclusion**. The objective is to decrease national territorial disparities, which have been worsened by the pandemic. Social inclusion is translated with three main priorities: gender equality and combating gender discrimination - which remains a serious socioeconomic problem in Italy – valuing young people and overcoming territorial disparities. For this reason, the NRRP devotes 40% of the total budget to the *Mezzogiorno* (the southern Italian regions).

These three axes have then been translated into six missions, each of which is articulated in components and interventions. Each mission refers to a specific topic and involves various implementing bodies. The missions are the following.

Mission 1: Digitalization, innovation, competitiveness, culture, and tourism. The focus is on the digital transition of the country, of the public administration, and the way of communicating for the productive sector. This mission aims at digitalizing the whole territory, improving competitiveness and the firm's internationalization,

besides relaunching tourism and culture and preserving the territories.

Mission 2: Green revolution and ecological transition. This mission aims to ensure the ecological transition of the country, making it sustainable, and improving its competitiveness. The investments of this mission are broad and diverse: starting from interventions in agriculture to, especially in cities, projects for sustainable mobility.

Mission 3: Infrastructures for sustainable mobility. Its main goal is to strengthen the country's rail connections and enhance high-speed rail through new interventions, having special attention to the South, due to the deep territorial gaps.

Mission 4: Education and research. This mission aims to fill gaps, both qualitative and quantitative, in the Italian education system. It includes different interventions starting from increasing the supply of kindergarten places to improving access to university. Particular attention is given to research through the provision of substantial funds to universities and for doctorates or research.

Mission 5: Cohesion and inclusion. The focus is on investing in social infrastructure and improving the protection of existing situations of social and

economic fragility in the territory. The mission promotes the urban regeneration of the territory through investment plans and programs.

Mission 6: Health. It focuses on two objectives:

strengthening prevention and care on the territory, and technologically modernizing Italian health facilities.

9. From EU guidelines to PNRR

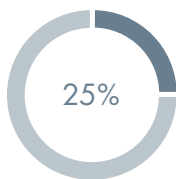
European Union's pillars

- | | | |
|------------------------------------|---|---|
| 1. Ecological transition | 2. Digital transition | 3. Smart, sustainable, and inclusive growth |
| 4. Social and territorial cohesion | 5. Health, and economic, social, and institutional resilience | 6. Policies for next generation |

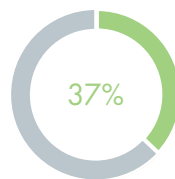
Italian PNRR

Three strategic axes

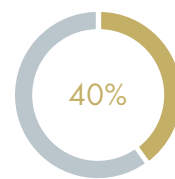
Strategic axis 1:
Digitalization



Strategic axis 2:
Green transition



Strategic axis 3:
Mezzogiorno



Six missions

Mission 1
Digitalization, innovation, competitiveness, culture, and tourism
21%

Mission 2
Green revolution and ecological transition
31%

Mission 3
Infrastructures for sustainable mobility
13%

Mission 4
Education and research
16%

Mission 5
Cohesion and inclusion
11%

Mission 6
Health
8%

The debate

After its approval, the Italian Recovery and Resilience Plan became the center of a public debate all over the country. Its significant entity and the opportunity it represents opened a discussion on the objectives, the feasibility, and the scenario forecast for the following years. Many voices have been taking part in the debate, ranging from the actors directly involved in the plan's implementation, political parties, to universities. Indeed, the plan offers food for thought on a large variety of issues and mobilizes several actors. In this framework, an interesting study was carried out by Urban@IT, focusing on the role of cities and providing concrete cases of how local entities are dealing with the plan (Urban@IT 2023). This thesis adopts a similar perspective, trying to analyze and understand the main aspects, potentialities, and critical points the NRRP raises, taking into account the various points of view that are constantly emerging in the public debate.

Some initial considerations

When the member states were required to develop a national plan to receive the European funds, Italy arrived unprepared. In the last decades, strong political instability characterized the country, with frequent changes in the government. This kind of situation hampered the possibility of constructing a

common strategic view for the future of the country. Besides, this opportunity was made even more difficult due to the progressive rise and affirmation of reactionary forces which, by their nature, are less open to programming and supporting public interventions in the national economy, favoring especially privates.

Anyway, the European resources represented a unique occasion for Italy to recover, increase its competitiveness, support its economy, and solve the deep territorial disparities. The plan that was developed, however, lacks a strong and unifying vision for the future of the country, and this can be seen in several aspects. When defining the plan and deciding the number of resources to ask for, both the Conte and Draghi governments did not involve territorial entities and socio-economic forces, establishing a dialogue only with ministries and large state-owned investee companies. This lack of involvement has strongly been criticized especially by local entities and is a symptom of the absence of a territorial vision for the plan. Indeed, the PNRR does not rely – also for issues of time – on an initial recognition of the needs and the criticalities at the territorial level (Viesti 2023).

At the same time, another aspect has to be pointed out: Draghi – who was leading a technical

government born to solve an institutional crisis – had a very large majority and enjoyed absolute confidence in his way of working, due to his experience. This is why, generally, the NRRP's contents and the wider decision to request all the available European resources were not put under discussion. Besides, the plan has been more and more conceived as a technical document that, for its nature, did not require a political confront, which however should have been necessary, especially when considering the entity of the investments it implies and the occasion it represents for the whole country. Indeed, the plan seems a technical document and reflects the technical nature of the government itself: it appears more as a plan of reforms that is accompanied by a list of interventions and results to achieve that are not part of a unitary vision (Viesti 2023). The Forum Diseguaglianze e Diversità collected some critical points and underlines that the plan lacks “that cultural and perspective reversal that would allow with greater force to attack the root determinants of inequality and, thus, avoid a simple return to the former normality, which even before the crisis prevented the country from growing and fueled widespread inequality and poverty”⁷. It seems that it aims more at the modernization of the country than at its structural transformation (Viesti 2023). Besides, as it will be deepened in the fourth

section of this chapter, the plan does not define the territorial allocation of almost all the funds, leaving this responsibility to the local entities and the many other implementing bodies involved that often lack the adequate competencies. A plan that does not dialogue with the territory and its needs can hardly bring a complete transformation of the country, solving inequalities and creating the missing services. In a nutshell, can a plan without a territorial vision bring Italy out of the crisis and increase its resilience?

2.3 TOWARDS A CENTRALIZED GOVERNANCE

The governance system and its changes

Meeting the deadlines that have been established by the European Union is a crucial aspect each state has to deal with to successfully carry out its national plan. Indeed, not complying with the schedule means not receiving the expected funds. For this reason, and to manage such a complex and articulated plan, strong and well-structured governance is needed. With the dl 77/2021, Italy defined a multi-level governance system creating new bodies with functions that range from establishing guidelines to monitoring the implementation of the plan. These new structures were defined to remain in charge until the end of 2026, following the plan's development. The first version of the plan prevented governance structures from being modified due to a change of Parliament majorities to ensure a certain soundness to the plan's implementation and its superiority to shifting political preferences. However, with the new government led by Meloni from October 2022, the structure was partially modified, overcoming the initial indications to better control the whole process.

The governance of the NRRP relies on a pyramidal structure, on top of which the national government takes responsibility for the implementation of the

plan, responding to the European Commission. Besides, in cases of breach by the implementing bodies, the government can exercise substitutive powers over all the fields involved in the plan (art. 12).

The original governance

The Prime Minister's office is responsible for addressing the realization of the plan: a Steering Committee (*Cabina di Regia*) has been established to guide, boost and coordinate the whole implementation of the interventions. It has also the responsibility of periodically informing Parliament on the state of the implementation of the plan. A second body is a Permanent Table for economic, social, and territorial partnership (*Tavolo permanente per il partenariato economico, sociale e territoriale*), which has the function of joining the territorial bodies, the civil society, the productive and research world, and, in case of critic situations, mediate with the other structures. The introduction of this entity allowed the establishment of the missing dialogue between the government and the rest of the actors involved, softening the pyramidal governance structure. These two bodies are assisted by the Technical Secretary (*Segreteria Tecnica*). To deal with normative and bureaucratic

difficulties, the Unit for the rationalization and improvement of regulatory effectiveness (*Unità per la razionalizzazione e il miglioramento dell'efficacia della regolazione*) was created, with the role of coordinating possible strategies to overcome the obstacles.

The activities of monitoring and reporting are given to the Ministry of Economics and Finance, through the Central service for NRRP (*Servizio Centrale per il PNRR*), which has the relevant responsibility of communicating with the European Commission. Besides, it manages the financial fluxes and offers technical support to the central administrations in need. Inside the same ministry, the Audit Unit (*Unità di Audit*) has a role of control, working independently from the other structures.

To what concerns the level of the implementation of the plan, each of the involved Ministries has to define a coordination structure that communicates with the Central Service for NRRP and has the role of defining the correct guidelines to select the interventions to realize and monitoring procedures, expenses and their regularity. The realization of the interventions is then attributed to the central administrations and the territorial entities, which, to speed procedures, can rely on public and in-house companies. With the dl 152/2021, then, a new body has been created: the NRRP State-Regions Unit (*Nucleo PNRR Stato-Regioni*), with the aim of better

coordinating the central administrations and the territorial entities and supporting the latter.

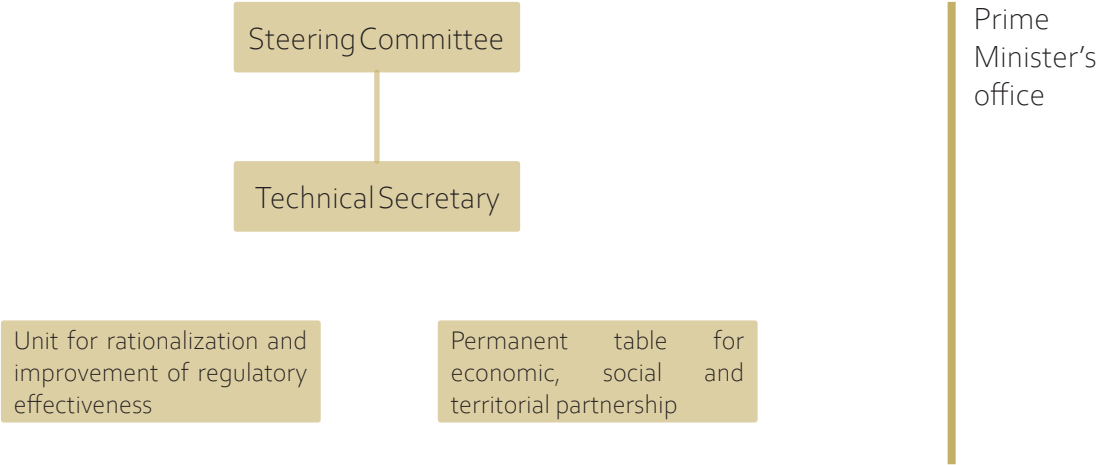
Changes in the governance structure

With the dl 13/2023, the governance structure has been modified by the new government headed by Meloni, introducing some important changes. First of all, the Minister for Foreign Affairs, the South, the Cohesion Policies, and the NRRP (Dr. Raffaele Fitto) is given a relevant role in the new structure as the entrusted political authority for the NRRP.

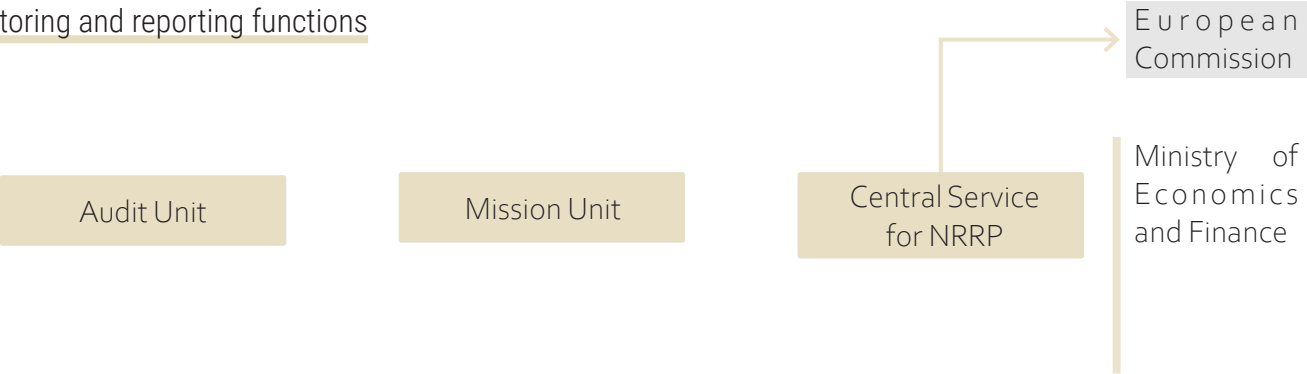
Secondly, two new bodies were created. The Taskforce for NRRP (*Struttura di Missione per il PNRR*) at the Prime Minister's Office level (art. 2) took the functions previously assigned to the Technical Secretary and supports the Minister for the NRRP, in terms of addressing the implementation of the plan and coordinating the government's action with the realization of the interventions. Besides, it becomes the interlocutor with the European Commission, an activity previously managed at the level of the Ministry of Finance. Besides, the general Inspectorate for the NRRP inside the Ministry of Economics and Finance (art. 1) substituted the Central Service, absorbing its functions, including the responsibilities related to the revolving fund, the financial fluxes, and the monitoring. Together with the Task Force, it supports the Minister for the NRRP. Then, the Permanent Table for the

10. Governance during Draghi government (dl 77/2021)

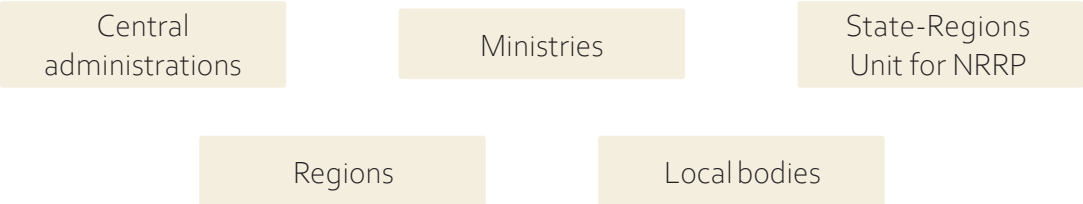
Guidance and control functions



Monitoring and reporting functions

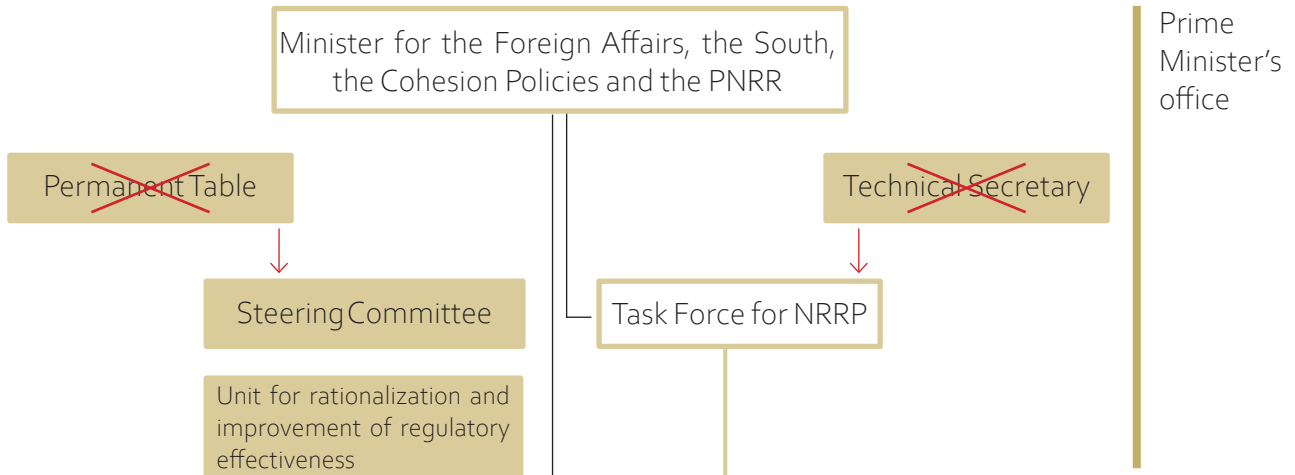


Implementation functions



11. Governance during Meloni government (dl 41/2023)

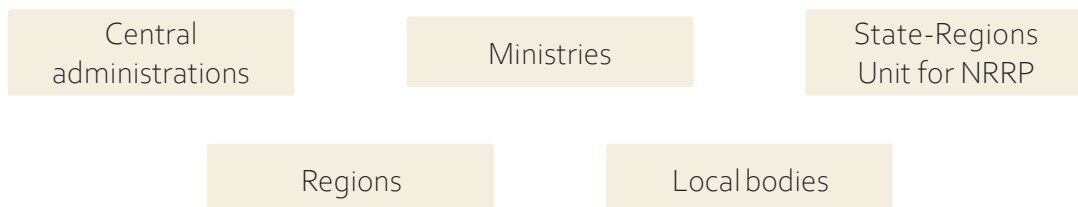
Guidance and control functions



Monitoring and reporting functions



Implementation functions



economic, social, and territorial partnership was abolished and its functions were taken on by the Steering Committee, to which, on some occasions, the representatives that participated in the table can join. Moreover, at the implementation level, the central administrations that hold some interventions of the NRRP are allowed to re-organize their internal structures.

There are also some measures to strengthen the structures of the local entities: the possibility of increasing the number of directors and stabilizing the roles of some personnel through open-ended contracts.

The debate

The modifications in the governance structure introduced by the dl 13/2023, which was converted into law⁸ two months later, rose some critical questions. It clearly emerges the will of the new government to centralize even more the management and control of the procedures, starting from the relevance given to Minister Fitto, who has become the unique political interlocutor with the EU and the head of the pyramidal structure. This tendency to establish an even more compact structure has been justified with the aim of improving homogeneity in the management, implementation, and vision for using the European funds. At the same time, it appears to be also a way

for the new government to substitute managers and executives nominated in the past with people closer to its values and perspectives. However, the main aspect that has been criticized concerns the timing of this important reform. Indeed, these months are quite a delicate moment for the implementation of the plan and the respect of the milestones, and the possibility of organizational changes at the level of the central administrations may cause some conflicts among all the bodies involved. Besides, this multi-level reorganization – whose entity is still undefined⁹ – involves a series of bureaucratic procedures that are likely to stress an administration system that is already in a difficult condition. Finally, the potential new nominations for some departments may create operational problems and confusion.

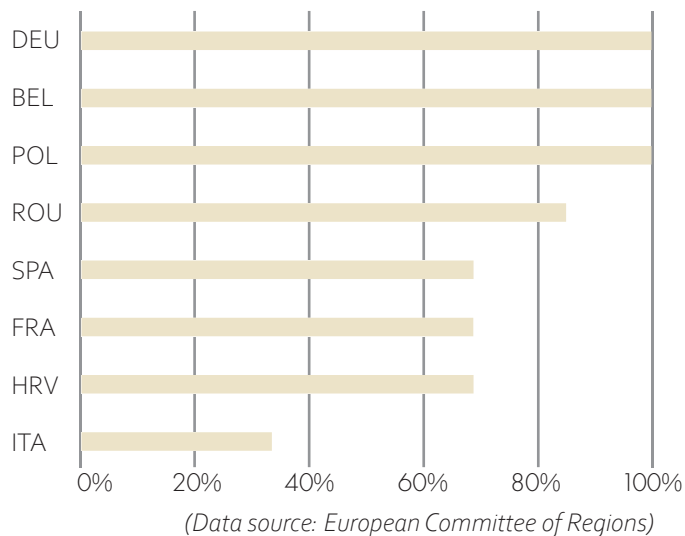
At the implementation level: the leading role of Italian municipalities

The Plan, with a strong sectorial nature, defines the central administrations and the ministries as the holders of the lines of intervention of the PNRR, in a strongly centralized model. These entities have a wide autonomy and responsibility in defining the effective interventions the funds will finance in the Italian territory. In contrast with the traditional Italian tendency, the Regions appear to have a quite limited role and influence on the implementation

of the plan. As implementing bodies, the Regions mainly deal with Mission 6 - as health is one of the subjects over which Regions have competing jurisdiction – and labor policies. They have the role of defining the so-called flagship programs (*progetti bandiera*): each region has to identify a project with strong strategic importance for its territory to orient the use of the funds in that direction. An example is the project proposed by Liguria to create a Center for Computational and Technological Medicine, part of mission number 6. As underlined by Ceffa¹⁰, the Italian regions had a quite limited role also in the phase of definition of the national plan, which instead was characterized

by the dominant role of the government. Indeed, as explained in the previous section, both the Conte II and the Draghi governments did not involve the territorial entities and the socio-economic actors and considered the regions more as descriptive elements than institutional entities (Ceffa 2022). This missed confrontation may be due to various reasons that range from the conflicts that took place between the State and the Regions during the pandemic to the general scope of a plan that requires an accountability to the European Union (Ceffa 2022). Making a comparison with other European countries (Belgium, Croatia, France, Germany, Poland, Romania, and Spain) about the role of regional and local authorities in this process¹¹, it emerges that the Italian case is the one where the territorial entities were less involved in the preparation of the plan (graph 12). This kind of evaluation refers to the details the plan provides in terms of the consultation process that took place to define the national plans: the picture coming up reveals that Germany and Belgium recognized a wide importance to role of federal states and regional governments in setting up the strategies, reforms and the measures. Poland, as well, got the same score of the previous countries for exhaustiveness of the information provided regarding the involvement of the local authorities.

12. Involvement of local authorities in the definition of the National Urban Plans



On the contrary, a relevant and challenging role is attributed to the local bodies, like municipalities and metropolitan cities. Indeed, these actors as implementing entities appear to have a fundamental role in the realization of the various interventions, with duties of monitoring, accountability, and control and being directly in contact with the ministries, without any mediation by the Regions. However, Italian municipalities found themselves strongly weakened by a period of restrictions in financial and social terms and don't have the adequate tools to deal with such complex and demanding procedures and interventions. This condition has been efficiently summarized in the expression "Italy of the disarmed mayors" (Viesti 2022a), referring to the relevant responsibilities assigned to local bodies that often lack the necessary instruments to face them. According to the analysis carried out by the Parliamentary budget office¹², between 34.7% and 36.9% of the total Italian funds of the Recovery and Resilience Facility will be managed by the territorial entities. These latter actors are facing a huge increase in the resources they are used to managing and often suffer from a lack of personnel and adequate competence. These difficulties are even more accentuated in the southern regions and the procedures defined for the implementation of the interventions are likely to determine an increase in those territorial

inequalities the plan aims to reduce. Indeed, the competing model on which the NRRP relies, the complex bureaucratic procedures, the number of controls and difficulties in the interactions with the other levels of the governance structure are among the main critical aspects these entities are facing (Ceffa, 2021). One of the four reforms the plan provides is indeed related to the structure of the public administration, aiming at improving the competencies of people involved (especially digital and green skills), strengthening its capacity and efficiency, and enhancing its digitalization. Apart from this reform, the government arranged and favored some forms of assistance, like the possibility to have 1000 experts to support the local authorities, the service portal Capacity Italy¹³, and the platform Easy¹⁴. Besides, for a complex issue like the nurseries a special task force was formed.

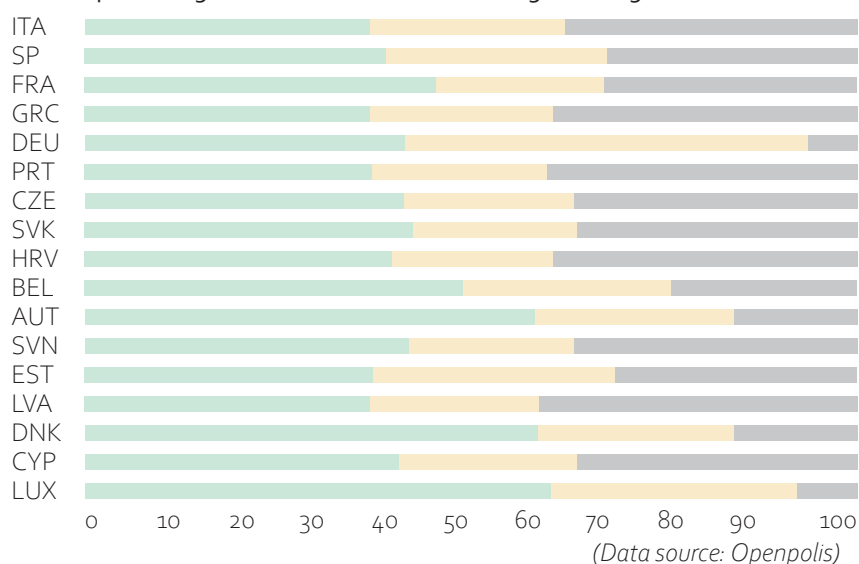
2.4 AN UNDEFINED PICTURE

The distribution of the resources

The first reasoning can be made considering the allocation of resources according to the three strategic axes sustaining the plan and shared at the European level. In the Italian national plan, 27% of funds are allocated for projects concerning the digital transition; while the other two pillars – ecological transition and social inclusion (*Mezzogiorno* in the NRRP) – receive around 37% each of the resources. At the European level, according to Openpolis¹⁵, Italy is the last country – together with Greece – for the percentage of funds spent for the ecological transition, being 37% the

minimum required by the European Commission. The resources of the plan have been allocated among the six missions according to the percentages shown in graphic n. 14. To these values, it is necessary to add the resources coming from the React-EU programme and from the Complementary National Fund¹⁶. Looking at the figures, it emerges that the first two missions correspond together to a wide part of the total funds, and this is related to the importance given to the digital and ecological transition, which are the so-called “high objectives” the plan pursues.

13. The percentage of funds allocated for the digital and green transition



Legend

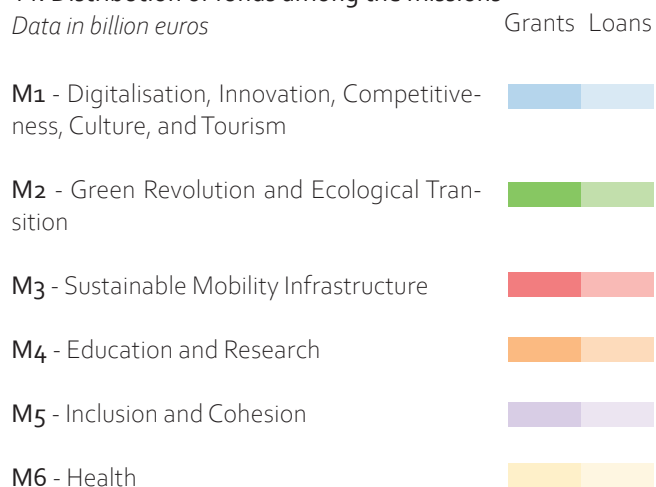
- Green transition
- Digital transition
- Other

The graph shows the different relevance the states gave to the pillars of digital and green transition, keeping into account that these percentages have been calculated on different amounts of resources. It is interesting to notice that Germany allocated most of the resources for these two goals, being the country with the largest percentage for the digital transition (52%), while none of the other states overcome the 31,5% (Lithuania). To what concerns the green transition, instead, the most virtuous countries are Luxembourg (60,9%) Denmark, and Austria, while Italy and Greece just reach the minimum.

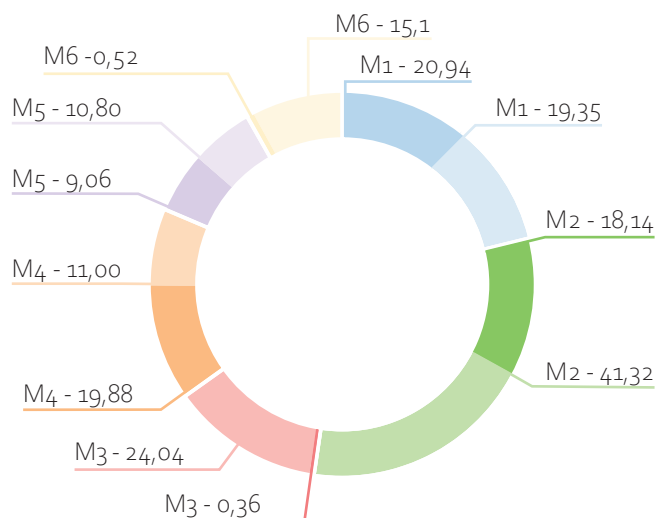
This distribution is then translated into the amount of funds each central administration (and some departments of the Prime Minister council) has

14. Distribution of funds among the missions

Data in billion euros



received to develop the various projects; there is a quite high uneven distribution of resources among the ministries. According to the report carried out



15. NRRP and additional resources

Mission	NRRP	React-EU	Complementary National Fund	Total
Mission 1	40.29 billion euros	0.8 billion euros	8.74 billion euros	49.86 billion euros
Mission 2	59.46 billion euros	1.31 billion euros	9.16 billion euros	69.94 billion euros
Mission 3	24.40 billion euros	0.00 billion euros	6.06 billion euros	31.46 billion euros
Mission 4	30.88 billion euros	1.93 billion euros	1.00 billion euros	33.81 billion euros
Mission 5	19.86 billion euros	7.25 billion euros	2.77 billion euros	29.83 billion euros
Mission 6	15.62 billion euros	1.71 billion euros	2.89 billion euros	20.23 billion euros

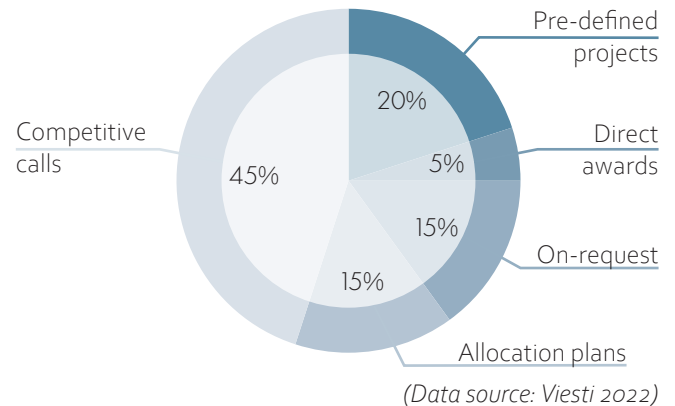
(Data source: governo.it)

by Corte dei Conti¹⁷, the Ministry of Infrastructure and sustainable mobility (MIMS) holds the highest number of measures (49), followed by the Ministry of Environment and Energetic Security (MASE)¹⁸ and the Ministry of Digital Transition (MITD). These Ministries are also those that have the highest number of already existing projects for which the plan has been a boost. At the same time, there are seven administrations – like the one for Sport, Regions and Autonomy, or Disability - that hold only one measure each.

To what concerns the territorial distribution of the resources, some premises seem necessary. First of all, the plan is composed of three different types of interventions. Firstly, **systemic actions**, which, due to their national and transversal nature, don't have a territorial dimension. Examples could be the digital innovation interventions. Secondly, **territorialized actions**, which concern projects already defined in the plan in terms of costs and localization; for example, some railway infrastructural projects. Thirdly, **actions to be territorialized** through administrative procedures.

A second premise, as clearly explained by Viesti¹⁹, is that, apart from the pre-defined projects and the direct awards directly managed by the central administrations, there are three ways in which the indications of the plans are translated into specific

16. Territorialized and to be territorialized interventions



territorialized projects:

- **on - request measures** (*misure a sportello*), which are the funds given to privates, enterprises, or citizens who require them; for instance, this is the case of those measures like "superbonus" for Transition 4.0;
- **allocation plans** (*piani di riparto*), according to which a part of the resources is distributed by the ministries among the regions, which, then, have the responsibility of identifying the projects to finance;
- **competitive calls** (*bandi competitivi*), which are managed by the central administrations.

Thirdly, the objective of social inclusion and territorial cohesion has also been translated into the imposition of a constriction²⁰, according to which at least the 40% of the resources of interventions with a specific territorial dimension

should be allocated in the so-called “*Mezzogiorno*”, the regions in the South of Italy. The aim of this measure is to guarantee that a relevant part of the funds is distributed among the most fragile and less-favored regions, overcoming the criterium of the population (according to which the percentage would be 34%, as it happens with ordinary plans). The respect of this constraint is monitored by the Department of Cohesion. This kind of measure has been criticized because it suggests a sort of simplification in considering the Italian territory made of two parts – Central and Northern regions, and the South – and not aiming for a more articulated vision of a heterogeneous system of realities. The specific needs and differences of the territories have not been considered.

Another relevant aspect is the ability of the territories to manage and effectively use the resources they receive. In the case of the southern regions, this aspect is crucial as the territorial entities result often unable to cope with the arrival of such an amount of funds, due to their historical and structural weakness; this is especially visible in the case of competitive procedures - the calls – managed at the national level.

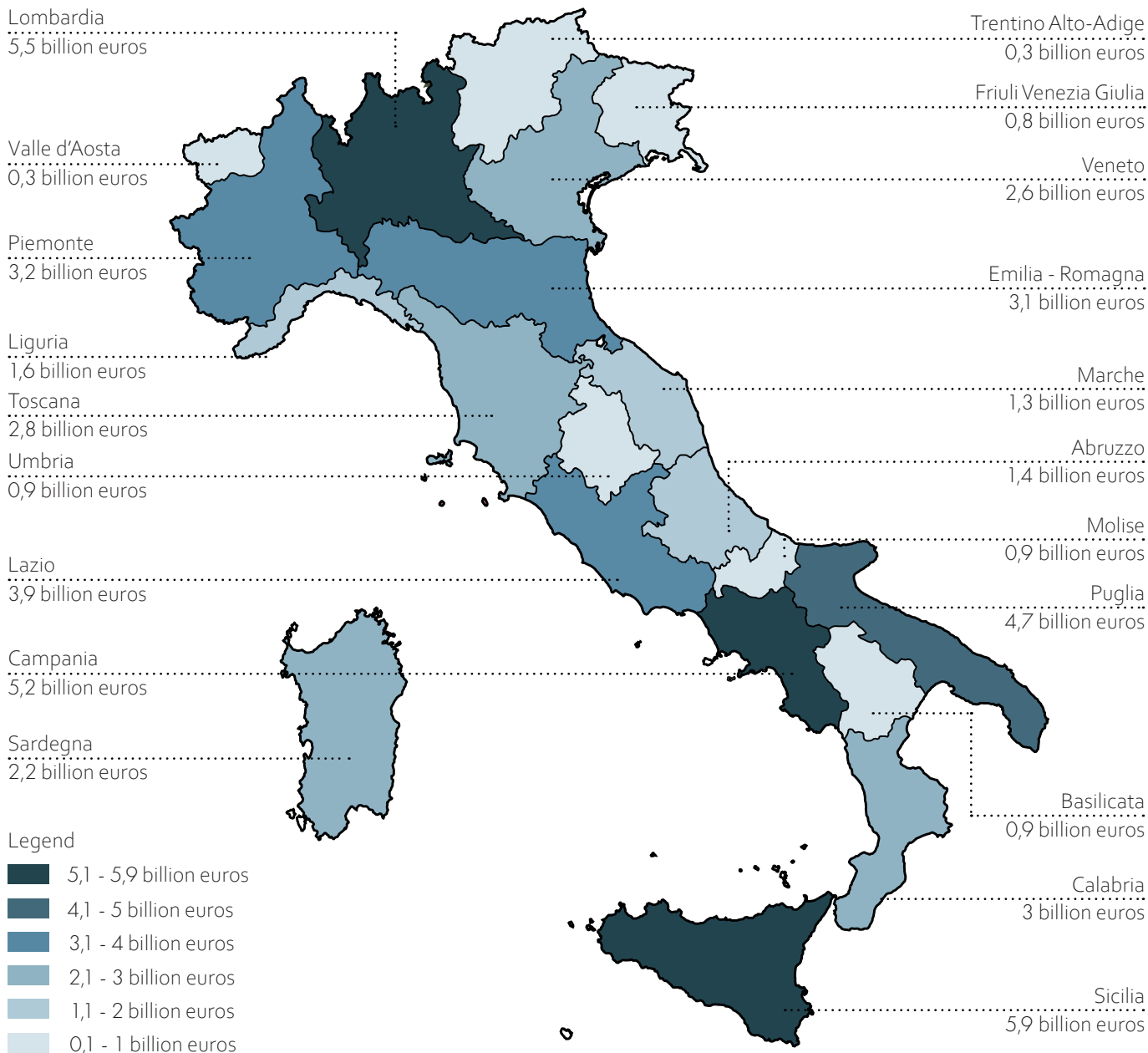
Considering all these aspects, what emerges is that the distribution of the resources will effectively result at the end of the allocation procedures, through the various modalities. The government

did not take this kind of responsibility, it tried to give a general orientation but a wide part of the realization – and the success – of the plan depends on the territorial entities and their ability to manage it. Openpolis realized a map showing the distribution of the resources – up to February 2022 – among the Italian regions²¹. Sicily is the first region for the amount of funds received (5,9 billion of euros), followed by Lombardy (5,5 billion euros) and Campania (5,2 billion euros), while Trentino Alto Adige and Valle d’Aosta are those receiving fewer resources (both 0,30 billion euros). However, this process is still ongoing.

From this picture, it emerges that the plan has a sectorial nature, having the investments distributed according to the different sectors and not so much on the territories. A relevant role in its implementation is played, as previously pointed out, by municipalities. To this concern, an interesting analysis has been carried out by Urban@it, focusing on those measures that have a relevant impact on cities - ranging from new public infrastructures to extraordinary maintenance of existing buildings – in order to have an image of their distribution and entity. However, this kind of evaluation is not easy to make, as the resources depend on uncertain allocative processes. The analysis carried out by Anci (Associazione Nazionale Comuni Italiani – National Association of Italian Municipalities)

Map 2. Allocation of the funds among the Italian regions

Elaboration on the basis of Openpolis data, situation up to February 2022



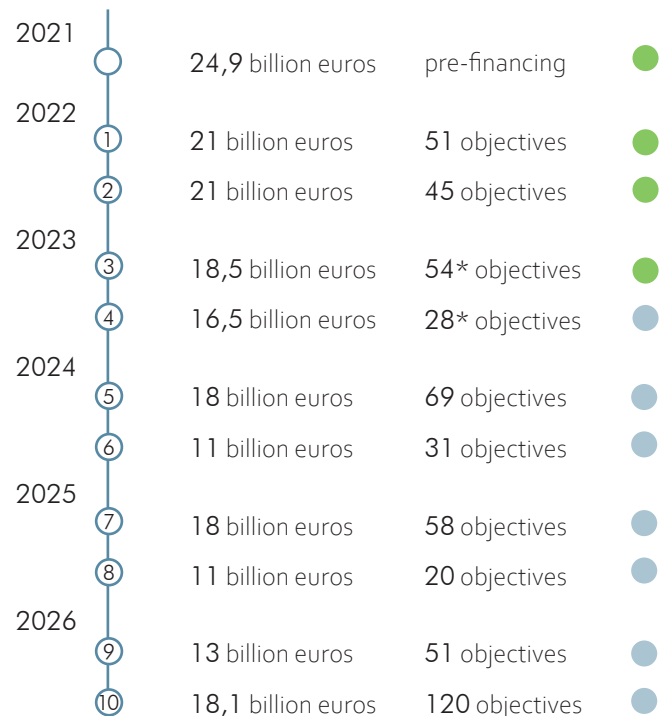
provides data about the entity of the investments for which Municipalities and Metropolitan Cities are the implementing bodies. What is clear is that these local entities have a crucial role in the phase of both design and implementation of the interventions. For this reason, Viesti often uses the expression "Italy of the Mayors" (*L'Italia dei Sindaci*), actors that, differently from the past, gained more power and responsibility than the Presidents of the Regions. The research by Urban@it, then, tried to map the transformations that will characterize provincial capitals and metropolitan cities in Italy, focusing on those investments²² (11) with a significant impact on them. For these measures, the allocation criteria and the beneficiaries are various, and they represent only a part of what effectively will fall on cities. What emerges is that more than two-thirds of the resources related to the considered measures will affect metropolitan cities (more than 14 billion euros), with an uneven distribution among them and also among the municipalities part of the metropolitan city (the capital receives much more funds). Generally, the investments are way more concentrated in the regional capitals and there isn't a higher concentration of funds in those territories that are relatively less efficient and developed. Besides, it is possible to see that there is unevenness among the territories, especially confronting big and medium-small cities.

The last updates

The context

Due to the ongoing nature of the plan, several changes occurred during its implementation phase that will end only in 2026. Such a multi-annual plan has inevitably to deal with both national and international circumstances that can put at risk its overall success. For the Italian plan, ten tranches of payments were agreed with the European Union, distributed over the years as shown in the diagram.

17. The Italian installments



* modified in 2023

(Data source: Italiadomani)

To what concerns the first two deadlines, the objectives were successfully reached, also because they mainly implied milestones, which means administrative actions and procedures that are generally easier to carry out than targets, with precise quantitative indicators. Coming to the third tranche, indeed, some critical aspects emerged, worsened by various contextual conditions. Meloni government, after reorganizing the governance structure in a more centralized way, had to face these difficulties and proceeded with a slight redefinition of the third and fourth installments, postponing one of the objectives to the latter one²³. This change was later approved by the European Union which sent the third tranche. As pointed out by the Third Report on the Status of Implementation of the National Recovery and Resilience Plan, the main critical points seemed to be related to three issues. First, some European directives like those of the Do Not Significant Harm principle had slowed down some procedures, requiring specific controls. Second, the territorial entities suffered from the lack of adequate administrative competencies to face the huge responsibilities the plan gives them. Finally, the Russian invasion of the Ukrainian country brought impactful consequences to the international scene, bringing an overall rise in costs. The effects of these critical nodes may be retraced in the difficulties Italy encountered in respecting

the deadlines: according to Openpolis data, indeed, on the 7th of June 2023, Italy had reached only 10 out of the 27 objectives forecast for the end of the month²⁴.

In this unstable context, on the 19th of April 2023, the various administrations met the European Commission task force to discuss about the difficulties encountered and some proposals to redefine the plan. Less than one month later, on the 10th of May, the government and the European Commission agreed on the opportunity of reshaping the national plan to be able to respect the tight schedule.

The reshaping of the national plan

The European regulation allows the member states to redefine their plans due to their multi-annual nature that exposes them to the contingency of the period. With the war in Ukraine and all the consequences related to it, the European Commission set some strategic guidelines for the REPowerEU programs, aiming at progressively reducing the dependency on Russian fossil fuels. To achieve such a goal, the national plans elaborated as part of the Next Generation EU appeared fundamental instruments to involve. For this reason, additional grants were allocated – 2,76 billion euros for Italy – and the states were allowed to add a new chapter to their National Recovery

and Resilience Plans related to the actions linked with the REPowerEU aims. Besides, the Italian government relies on the availability of 3 billion euros from the Cohesion Policy 2021-2027 which shares similar objectives with the REPowerEU.

On the 27th of July 2023, the changes to the plan were made public and later discussed in Parliament on the 1st of August. The redefinition of the NRRP is the result of a process started in March aimed at identifying the necessary changes and integration to assure the respect of the 2026 deadline. The analysis carried out was aimed at understanding which of all investments forecast were too complex or uncoherent - in terms of schedule or reporting methods - and consequently redistributing the resources in favor of the feasible ones. At the same time, however, the government assures that the projects removed from the NRRP will be financed as well, even if the precise origin of these resources is not specified. The changes involve 144 NRRP measures that can be summarized into three distinct categories.

First, some formal changes concerning the description of some measures and their checking methods, aiming at simplifying the reporting procedures of the objectives to reach.

Second, the reprogramming of some measures, due to the impossibility of achieving the forecast goals. Various investments fall into this group,

ranging from projects related to high speed to actions for the digital transition. One case that is worth mentioning concerns Mission 6 because several components of it saw a remodeling of both the realization of new sanitary structures and digital transition interventions for the health sector, due to the increasing building costs. For instance, there will be a reduction in the number of Community Health Houses (M6C1) from 1350 to 936 interventions.

Third, the removal of the NRRP funds from some measures that will be in any case financed through other financial devices and funds. This transfer involves 9 investments for a total of 15,9 billion euros. These measures were said to be those with the most relevant criticalities for their implementation and reporting.

Besides, the redefinition of the plan also includes the allocation of additional resources for two separate issues. On the one hand, 900 million euros will be destined for the Nursery measure, allowing the ministry to launch a new call and hopefully reach the final target. On the other hand, there is the possibility to financially support the recovery of the territories in the Emilia-Romagna region that have been damaged by the floods.

The European Commission has received this proposal for a redefinition of the plan and has two months to evaluate it.

18. The defunded projects

Measure	NRRP	Administration holder	Total
M2C4	Interventions for the resilience, land development and energy efficiency of municipalities	Ministry of Interior	6.000.000.000,00
M5C2	Investment in urban regeneration projects, aimed at reducing situations of marginalization and social degradation	Ministry of Interior	3.300.000.000,00
M5C2	Integrated urban plans - general projects	Ministry of Interior	2.493.800.000,00
M2C4	Measures for flood risk management and hydrogeological risk reduction	Ministry of Environment and Energy Security	1.287.100.000,00
M2C2	Hydrogen utilization in hard-to-abate sectors	Ministry of Environment and Energy Security	1.000.000.000,00
M5C3	Aree interne - Potenziamento servizi e infrastrutture sociali di comunità	Department of cohesion policies	724.999.998,00
M2C2	Promotion of innovative plants (including offshore)	Ministry of Environment and Energy Security	675.000.000,00
M5C3	Enhancement of property confiscated from the mafias	Department of cohesion policies	300.000.000,00
M2C4	Protection and enhancement of urban and suburban greenery	Ministry of Environment and Energy Security	110.000.000,00
TOTAL			15.890.899.998,00

(Data source: Italiadomani.it)

The debate on the changes

The remodeling of the NRRP raised concerns in the public debate for several reasons, starting from the fact that it didn't require the involvement of local entities when making these decisions. One of the main issues concerns the lack of

warranties for financing the projects removed from the NRRP: the government did not specify the tools and methods for assuring the coverage of these interventions, many of which are already ongoing or on the point of starting. The urgency of such a definition has been underlined also by

the report “Monitoring the Implementation of the National Recovery and Resilience Plan”, carried out by the Chamber Study Service (Servizio Studi della Camera) and which denounces the absence of a clear strategy to finance these interventions. Among the alternative funds that the government mentioned, is the Cohesion Policy Fund. In this regard, the president of the Tuscany Region, however, wonders how is it possible to take some resources from a fund that – in this case – is fundamental to ensure the streets maintenance without eliminating other projects.

Another aspect concerns the fact that among the implementing bodies, the Municipalities and the territorial authorities have been the most hit by these changes, seeing the removal of some of the resources they have been assigned. The National Association of Municipalities (ANCI) insisted on this point as the Municipalities have proven to be, as it will be explained in the third chapter, the implementing bodies that were able to work fast and efficiently, unlike other actors involved. The President of the ANCI Association asked the government for warranties explaining the worries of the Municipalities that - if by September-October the projects are not covered by other funds – will have to pay for the interventions themselves. This possibility, apart from the burden it will represent for

the Municipalities, may also cause the stop of some works due to the lack of warranties for the firms and a general atmosphere of distrust towards the State.

When looking carefully at the projects that have been defunded from the NRRP, other questions emerged. For instance, the choice to involve the Integrated Urban Plan has been strongly contested. For this measure, the Metropolitan Cities have already assigned 94% of the interventions: why remove them from the plan? Besides, they are crucial and strategic projects for cities. Similarly, the urban regeneration projects concern realities like Tor Bella Monaca in Roma or Le Vele di Scampia in Naples, two neighborhoods highly in need of these interventions. Moreover, the decision to also reduce the funds for fighting the hydrogeological instability in some way clashes with the recent phenomena that strongly damaged the national territory, ranging from floods, fires, and landslides.

CHAPTER 3
RESILIENCE AND CITIES

3.1 THE CITY AS A (ECO)SYSTEM

The concept of resilience

The concept of resilience is not new and especially in recent years it has been used as a “mantra,” not always consistently with its actual meaning. This notion has been used by different theoretical approaches and fields of knowledge over time, ranging from engineering, to macroeconomics, to the broader field of policy strategies (Campano and Woo 2017). The word resilience comes from the Latin verb “resalire” (re+salire), which stood for the action of bouncing back or returning in an equilibrium state (Alexander 2013). In Italian it refers to “the ability of an object to resist an external effort without breaking”, according to the definition provided by Treccani. Throughout the 20th century, however, the meaning of resilience has become increasingly diverse, depending on the disciplines that have made it their own. This increasingly complex heterogeneity of meanings of resilience makes it mandatory to study its definitions in order to understand its importance when we talk about cities.

Resilience as the most common and most widely used expression finds its origins in the field of engineering where it takes on the meaning of “the ability of a material to resist shocks and ruptures by absorbing energy through its own deformation, and then releasing it and returning to its original shape

as elastics do, for example”²⁵. Here, the meaning of the term refers exclusively to a physical state of matter. This meaning later, during the 20th century, also took on significance in the field of psychology, where resilience is defined as “representing the ability of an individual or group of people to react in the face of adversity in life, or even just specific negative events, by transforming negative energy into positive energy”²⁶.

But how does the concept of resilience relate to the city? To delve into this section, it is appropriate to first introduce the concept of the city as an ecosystem.

The ecology of the city has its roots in the 1990s and brings a new point of view in considering the city, which is seen as an ecosystem defined in space - by physical or natural boundaries - that is open, in the sense that it exchanges relationships with the outside world. According to Ugo Leone, “The city, indeed, is a man-made construction that, in order to function, needs to be fed by continuous flows of matter and energy from the territory that surrounds it. For this reason, precisely, it can be configured as an ecosystem”²⁷. Viewed in this way, resilience takes on a new meaning with respect to the city: it is the capacity of a system to “tolerate alteration before reorganizing around a new set of structures

and processes and it depends on the cities' ability to simultaneously maintain ecosystem and human functions"²⁸.

With the recent focus on climate change, economic crises, and especially the all-nation pandemic in 2020, the topic of building resilient policies has become increasingly important in the public debate. Resilience in public policy is primarily based on preparing a system - in this case, a city or a nation - for what are called black swans, or an event that comes unexpectedly.

However, resilience is an essential property for the system even during periods of equilibrium, in which it continues to have a main function as it maintains and prolongs moments of equilibrium.

The creation of resilient policies, however, should not be limited only to agenda setting but also the stages of policy formulation. Resilience should not be seen as a goal but rather as a way to achieve equilibrium; it becomes a pathway that must ensure the durability of a system.

Regarding policy formulation there are different aspects that must generally be considered in respect to resilience. First, polycentrism is essential in solving complex problems: a diverse and unrestricted network of stakeholders allows multiple interests and viewpoints to be brought in during the design process. Second, given the variety of stakeholders, a structured participatory process

is important. However, too much polycentrism and participation could lead both to the rigidity of the policy process and to the idea that solving collective problems requires less and less funding from the public sector.

Finally, to respond to the need to adapt to an external shock, a resilient policy requires the presence of a widespread structure: in a nutshell, a multilevel capacity to adapt and implement public policies in a resilient way is needed (Campano and Woo 2017).

NRRP and resilience: some reflections

The concept of resilience is central to the construction of the NRRP, in compliance with European guidelines, to such an extent that it is an integral part of the name. Resilience refers to the creation of a system that is ready, in the future, to respond to sudden external shocks. The health crisis was the perfect example to demonstrate the low state of resilience of Italian cities. However, some doubts arise in considering the plan as resilient. First, neither the concept of resilience nor urban resilience - both of which are key terms for the plan itself - is ever explained in the plan. Moreover, the spatial disparities, not only between north and south but also between urban and rural, are not negligible: many interventions are concentrated in cities and are likely to cause an increase in the

economic polarization of these systems. Another problem is timing: funds are to be used in the short term and this does not always turn out to be the best choice for building a resilient system. Finally, there has been little attention paid to the use of indicators in the establishment of the plan: OECD, for instance, includes in its documents²⁹ a number of indicators that are fundamental to the creation of a resilient policy that not only pertains to the drafting phase of the plan (which were partially included) but also to a later monitoring phase, which is very important in a resilient system.

3.2 MAYORS IN THE FRONTLINE

The role of cities in the NRRP

The Recovery and Resilience Plan has attributed Italian cities a key role in its implementation. Cities are the places where most of the forecast interventions will take place, even if the local bodies saw little or no involvement during the definition of the plan: this kind of situation - which is then at the origin of the lack of the territorial dimension of the plan - has often been criticized and considered one of its limitations. Cities are invested by the arrival of the NRRP in several ways: as implementing bodies for some measures, as places where many projects are realized, or as participants in some interventions directed by the central administrations, for instance when dealing with the digitalization of the public administration. The unquestionable central role of cities in addressing current global challenges has widely been recognized. The Urban Agenda for Europe, introduced by the Amsterdam Pact in 2016, expresses their strategic function. This kind of tool, focusing on some priority topics, aims at simplifying the use and implementation of policies and laws, in a more consistent and effective way, by boosting communication and exchange of best practices among the actors involved (European Commission, 2016). The aim is to involve local entities to improve three main aspects: laws and regulations – overcoming implementing obstacles

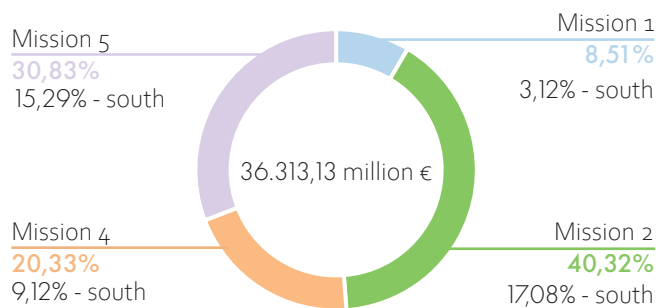
in cities -, access to European funds – that are often landing in urban areas -, and knowledge – enhancing and sharing experiences and best practices – to build more grounded and effective urban policies. During the sanitary crisis of Covid-19, cities worldwide were the hardest hit, proving to be quite vulnerable due to some of their intrinsic characteristics. However, in many cases, they were also the ones able to develop prompt and innovative solutions to deal with the emergency. For these reasons, it was right to expect their involvement in the definition of the NRRP, but this was not the case. When the plan was presented, cities became aware of the huge responsibilities the government attributed to them in the implementation and realization of the measures and had to face, in many cases, the lack of adequate instruments to do it.

Thanks to the data collected and elaborated by IFEL Foundation, available on the platform Easy, it is possible to have a clear picture of the funds that have been allocated to Municipalities, Metropolitan Cities, unions of Municipalities, and mountain communities, distributed among the four missions that imply their involvement as implementing bodies: M1, M2, M4, M5. The most recurrent

themes, indeed, concern urban regeneration, mobility, and social infrastructures. The total funds assigned to these entities result to be 36.313,13 million euros, most of which – as shown in graph 19 – are related to Mission 2 “Green revolution and ecological transition” – followed by Mission 5 “Inclusion and cohesion”.

19. Distribution of funds among the missions (March 2023)

Municipalities, Metropolitan Cities, unions of Municipalities, and mountain communities



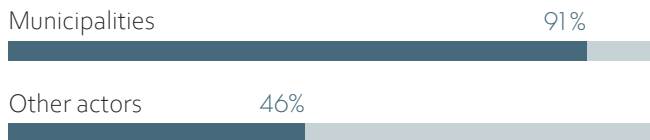
(Data source: Fondazione IFEL)

As presented by IFEL Foundation at the national congress “Missione Italia 2021-2026” organized by ANCI in July 2023, Municipalities and local bodies were eventually able to realize more than expected and hoped: indeed, they managed to assign 91% of the received resources, with a percentage way higher than the average of all the other subjects involved (46%). This achievement is the result of a huge effort made by the local administrations that in the previous months have managed to launch

an increasing number of tenders, as displayed in graph 20. Between July 2022 and June 2023, Municipalities appeared to be the first category of actors, as they launched 51% of all the tenders – around 52 thousand - for interventions financed by NRRP or NCP. Besides, the allocation of these resources seems to respect the constriction related to the Southern regions: indeed, 44,9% of funds are located in the *Mezzogiorno*. Looking at this largely positive picture, widely unexpected, the President of ANCI Decaro reaffirmed the merits and the achievements of the local administrations with the expression “*I sindaci corrono*”³⁰, which means “the mayors run”. This is even more relevant considering that, apart from the assigned resources, the local entities have more than 40 billion euros in projects that are ready to be implemented with a potential reorganization of the overall plan.

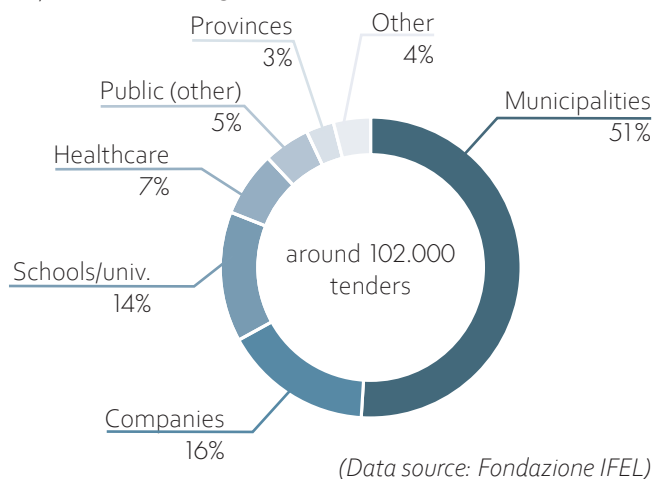
Looking at the spatial distribution of the resources, the emerging picture is dominated by the provincial capital municipalities – 109 in Italy – and the Metropolitan Cities, with a strategic role in the whole implementation: indeed, they manage 36,6% of the resources³¹. As underlined in the previous chapter, the plan doesn’t envision a spatial allocation of the resources – lacking a territorial vision – but a great part of the results depends on the capacities of the implementing bodies. The

20. Allocation of the assigned resources (July 2023)

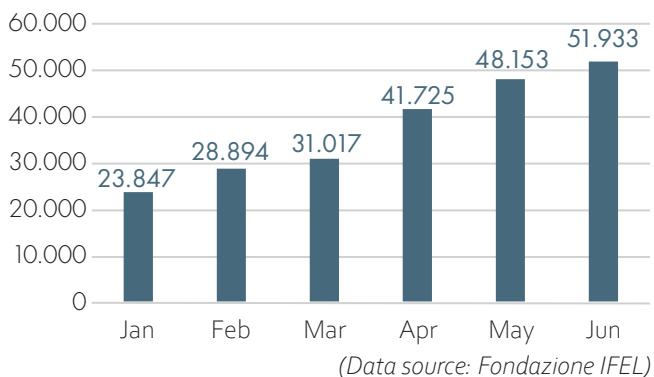


21. Actors who launched NRRP/NCP tenders

July 2022 - June 2023



22. Number of tenders launched by Municipalities in 2023



competitive calls, widely used for the NRRP, have an important role concerning two aspects: on the one hand, they define the recipients; on the other hand, they require certain competencies the administrations do not always have even for participating at the call. Indeed, the calls fall over regions and local entities that are characterized by marked differences in terms of norms, type of administration, entity of public budget, capacities, and competencies. This aspect, which will be deepened in the next paragraph, may increase the same territorial inequalities the plan aims to reduce.

How are the Municipalities dealing with the NRRP?

At the national level, the plan was mainly defined “from the assemblage of projects that were given as much common ground as possible from the perspective of major ecological and digital transitions”³² and this is visible also at the local level for the ways of territorialization of the resources. In general, the NRRP funds allow cities to realize new projects specifically made for this occasion, interventions that were already defined and waiting for funding or further projects that can be realized because NRRP has substituted and released other resources. Due to the tight schedule of NRRP, local administrations were in some ways forced to candidate those projects that were already defined until a certain degree of detail and

then, construct a sort of narrative to keep them all together. Talia underlines the necessity of “public opportunistic urbanism” (*urbanistica opportunistica pubblica*)³³ referring to the practice of presenting old projects that were not realized as long as the time is respected. To this concern, it is interesting to compare the way cities are managing the resources with the type of planning instruments available for each Municipality. With these premises, it may seem that those Municipalities with an outdated urban plan, largely or in part unrealized, are favored because they have a set of projects to candidate, easily integrating NRRP interventions in the previous urban processes. However, an analysis of some Italian cases may give a clearer picture of the situation.

An interesting case is the city of **Modena** that, at the time of the definition of the national plan, was busy making a new Piano Urbanistico Generale – then approved in June 2023 – to substitute the previous Piano Regolatore Generale. The concurrence of these two processes allowed to establish coherence between the objective of the urban plan and the NRRP interventions, making them fit inside the strategies for the city. The final object is to transform the European resources into structural funds, contributing to the implementation of the urban plan for Modena

2050. Similarly, **Florence** too was defining a new Piano Operativo that was approved in March 2023. Like Modena, the Florentine Municipality saw in the NRRP the possibility to realize synergies with the new instrument: indeed, apart from the already planned interventions, it was possible to assure the new projects’ conformity with the plan. Moving down towards the south, then, the city of **Bari** is on its way to define the Piano Strategico Metropolitan and, also in this case, this timing was useful to match the strategic axes of the new plan and the projects realized with the European funds. A city that has an already defined plan able to easily deal with this challenge is **Bologna**, which approved the new Piano Urbanistico Generale in September 2021. In this case, the strategic nature of the plan, together with the general policy direction taken by the city in the use of NRRP funds, allows an easy check on their conformity.

In the case of **Rome**, instead, the Piano Regolatore Generale dates back to 2008 but is characterized by non-realization, especially of some of its public parts. The Roman administration has attempted to take the occasion of the NRRP to start a new phase of public urban planning that, in the previous years, has progressively left more and more space for private interventions. Such a way of working was defined coherently to the main directives of the plan that, despite the time that has passed

since its approval, remain relevant: these include polycentrism, environmental sustainability, and proximity. The attempt is, therefore, to bring the state back to those parts of the city where it has been a major absentee, going to those public centralities where public planning has not been implemented. Among these interventions, there are the plans for the Tor Bella Monaca and Corviale public housing complexes. Moreover, in general, it is possible to find that the projects financed by the NRRP that fall within the urban territory refer to the three categories defined by the Roman plan, namely urban and metropolitan centralities, strategic planning areas, and the public city.

For the city of **Turin**, whose Piano Regolatore dates back to 1995, City Planning Councillor Mazzoleni³⁴ stressed that the NRRP should be an opportunity for the city to do opportunistic public-directed urban planning, maximizing the impacts on the territory with an *a posteriori* reconstruction of a plan. In the case of a city like Turin, an integration with an outdated plan is difficult due to the fact that NRRP measures have different logic, timing, and modes of intervention from this one. Therefore, a broader issue seems to open up, related to the need to rethink national planning, today so fragmented and approached with different tools in the various regions, toward the definition of a set of clear principles such as the prevalence of strategy,

flexibility and scalability of policies.

INU President Talia³⁵ defined a number of points of attention and what should be worked on in the management and implementation of the NRRP. The first issue concerns the need to consider more the territorial and urban impact of those interventions that are mostly presented in relation to financial and efficiency logic, making sure that sectorally defined measures actually contribute to an overall modernization process. In addition, it is crucial to use the opportunity of the NRRP to prepare and capacitate the country in adhering to future and continuing cycles of structural funds. Finally, this season cannot result in the abandonment or sidelining of policies that are still ongoing and had yielded positive results in recent years: one example among all is represented by the policies for earthquake-affected areas. In more general terms, there is the need to simplify and improve relations between the various levels of governance—from the state to local authorities—without resorting to competitive mechanisms but favoring an exchange of practices.

In this regard, extensive work addressing the issue of the NRRP in Italian cities is collected in the ninth report carried out by Urban@IT. In this work, the analyzed realities are Turin, Milan, Bologna, Rome, Naples, and Bari, providing details and reflections

on the way of dealing with the arrival of European funds. A focus on medium-sized cities enriches the report and enlarges the discussion.

3.3 FACING OVERWHELMING RESPONSIBILITIES

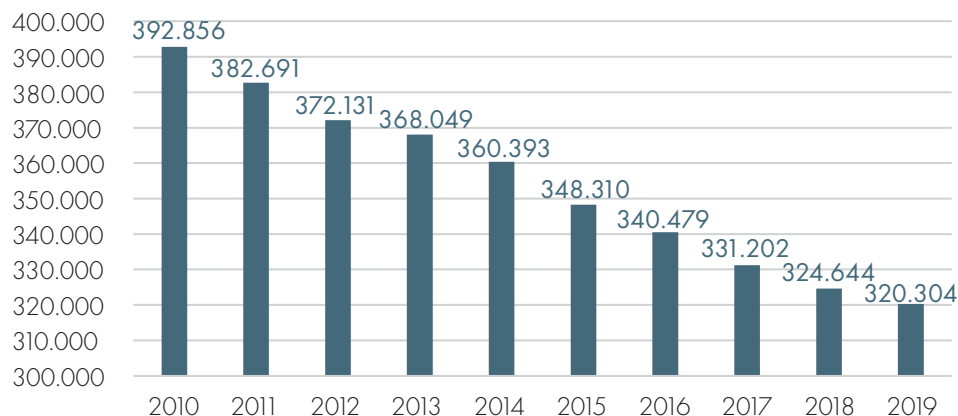
The difficulties of cities in the PNRR

The main challenge posed by the NRRP certainly relates to the need to use a large number of resources in a timeframe that is incredibly tighter than traditional schedules. The issue of time has raised many justified concerns, related not only to the risk of not being able to complete interventions on time but also with respect to the modalities that administrations have to adopt in defining the projects to implement. As already anticipated, the dilemma may arise as to whether to choose measures that are strategic for the city or to prefer some that are already defined and implementable in order to meet deadlines. Moreover, this also leads to a reduction in the timeframe for the design itself, with the potential risk of investing less in

the quality of the intervention. On the other hand, however, the tight schedule is grasped by many in its positive aspects, especially for projects that have been waiting for a long time to become reality. An exemplificative case concerns projects for ecological transition, which are increasingly urgent and necessary, and will see the light of day in a few years.

Local governments, recipients of substantial responsibilities, have found themselves in a difficult situation in having to manage the implementation of the plan. With more or less marked differences at the territorial level, local governments are on the whole weakened by a period of quantitative

23. Number of employees in Municipalities



Looking at this trend at the regional level, the percentage change in employment is the following:

-15/20% for Calabria, Lazio, Sicilia, Emilia-Romagna, Veneto, Marche, Lombardia and Toscana;

-20/30% for Piemonte, Sardegna, Umbria, Liguria, Puglia, Abruzzo;

-30/38% for Basilicata, Campania and Molise;

+ 38% for Friuli Venezia Giulia.

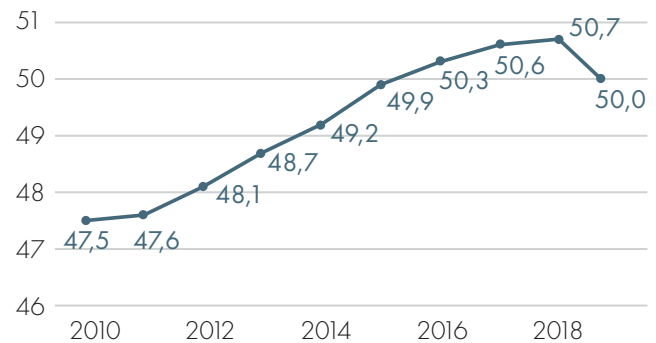
(Data source: Ragioneria Generale dello Stato)

and qualitative desertification of administrative personnel. As depicted in the graphs in these pages, based on data from the Ragioneria dello Stato, the number of civil servants at the local level has dramatically decreased, with the sole exception of Friuli-Venezia Giulia that, by its status as a special-statute region, has been able to act differently. At the same time, the average age of the workforce has gradually increased with the result that, with the arrival of the NRRP, funds have landed in Municipalities and Metropolitan Cities with shortages of staff and skills. Beyond the resources that arrived in the various cities - usually at a significantly higher value than ordinary municipal budget - the regulation of the PNRR and its complementary funding requires complicated procedures and new controls that come as an additional obstacle for local governments.

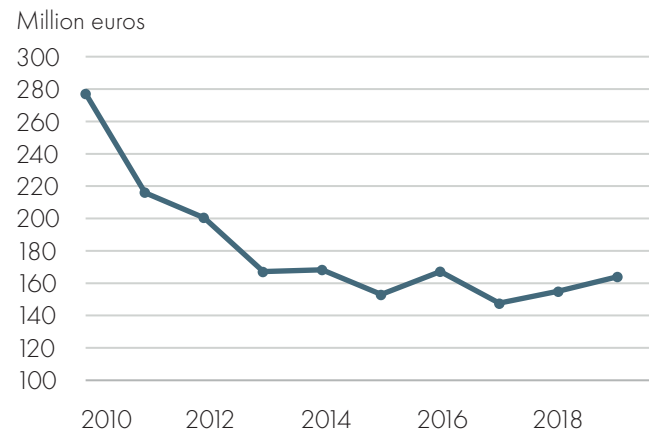
This situation, especially in smaller and less-equipped municipalities, has led to difficulties even in the management of ordinary administration, which seems to take a back seat to meet PNRR deadlines, or in cases of extraordinary events as happened in May with the flooding of the Emilia-Romagna areas. The difficulties related to the capacities and skills of local governments are reflected in their participation in the numerous competitive calls made by ministries. Indeed, less-equipped local governments have difficulties even

submitting projects for application due to the complex bureaucratic procedures and required documents. This has to be ascribed to the absence of an equalizing criterion and the domination of competitive mechanisms among cities that inevitably favor those that would have less need for intervention.

24. Average age of employees in Municipalities



25. Expenditures on training activities in Municipalities



(Data source: Ragioneria Generale dello Stato)

How did the government intervene to support local administrations?

With the awareness of the necessity to support local governments to complete what they are entrusted with, several measures related to the hiring of new qualified personnel were introduced. In fact, for municipalities holding interventions, simplifications were provided for the hiring of non-managerial personnel with specific professional skills on a fixed-term basis for a limited period not exceeding 2026. Among other measures, collaborative contracts were given to 1,000 experts and professionals to provide support to local authorities, especially in managing complex procedures (dl 80/2021). In addition, for municipalities with a population of less than 5,000 inhabitants, which are among those most in need of support, another fund for recruitment has been defined, for more than 1,000 positions. To simplify these types of procedures, the InPA platform was used, allowing a more efficient matching between supply and demand. On the other hand, regarding investments in staff training, the Syllabus platform allows each employee - of the participating local governments - to receive a customized training program according to their specific needs. In addition, with the Memorandum of Understanding of the 20th of October 2022, so-called unitary territorial garrisons (*presidi territoriali unitari*) were established, with a role in supporting

the local administrations that own interventions in the monitoring, control, and reporting phases of funding. These entities, then, are also responsible for training activities.

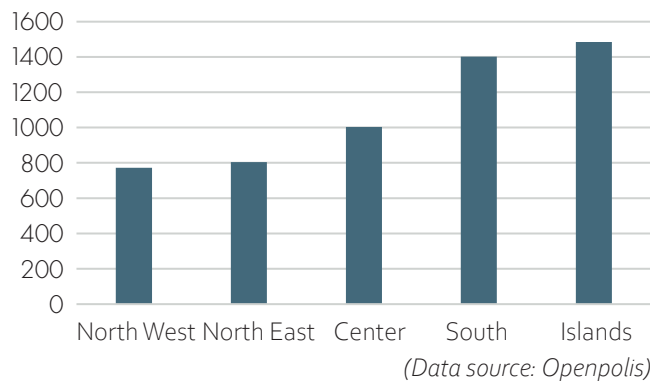
These measures, however, have demonstrated limitations due to several issues. First, as also pointed out by Corte dei Conti's 2023 report, the temporary nature and low salary levels of the contracts make them potentially unattractive. Moreover, beyond experts, local governments need additional staff, but hiring for technical assistance activities is not foreseen. Criticism has also emerged due to the fact that calls for the recruitment of specialized staff rarely include the figure of the Territorial, Urban, Environmental, and Landscape Planner, who, on the other hand, would have useful skills, especially for the territorialization phase of resources (Ziparo 2021).

Among the requests repeatedly made by municipalities, there is the extension of the simplifications now in place for the school construction sector to the other PNRR investments as well, given the significant benefits and results in meeting deadlines.

Looking at the picture of the implementation status up to July 2023, characterized by very good results for the performance of municipalities, as mentioned above, questions are raised about

the next steps. Indeed, some concerns regard whether the companies that have been awarded interventions will really succeed in implementing all of them and on time. This aspect takes a particular relevance especially in the regions of the South, where the time taken to complete the works is traditionally up to two times longer than in the rest of the peninsula.

26. Average of the days required to realize public works



Then there is the fundamental issue of the country's production capacity: the market, indeed, has already shown some signs of suffering and unpreparedness to respond to demands as substantial as those envisaged by the NRRP, and an indication of this can be found, for example, in the tenders that go unsuccessful. A case is that of the supply of electric buses, which involves the entire country: several tenders have been unsuccessful

precisely because companies are required to produce several units excessively higher than the norm. "The risk, evidently, is that in the absence of adequate production capacity, NRRP investments will proceed at a slow pace, failing to meet targets," is what emerges from the Court of Auditors' report. Finally, in the longer term, a question that needs to be taken into account concerns the management of all that will be achieved with NRRP funds: will administrations emerge strengthened from this season and will they have the tools to manage the legacies?

A thorny issue: the case of nurseries (0-3 years old)

One measure that is relevant and has been the focus of a long debate concerns funding for new places for children in nurseries (0-3 years) and kindergartens (3-5 years). Italy urgently needs to take action especially on the supply of kindergarten services since it is far from reaching the target set at the European level in 2002 of 33 places for every 100 children³⁶. This service, which has been given a value that is no longer caring but educational to all intents and purposes, plays a fundamental role not only in the cognitive development of children, as defined by the Unicef guidelines, but also in reducing particularly marked gender gaps between men and women with children.

At the national level, the coverage of these facilities reveals deep territorial gaps, with uneven distribution not only among regions but also within them, between major urban centers and municipalities in inner areas.

18,5% Gap between Center-North (average 32%) and the South (average 13,5%)

13,8% Gap between centralities (average 31,6%) and peripheral Municipalities (average 17,8%)

(Data source: Openpolis)

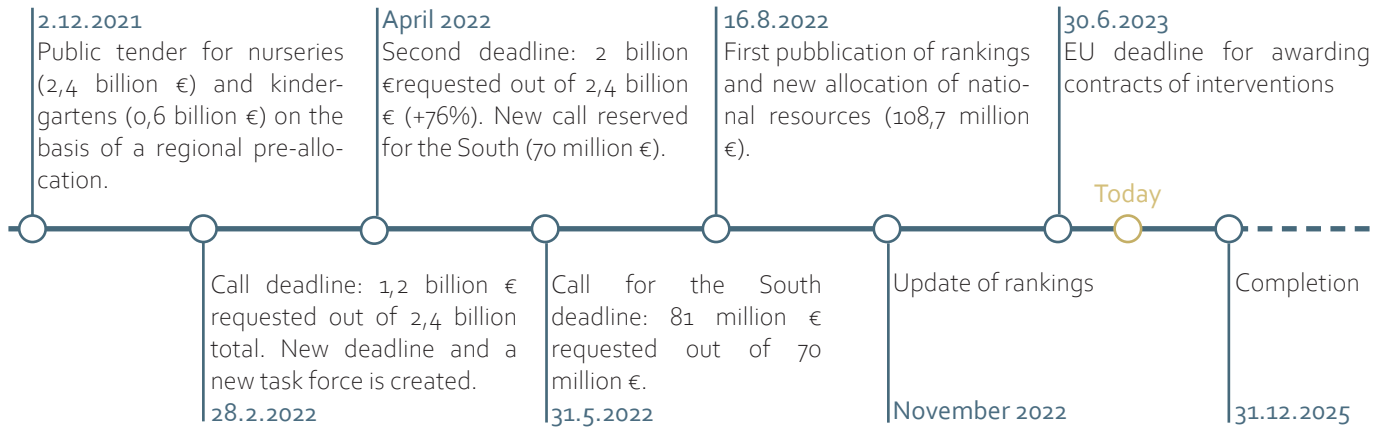
With the NRRP, it was decided to allocate funding for the construction of about 265,000 new places in both kindergartens and preschools. Without

providing any indication as to the territorial allocation of resources, the plan identifies the Ministry of Education as the holder of the measure. Even though this intervention would have required –for its nature as an essential service - a nationwide development plan (Viesti 2023), the Ministry at the time led by Azzolina decided to proceed again through competitive calls, with all the related limitations already highlighted.

At first, 700 million euros were destined for the Nurseries and Preschools Fund, which provided for the allocation of 60% of the resources in the most disadvantaged areas. In this call, however, a contradictory element stood out: indeed, there were additional scores for those municipalities able to co-finance the interventions, disadvantaging, even more, the poorer and less-equipped ones. Consequently, there was a higher percentage of awarding municipalities that were already provided with such facilities than those without. Then, in 2021, with the new government, a second call for bids worth 2.4 billion euros was issued and aimed at all municipalities - and thus, again, not favoring the underserved areas.

In addition, a regional pre-allocation of resources was prepared - even though nurseries are a municipal service - according to two criteria: the current coverage of the service (with a weight of 75 %) and the forecast of the population 0-2 years old

27. Timeline of the nurseries interventions



in 2035, according to Istat data (with a weight of 25 %). Under these criteria - criticized by many - the south received 55% of the resources.

At the end of the three months given to municipalities to prepare projects, the proposals received reached only half of the available amount, due to tight deadlines, difficulties of administrations to provide all the necessary documentation, or doubts about future management. Facing this problematic picture, it was decided to extend - twice - the deadlines for project submission, and an *ad hoc* task force for kindergartens was established to support local governments. With the extension of time and measures to support administrations, applications reached an increase of 76% in April 2022. Besides, additional resources were allocated

for kindergartens and a specific call for proposals for the south was made: the latter, in less than two months, resulted in proposals worth a total of 81 million euros out of the 70 million euros available.

The nursery school affair, which has found wide space in the newspapers, reveals the limitations arising from the absence of a territorial vision in the Italian national plan. The use of competitive calls for the implementation of such essential services - not only for the development of children but also for the reduction of gender gaps - is ill-suited to the goal of territorial rebalancing. As in other cases, indeed, less-equipped administrations are at a disadvantage, especially compared to those that already have the service and, so, the tools and

knowledge to manage it more easily.

On the sidelines, moreover, another fundamental question arises regarding the future management

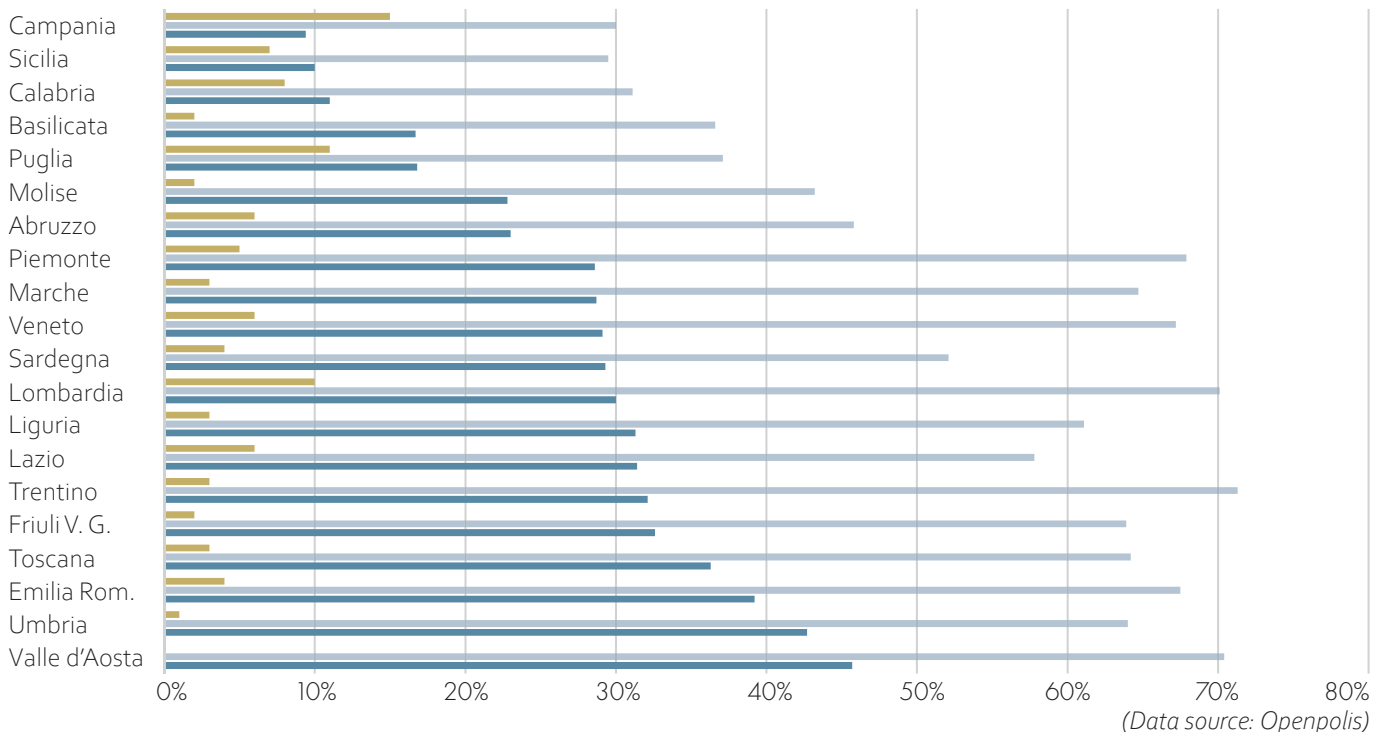
of these newly implemented services. Will administrations be able to guarantee their operation? Will there be sufficient staff to manage them?

28. The distribution of funds for nurseries according to the contexts

The graph below establishes a relationship among three different elements: the amount of NRRP funds destined to each Italian region is compared to the existing nursery spots up to 2018 and the female occupation rate in 2019. These two elements are in some ways linked because the possibility to access nursery services contributes to the reduction of gender gaps.

Legend

- NRRP funds for nurseries (up to August 2022)
- Female occupation rate 25-34 years (2019)
- Authorized nursery spots for 0-2 years children (2018)



A virtuous attempt to innovate: the case of ANCI Lombardia

Among the initiatives to support local authorities in implementing the NRRP, the case of the *Centro di Competenza* (Competence Center) established by ANCI Lombardia stands out: in recent months it has emerged as an important reference point for municipalities in Lombardy and the Piedmont provinces of Novara and Verbania-Cusio-Ossola. Thanks to a grant from Fondazione Cariplo, in November 2022, the project started with the pilot experience for the measure “Attractiveness of Villages” (M1C3).

Given the positive results of this first project, it was decided to extend the service and activities offered to other measures of the NRRP, namely, “Green communities” (M2C1), “Nursery and kindergarten plan, early childhood education and care services” (M4C1), “Urban regeneration investments to reduce marginalization and social degradation” (M5C2), and “Community social services and infrastructure” (M5C3).

Bringing together the expertise and tools acquired over time by Fondazione Cariplo and a task force of experts, ANCI Lombardy aims to facilitate synergies between public, private, and institutional actors, using system-building as its *modus operandi*³⁷. Establishing networks and synergies between local and institutional bodies is particularly important to meet the challenge posed by the NRRP: and it is with this in mind that ANCI Lombardy has

ANCI (Associazione Nazionale Comuni Italiani) is the National Association of Municipalities that counts 7134 adherent members (up to January 2022). In activity from more than 100 years, ANCI has a relevant role in representing a wide network of cities in front of all those institutions exercising public functions of local interests.

also chosen to reorganize its internal structure by defining a specific area for NRRP-related issues.

The Competence Center is divided into various instruments: the technical secretariat, the desk, the task force, and the steering committee. The activities carried out range from direct assistance to municipalities through the active listening desk to which demands can be addressed, to the organization of meetings for in-depth study of certain issues and technical and planning workshops. In addition, there is a contextual activity of monitoring, mapping, and data collection that are then processed and shared.

3.4 WHAT HAPPENS IN EUROPE?

The role of cities in other European countries

Looking at the other European countries and how they are dealing with the NGEU funds, some commonalities emerge. Even though cities had a central role during the COVID-19 pandemic, the National Recovery and Resilience Plans have been generally defined in a top-down way, with responsibilities centralized at the level of the government and rarely involving territorial and local entities. The risk of this way of acting, often due to the tight schedule to respect, is that the strategies implemented may not be able to “respond to specific urban realities, priorities, and needs”³⁸. The results of a Eurocities survey in 2021 show that over 63% of the respondents interviewed consider as “insufficient” the involvement of cities in the design of national plans (Eurocities 2021). A shared feeling among the mayors of the main European cities is that the national institutions did not take into account the ideas and the projects proposed by the cities in the process of plan formulation (Boni and Zevi 2021).

Thanks to Eurocities’s surveys and the ninth CIDOB report (*Cities in the EU recovery process*), it was possible to see how different European countries reacted and defined their national plans. Besides, the CEPS’s *Reflection Papers* provided further information, comparing various national plans.

Similarly to the Italian case, the **Spanish** Recovery and Resilience Plan has a strong urban dimension as it attributes to cities a key role in its realization. Cities are indeed crucial beneficiaries of the measures of the plan through several calls for projects. However, they didn’t see any room for their involvement in the design of the plan, which was managed only by the government, economic operators, and autonomous communities. Besides, the main structure for the coordination and monitoring of the plan does not involve local governments at all, except for some informal contacts. Another decentralized state is **Germany**, which oriented its Recovery and Resilience focusing on a green hydrogen strategy in consultations with the level of the federal states. For this reason, the plan doesn’t show an explicit urban dimension, even if cities will benefit from the investment of the European resources directly – as they are holders of 37% of the funds - or indirectly. The decision to boost the green hydrogen development and the temporary nature of the plan explains the minor role of cities that, at the same time, have already many other ongoing programs with a stronger urban focus. Another country where the plan lands in a top-down way over cities that have not been involved in its design is **France**. The France plan does not show

29. European countries and NGEU funds

Finland

2.085 million euros (0.9% of the GDP in 2019)

The Finnish NRRP is part of the *France Relance* recovery strategy and assigns 27.1% to digital transformation and 50.4% to green transition. The plan relies on 4 four pillars which, apart from the two mentioned above, concerns also measures for employment, social cohesion and healthcare.

Germany

25.6 billion euros (0.7% of the GDP in 2019)

The German NRRP assigns 52.7% to digital transformation and 42.6% to green transition. The plan is articulated in 6 missions and the most relevant is the M1 (40%) related to climate policy and energy transition. The plan envisages a significant increase in the productivity of the country.

France

39.4 billion euros (1.6% of the GDP in 2019)

The French NRRP is part of the *France Relance* recovery strategy and assigns 21.3% to digital transformation and 45.9% to green transition. 9 components among which the most relevant are C9 (Research, health and dependency, territorial cohesion) and C8 (Job protection, youth, disability, vocational training).

Spain

69.6 billion euros (5.6% of the GDP in 2019)

The Spanish NRRP assigns 28.2% to digital transformation and 39.7% to green transition. The plan defines 10 lever policies where the most relevant one is Industry and SME modernization and digitalization (23%).

(Data source: European Parliament)

any particular signs of innovation and it seems quite in continuity with ordinary national policies, focusing first on a short-term economic recovery, and second on a long-term digital and green transition of the whole economic system. Cities are not the main recipients but, in any case, the places where most of the investment will be located. A virtuous and rare case of satisfactory involvement of local governments in the definition of the design of the plan is the case of **Finland**. Indeed, in the first phase, there has been a strong dialogue between the government and the municipalities allowing a recognition of the various needs and priorities. However, some critical aspects emerged in the following phases because the content of the plan seems to lack the necessary innovation just by implementing already existing policies.

CHAPTER 4
THE MILANESE CASE

4.1 MILAN

The trends of the city chosen as a case-study and its vision for the future

To better understand the impact of the NRRP on the Italian Municipalities, a focus on one city seemed necessary and Milan was chosen as case-study.

During the Covid-19 pandemic, Milan and the Lombardy region, in general, were the hardest hit at the national level, being among the early epicenters of the country with the most severe losses. This intensity can be referred to the high level of connectivity the city has, which has been found to be a crucial element for the first spread of infections. Such a harmful phenomenon, with people confined to their homes due to lock-down rules, closed commercial activities, teleworking, and social distancing measures made scholars question the future of cities themselves, in terms of their relevance and role in the global economy. However, as demonstrated by the recent trends, cities have changed mainly at the local level, preserving their unique function as clusters of innovation, economic growth, and interactions (Florida, Rodriguez-Pose, Storper 2021).

As shown in graph 30 – in this case related to May 2020 - Lombardy was the region that reported the highest number of infections, with a certain distance from the others. This trend continued in the following months due to several characteristics of the area that contributed to the spread of infections. As

the NRRP was defined as a plan to help the country recover from the sanitary crisis, Lombardy appeared to be a quite demanding situation, considering the incredible spread of the virus and the consequent suspensions of economic activities due to the restrictive measures.

Secondly, Milan is the second city for the number of inhabitants, after Rome and before Naples. With a trend of variation of the population between 2019 and 2020 that is quite similar for all the regional capitals – independently from their size -, there has been a slightly progressive reduction in the number of inhabitants with rates between -2,8% and +0,4%. Milan, in particular, had the second largest decrease in the number of inhabitants between 2019 and 2020 – just after Napoli – and the trend continued in the following year, with a rate of -1,8%. However, what has emerged in these last years, is that the city managed to get back to the previous conditions, remaining part of the richest Italian region. The graph related to the variations in per-capita income in the regional capitals provides an overview of the national situation. It emerges that the cities that suffered the most in 2020 in terms of per-capita income are those where tourism is a crucial element in the economy, like Venice and Florence, but in general – apart from a few exceptions – all the cities went

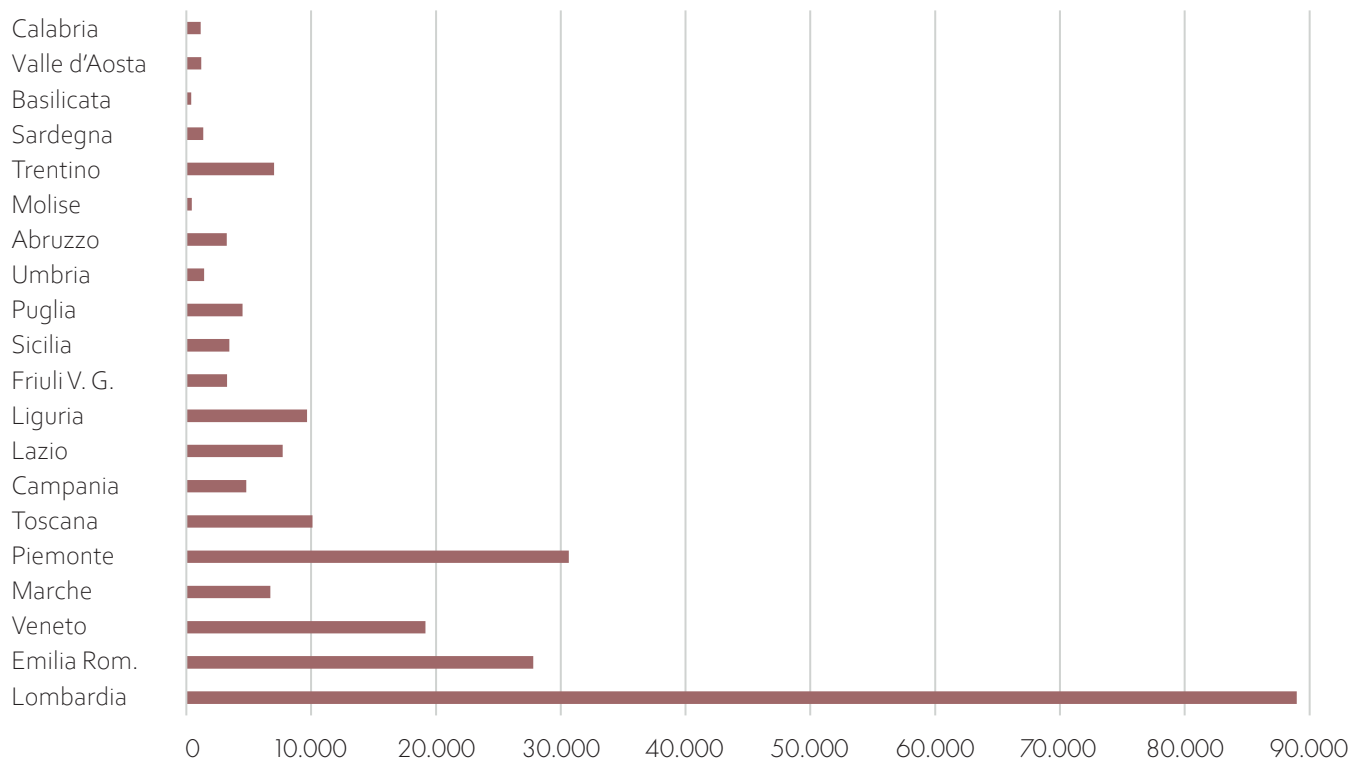
through a declining period. Milan as well experienced a decrease in value of around -1,7%, but the following year an incredible rise characterized the city. Indeed, the Lombardy capital had the highest increase in per-capita income between 2020 and 2021, reaching a 6,1% value, in an overall context of recovery for all the Italian regions. Also, in terms of tourism, between 2019 and 2020 Milan lost 75.8% of touristic arrivals but in 2021 it managed to get back to 1.2 million tourists (June – August),

doubling the value of the previous summer³⁹.

Keeping these characteristics into account, it is possible, then, to consider the distribution of NRRP funds among the capital regions that - as explained before – is the result of several mechanisms of allocation, only in part managed and directed by the government. At the city level, Milan is the second recipient of resources with around 2,7 billion euros, following Rome (around 4,4 billion euros) and preceding Naples (2,3 billion euros). The impact of the-

30. Number of Covid-19 infections (May 2020)

(Data source: *salute.gov.it*)

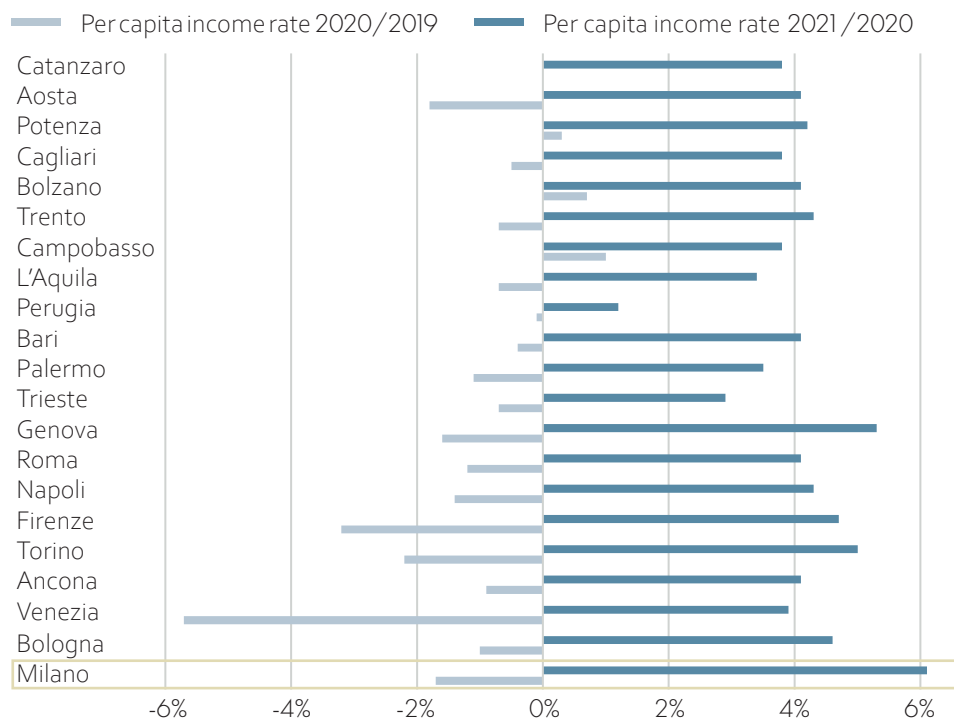


se funds will undoubtedly be relevant for the city but not as much as some other realities where it could be a real turning point. Indeed, for the city of Milan, the arrival of these funds represents only a part of the overall resources the city is currently managing, mainly from private parties. Especially after Expo 2015, Milan started to attract foreign interests that progressively arrived in the city activating deeply transformative processes and involving it in many networks of cities. Indeed, Milan is becoming more and more of a global city with new financial distri-

cts, clusters of multinational agencies, and places for several national and international events. For instance, many former industrial areas requiring regeneration are considered golden occasions for foreign investors and real estate developers who are currently realizing brand-new neighborhoods, offices, and facilities all over the city. Besides, in the season of the NRRP, Milan is working to be able to host the Winter Olympics in 2026, an international event that requires several interventions to provide all the event-related public arriving in the city the

31. Change in per capita income

(Data source: Sole24ore)

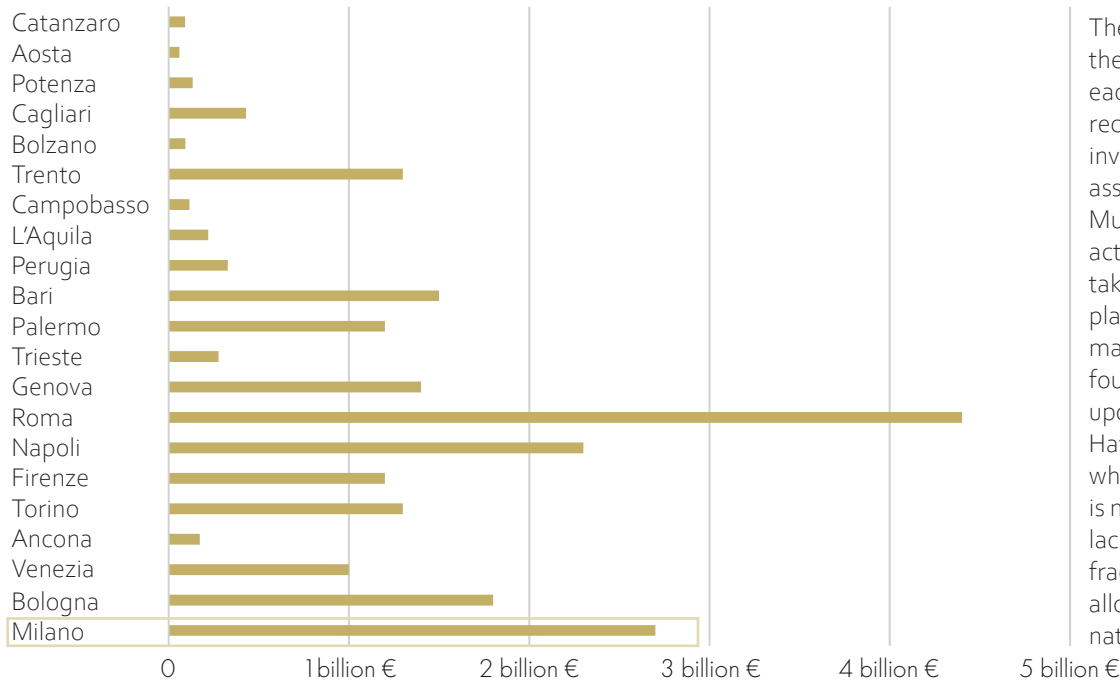


Variation of GDP (Gross domestic product) at the national and Milan level.

2019	+0.3%	Italy
	+1.2%	Milan
2020	-8.9%	Italy
	-9.8%	Milan
2021	+5.3%	Italy
	+5.5%	Milan

(Data source: Istat)

32. Number of NRRP funds (July 2023)



(Data source: openPNRR)

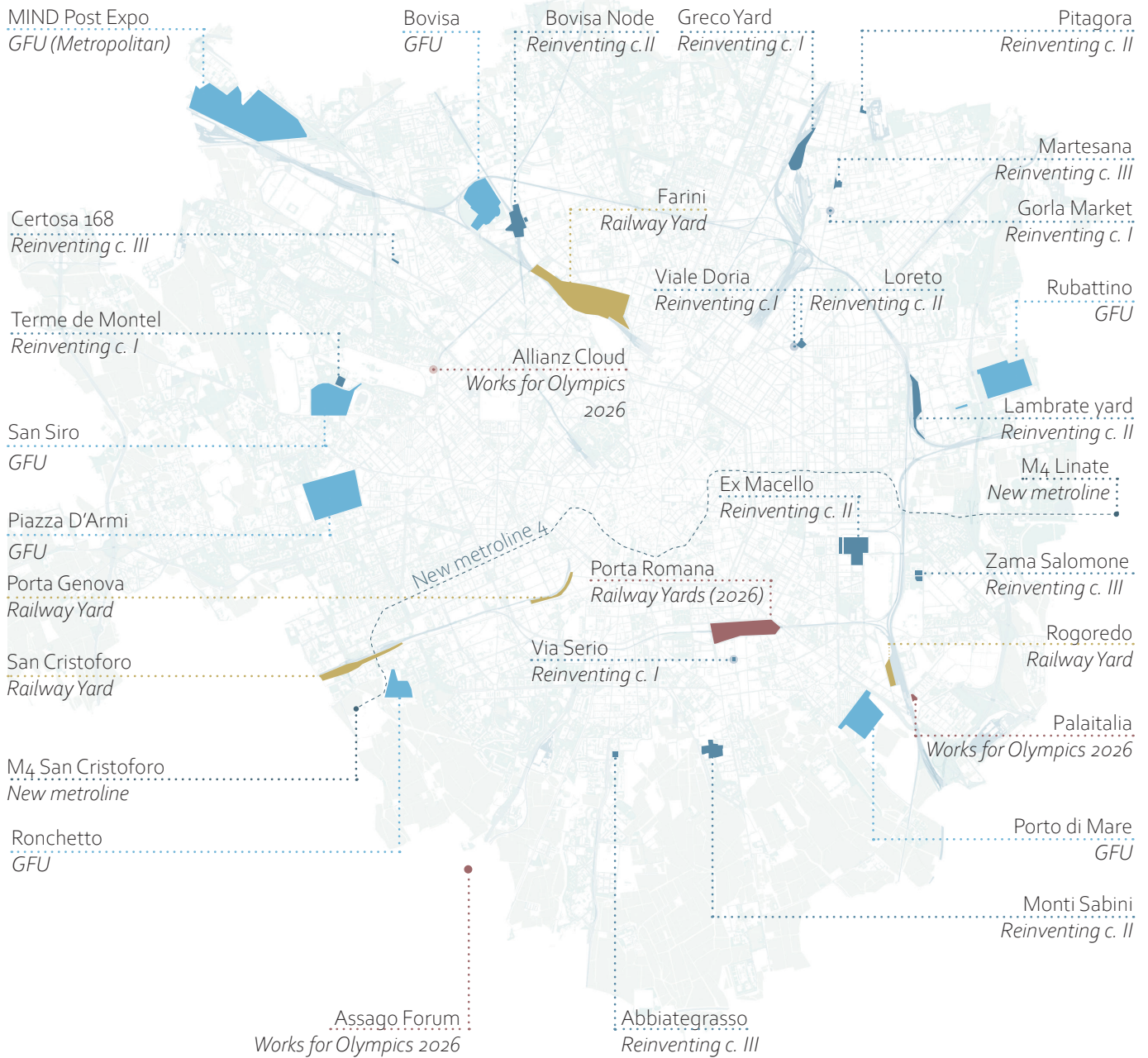
The graph displays the entity of the funds each regional capitals is receiving from the NRRP, involving the resources assigned both to the Municipalities and to other actors. These data were taken from the OpenPNRR platform, which is managed by Openpolis foundation, and they are updated until July 2023. Having a clear picture of where resources are going is not easy due to a general lack of transparency, fragmented processes of allocation and the ongoing nature of the plan.

adequate infrastructure and facilities.

At the same time, of course, all these transformations that are enriching and bringing an increasing quantity of money to the city are at the origin of some expulsion processes and a general rise in the prices. These latter phenomena are making the city inaccessible and unaffordable for an increasing number of inhabitants and potential ones, requiring interventions to attempt a sort of rebalance of these inequalities. For instance, in recent months, rent prices have been at the center of the public debate due to the fact that they reached excessive values

making it impossible for many off-site students and workers to live in Milan, which, at the same time, has become very attractive for the studying and working opportunities it offers. These trends were summarized in the Sole24ore ranking published in December 2022: Milan got the highest rankings in terms of work attractivity - concerning the number of startups, new enterprises, and employment rate - and very good levels for student one. At the same time, however, it has seen an increase of 2,3% in the average rental prices between 2021 to 2022 and of 5,1% in the average selling prices⁴⁰.

Map 3. Main current urban transformations in Milan



Big Urban Functions (GFU)

In the current Plan for the city of Milan - *Piano di governo del territorio Milano 2030* - some areas are identified as "big urban functions" (*grandi funzioni urbane*), recognizing them as relevant for the strategic role they can play in the development of their surrounding neighborhood. At the municipal level, there are six big urban functions, all located in the exterior belt of Milan. Besides, looking at the metropolitan scale, other big urban functions can be pointed out and one of these is the post-expo area, currently referred to as MIND. These areas have in common the potential to host an attractive function - which can range from cultural, university, green, and leisure to sanitary services - in order to transform urban voids into drivers for the regeneration of the surrounding districts.

Reinventing Cities Competition sites

Since 2009, the city of Milan is part of the international network of cities C40, and one of the initiatives carried out in this framework concerns the Reinventing Cities Competitions. These calls are aimed at promoting sustainable and innovative solutions for the regeneration of some parts of the city. The Municipality, indeed, determines some underused sites that need to be regenerated through resilient and cutting-edge urban projects. In the case of Milan, since 2017 there have been three editions. In the first two calls, only two out of eleven locations didn't have a project approved. The third edition is still ongoing and focuses on housing issues. The projects collected with this competition have various sizes and many of them will radically change some parts of the city.

Works for the Winter Olympics in 2026

In 2026, the city of Milan will host some of the Winter Olympics ceremonies and competitions. For this reason, some interventions are forecast in order to assure the necessary infrastructure to deal with all the event-related occurrences. One of the most important projects that is currently under construction concerns the realization of the Olympic Village. The latter will be built thanks to a regeneration plan to reuse the railway yards of Porta Romana, in the south of Milan. The plan forecast several functions and it is expected, after the sporting event, to become student housing, responding to a pressing need the city is facing. Other interventions concern some works to build or improve sporting structures to host the competitions.

Other railway yards

The city of Milan has strongly invested in the regeneration of railway yards that today are oversized in comparison to the needs. Some of them, as already said, were part of Reinventing Cities competitions or, as in the case of Porta Romana, are linked with the arriving Olympic Games. Besides, also Farini, San Cristoforo, Porta Genova, and Rogoredo yards have regeneration plans with different states of the works. The first two yards are linked in a unitary plan that focuses on the environmental aspects, providing particular attention to the realization of new green and blue infrastructures. For Porta Genova yard, a new agricultural park was forecast, while for Rogoredo a new neighborhood is expected to be realized by 2025.

4.2 THREE LEVELS INTERACTING

The governance system of Lombardy Region, Metropolitan City and Municipality of Milan

To analyze the projects funded by the NRRP in Milan it is important to consider the governance they rely on, and this often implies dealing with several levels and agencies that can differ according to the city. To provide a general framework, the three main levels of governance have been considered: the Region, the Metropolitan City and the Municipality.

At the **regional level**, to deal with the NRRP, a new working group has been established⁴¹ ("Gruppo di Lavoro Attuazione PNRR") with the aim of activating, managing, and monitoring the implementation processes for the projects entitled to the Lombardy Region. It has been formed as a space where to share experiences and knowledge among the actors involved, which are:

- the General Directions,
- the regional agency for the control activities (ORAC),
- the pro-tempore councilor for Economic and Financial Affairs,
- the Lombardy section of the National Association of Italian Municipalities (ANCI Lombardia),
- the Union of the Lombardy Provinces (UPL).

The last two actors join the working group when dealing with the issue of Technical Assistance and they contribute in a relevant way by providing

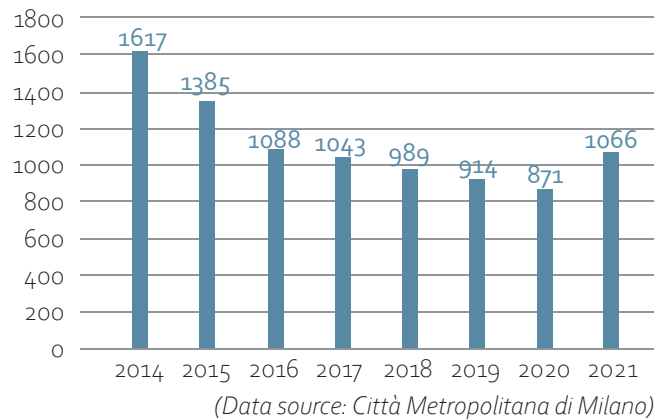
information about the Provinces and Municipalities in need and through monitoring reports.

In order to support the implementation of the plan, especially to what concerns the management of new procedures for local entities, some resources have been distributed at the national level for the employment of experts and professionals. For this investment, Lombardy region has received 38.632.000 euros and defined a Territorial Plan for the distribution of the collaborations contracts to support administrative procedures. Six of these experts are employed to constitute the Technical Secretary as an intermediary between the Working Group for the Technical Assistance issues and the other professionals, coordinating and monitoring their activities. These latter were distributed among eight task forces with different spheres of action.

The level of the **Metropolitan City** should be considered starting with some premises related to their establishment and their development throughout the years. Indeed, the metropolitan cities has been introduced in 2014 with Delrio Reform⁴², substituting the previous provinces. Differently from these latter, the mayor of the metropolitan cities coincides with the mayor of its capital city. Their introduction was specifically

meant to provide the strategic planning for the area, dealing with several dimensions – spatial, social, cultural and economic. This is pursued realizing a Metropolitan Strategic Plan that lasts three years. In the specific case of Milan, the Metropolitan city has experienced, from 2015, a decrease in the number of its employees, due to financial cuts. This sharp reduction in the organizational capacity has determined several difficulties but Milan, thanks to some planning experiences, has kept and developed an important strategic ability through network projects and activities able to activate the resources of the Municipalities. Among these, the Strategic Plans, the involvement in tenders like “Bando Periferie” for the Peripheries contributed to strengthening the capacity of the Metropolitan city in responding to calls like those provided by the

33. Employees with a permanent contract of the Metropolitan City of Milan



PNRR. To manage the funds coming from the NRRP and explicitly destined to these local entities, the Metropolitan City of Milan established, in January 2022, a direction for the European financing programs, with the role of a Steering Committee. The sphere of action of this new group refers to the coordination of the various directions to respond to European calls for funds, to the monitoring of the activities and the elaboration of periodical reports on the state of works.

The **Municipality of Milan**, similarly to the approach adopted by the Metropolitan city, preferred to have a light governance structure to deal with the NRRP funds arriving in Milan. The already existing direction Authority of Plans Management and Monitoring – *Autorità di Gestione e Monitoraggio Piani* – appeared to have the adequate competencies to cope with the NRRP challenges. Indeed, it was established in 2019 to manage all the projects financed through extra-municipal budget funding: for instance, it coordinates the funds from PON metro programming. For this reason, applying an already tested model, the choice made by the Municipality was to centralize in this direction all the tasks related to the NRRP funds. Under the guide of Dr. Moneta, it both supports the various directions during the phases of scouting and definition of the project proposals, and it oversees the financial

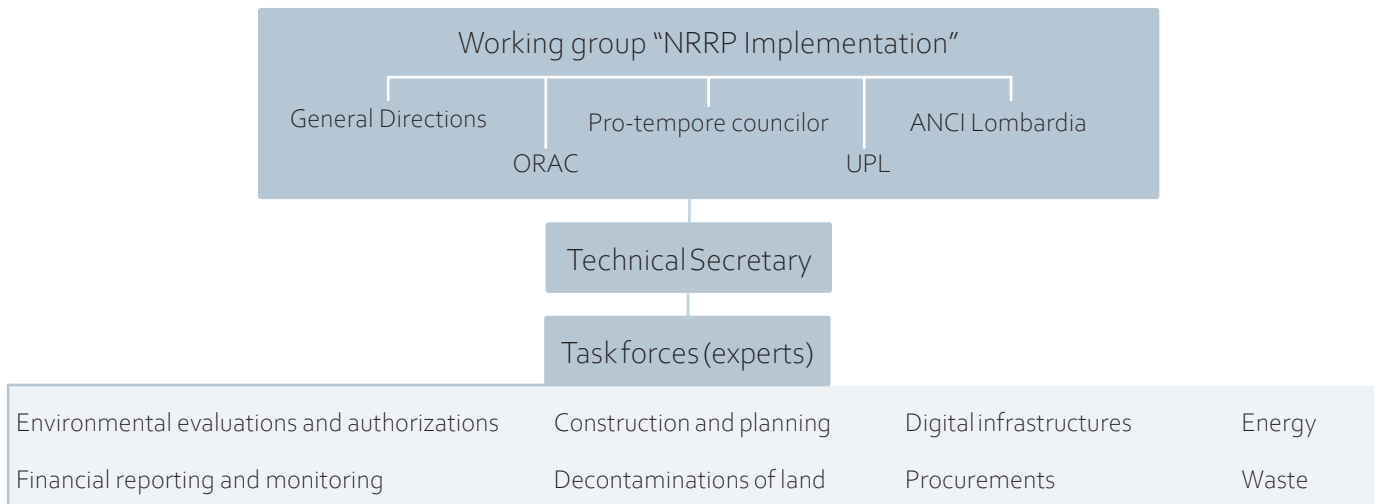
and administrative management. In this way, by adding new NRRP competencies to this structure, it was possible to achieve a complete picture of the funds and the progress of the projects, monitoring the compliance with the tight schedule and the milestones.

The Municipality and the Metropolitan City of

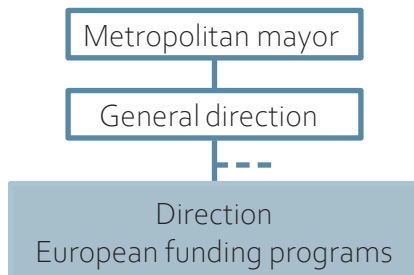
Milan signed a framework convention aimed at improving the coordination and collaboration between the two entities when dealing with the implementation of the NRRP. The collaboration between these two entities concerns mainly the Integrated Urban Plans, a forestry intervention, and one related to active labor policies.

34. Governance structure for PNRR in Milan

Lombardy Region



Metropolitan City



Municipality of Milan



4.3 WHAT LANDS IN MILAN?

The resources arriving in the Milanese territory

The NRRP is a valuable tool for the future of the city of Milan, a plan that can enable the area to achieve resilient and sustainable development.

The city has received from the NRRP funding of 775 million euros, distributed among missions 1, 2, 4, and 5. In addition to these funds, the National Complementary Fund allocated another 111 million euros: they finance the BEIC's realization (101.5 million euros) and the demolition and reconstruction of public housing in Via Tofano (9.5 million euros). Despite the substantial funds Milan receives, many other resources and programs fall into the city, making the NRRP - even though its entity - one of the city's development tools, rather than its main asset for building the next future. In addition, Milan, as a large city, receives 129 million from the Decreto Aiuti, which aims at strengthening the NRRP interventions. With these additional resources, the most important projects will be some interventions inside the wider project of Bovisa Goccia - with the Politecnico campus -, the extension of tramway number 24, and support for the construction of the Magnifica Fabbrica.

Given the very tight schedule and the need to send the works out to tender as soon as possible, the municipality decided - with a scouting phase - to apply mainly for projects that were already defined

and did not require design from phase zero. For this reason, almost all of the NRRP interventions were present in the municipality's Three-Year Public Works Plan. Thus, this situation did not help in creating a strategic vision for the use of these funds. The NRRP appeared an inadequate framework for accomplishing something innovative. What the NRRP allows to do has been an acceleration in the realization of the projects: the interventions that were applied for were in any case part of the priorities for the municipality that, without the European funds, did not have adequate resources to implement them.

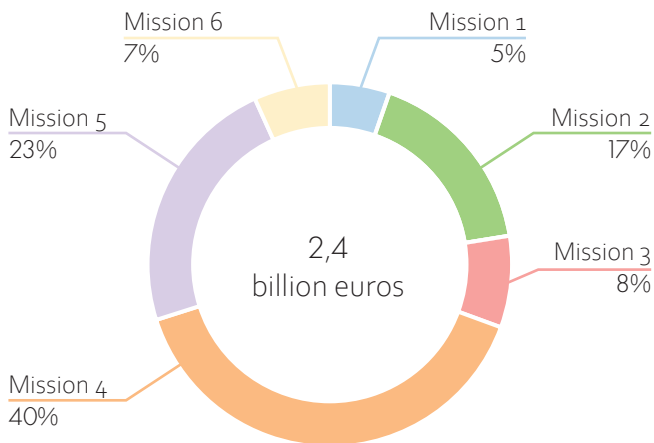
The city of Milan, however, is involved not only through these projects, but it is necessary to take into account all those interventions that have another public or private entity as the implementing body. These include the role of the Lombardy Region in the territorialization of Mission 6 funds with the creation, for example, of health houses. Another key role is that of the Metropolitan City, which intervenes with Integrated Urban Plans and in some interventions of Missions 4 and 5.

NRRP is an opportunity for the City of Milan, to implement not only large projects that have

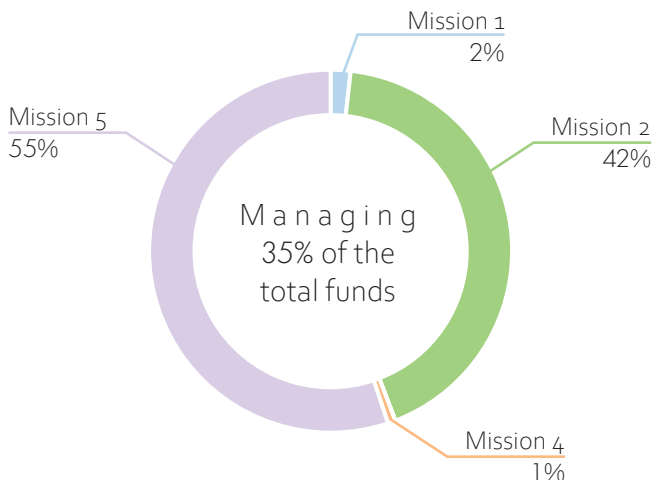
Results of the analysis

Around **2,4 billion euros** will land in the Milanese territory;
the Municipality of Milan is the implementing body for **35%** of it.

35. Funds according to NRRP missions



36. The Municipality as implementing body



long been waiting for funds but also synergistic planning with other entities, creating plans that bring dialogue and relationship between public and private entities of various levels.

Methodology

In an attempt to reconstruct the totality of funds that land in Milan through the municipality and other entities, the carried-out analysis encountered several obstacles. The main difficulties were mainly related to the absence of a single system for collecting and mapping data completely and transparently. The municipality itself is not aware of all the funds that land on the city through other entities as implementing bodies: such a circumstance represents a clear obstacle to creating a strategic vision for implementing the plan.

Data were extrapolated from various data sources. The first was Open.pnrr, a site belonging to the Openpolis Foundation, which works independently of the state, aiming at collecting, monitoring, disseminating, and informing the public of data related to NRRP funds and other matters. The second source was the mapping work carried out by the PIM study center, which is a nonprofit foundation aimed at collaboration and scientific-technical support in land governance. Another source is the municipality of Milan itself, which

37. Part of the table for mission 5

Description	CUP	Location	Implementing body	PNRR funds (€)	Total cost (€)
New offices and services	B44H22000760006	Via Sile 8	Municipality	715.000	715.000
Requalification	I49J21000550006	Gratosoglio	Region	42.330.000	42.330.000
Energy upgrading	B47H21001800001	Via Rizzoli	Municipality	12.000.000	12.000.000
Environmental req.	B49J20002240004	Lambro	Municipality	8.850.000	8.850.000
Demolition and new construction	J42C21002820004	Via dei Giaggioli 7/9/11	Municipality	47.987.000	47.987.000
Lambretta park (green-field work)	B45B22000420001	Lambretta Park	Municipality	22.000.000	22.000.000
Lambretta park (decontamination)	B45B22000410001	Lambretta Park	Municipality	16.000.000	16.000.000
Conservative rehabilitation	B47H21006410004	Via delle Rimembranze 24	Municipality	18.000.000	18.000.000
New primary school	B42J22000010001	Via dei Caduti	Municipality	13.500.000	13.500.000
New mobility hub	B47D22000130006	Greco-Pirelli station	Municipality	11.360.291	11.360.291
Requalification	B47D22000140006	Piazza Freud	Municipality	3.066.042	3.304.112
Requalification	B47D22000150006	Domodossola M5	Municipality	1.840.000	2.000.000
Removing Arch. barriers	B43C22000380006	Bande Nere M1	Municipality	1.470.000	1.598.710
Removing Arch. barriers	B43C22000390006	Sant'Agostino M2	Municipality	1.350.000	1.464.293
External requalification	J49J21000090004	San Cristoforo M4	Municipality	2.794.547	2.794.547
External requalification	J49J21000080004	M4 Western part	Municipality	23.500.000	23.500.000
External requalification	J49J21000100004	M4 Center	Municipality	20.000.000	20.000.000
Biciplan 2	I41B22000560001	Northern area	Metropolitan city	1.350.000	1.463.980

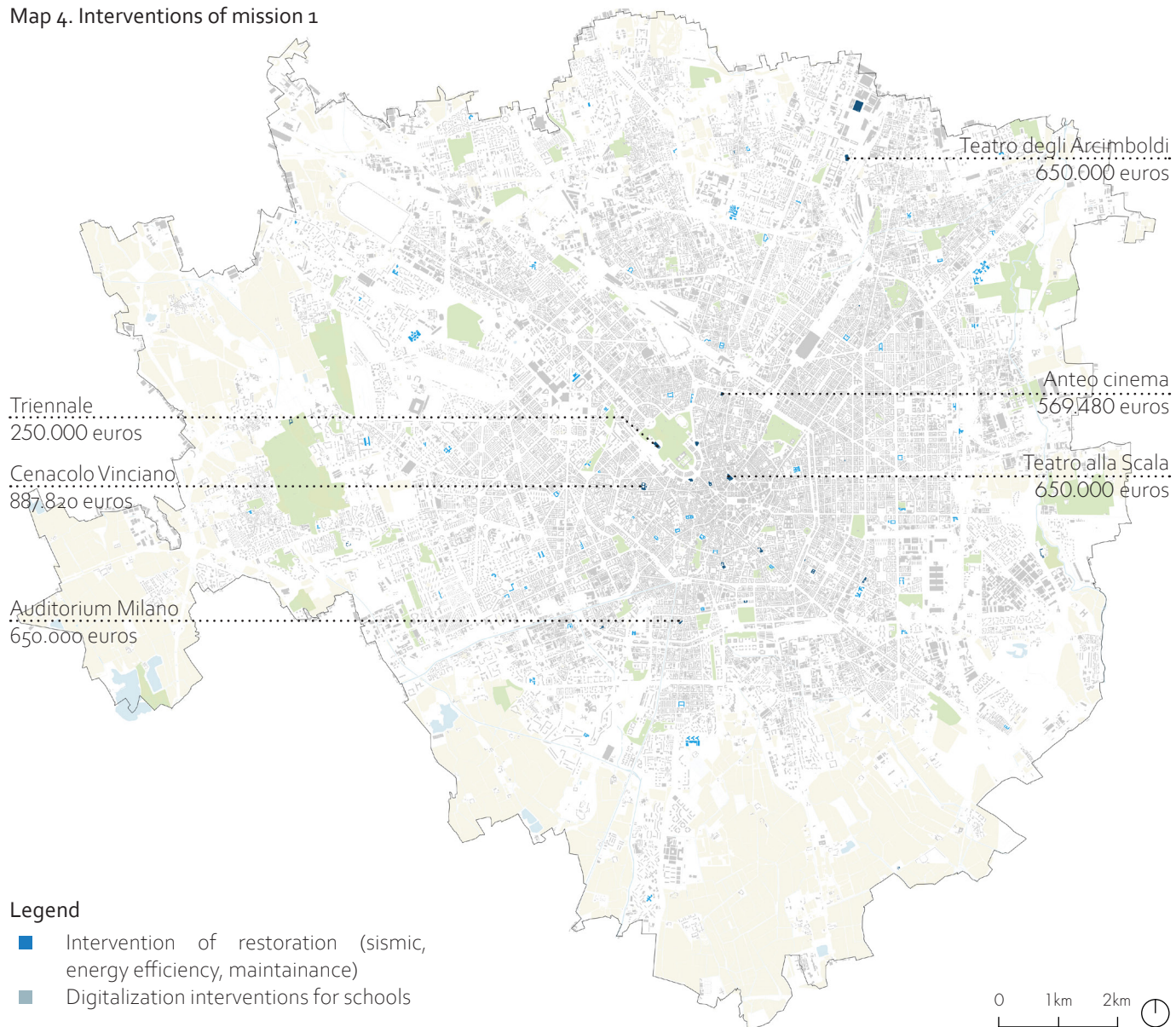
supported the research through some tables with data on the main projects being implemented in the city of Milan. Finally, these data have been cross-checked with official documents prepared by various ministries and ANCI reports.

The elaborations on the following pages are an attempt to map the territorialization of funds according to the missions of the NRRP and are based on the data available up to June 31, 2023. This clarification is necessary because of the unfolding nature of the plan, which sees continuous changes and reallocations of resources. Despite these - often negligible - deviations, the analytical work allowed some reasoning that led to identifying some positive and negative aspects of the plan for the city. In addition, mission 3 funds were not presented because of their marginal relevance to the city of Milan. This mission focuses on major regional rail links and ports, and the Municipality is never the implementing entity.

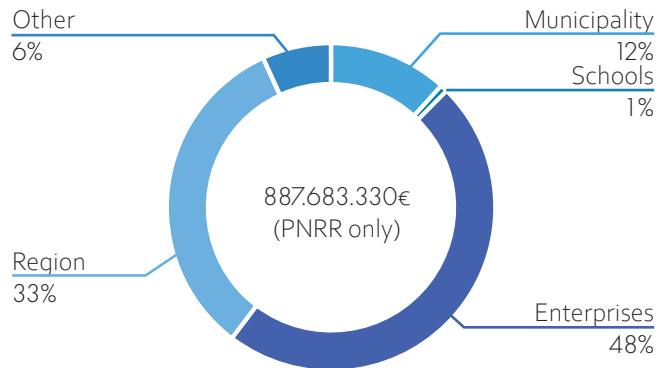
MISSION 1

Digitalization, innovation, competitiveness, culture and tourism

Map 4. Interventions of mission 1



38. The funds according to the implementing body



39. Territorialized and non territorialized interventions



Mission 1 is one of the least impactful missions in terms of territorialization of the investments. The goal is to achieve a country-wide digital revolution to make Public Administration more fluid and at the same levels as other European states, invest in culture and the productive sector to make them more competitive and innovative.

The interventions in this mission are diverse, and for almost all of them, funding through NRRP funds covers the total costs. First, a critical point for the state concerns the interventions for the digitalization of public administration, although Milan already boasts of being a virtuous example compared to

other cities. In particular, a lot of funds are allocated to the city's schools and high schools to adjust to the new national standards. Another type of funding is for "business internationalization and digital transition" and implies a series of interventions aimed at digital transition for small businesses in the city by SIMEST. In the latter category, some interventions fall under component 3, namely tourism and culture. They mainly involve Milan's theaters, some cinemas, and a few churches with interventions of various kinds: for example, seismic improvement, conservative restoration, energy efficiency, or extraordinary maintenance. In addition to being a less impactful mission on the territory, it is also economically so: of the more than five hundred projects that will be implemented, only a very small part sees the City of Milan as the implementing party.

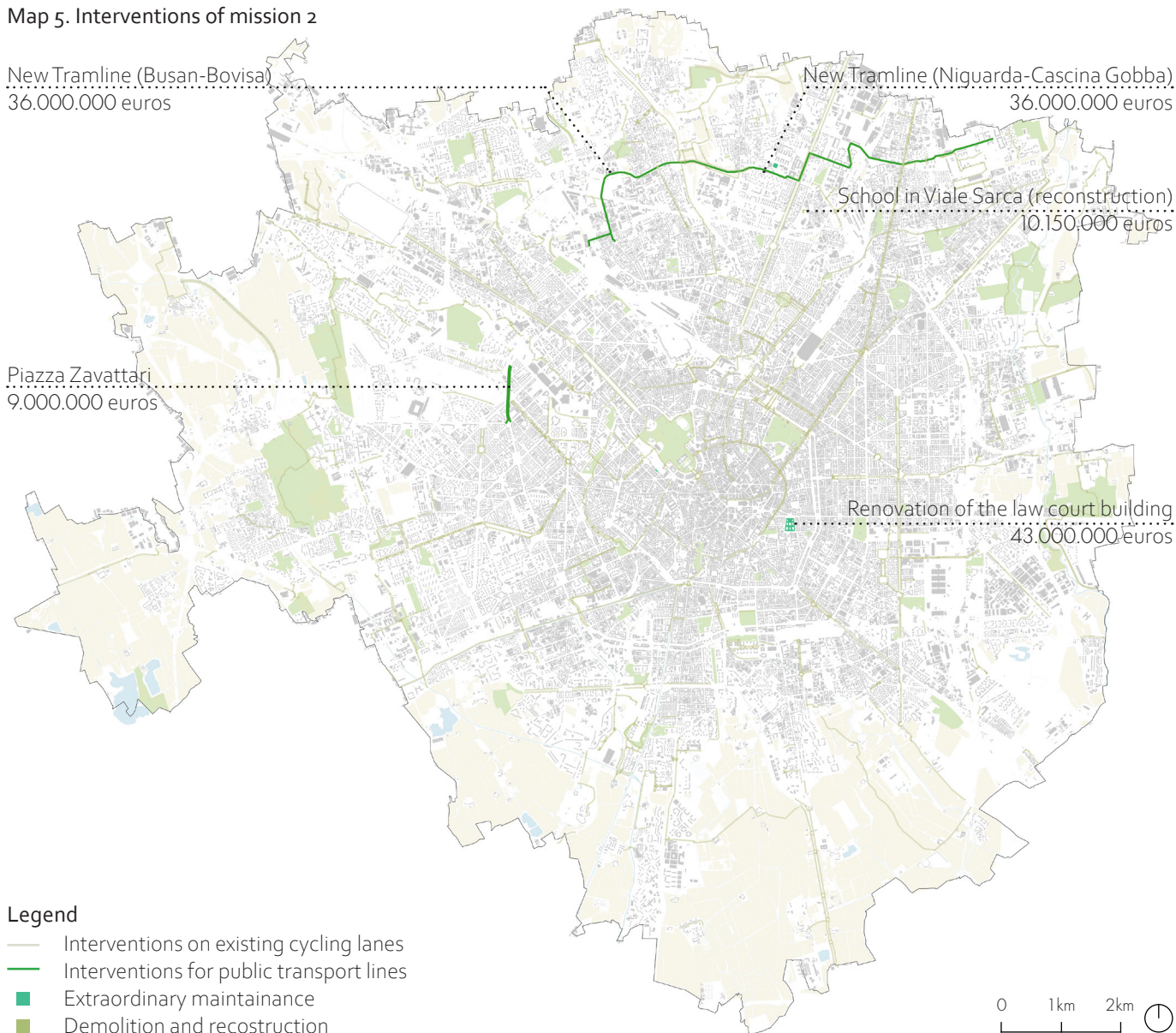
Final remarks

Certainly, the issue of digital transition is still a critical issue for Italy: in addition to being below the standards of many European countries in this area, it is an important strategy to also secure a simplification of bureaucratic steps. The problem with this mission, however, is that it lacks a common vision and one that can keep all the defined actions together. In addition, many actions are not well defined, as in the case of the internationalization of enterprises.

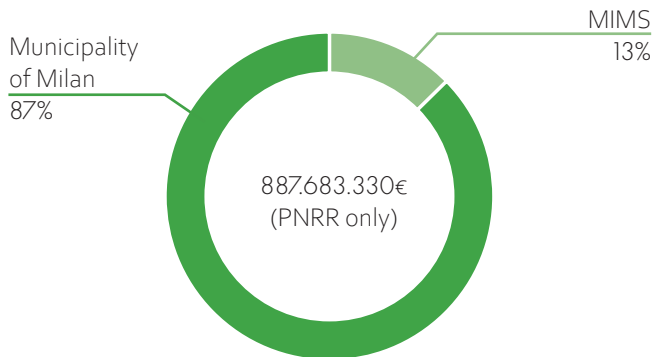
MISSION 2

Green revolution and ecological transition

Map 5. Interventions of mission 2



40. The funds according to the implementing body



41. Territorialized and non territorialized interventions



Mission 2 focuses on the country's green revolution and ecological transition. The aim of the mission is to make cities and territories resilient and in balance with nature and its systems. In the case of the City of Milan, special attention has been given to the public transportation system, specifically in the implementation of tramway 2. This project is extremely important for public transport and involves the creation of a new transport system that will allow the connection of the northern part of the city, from Bovisa to Cascina Gobba. The NRRP will allow not only its implementation but also the purchase of a fleet of fourteen trams that will be able to guarantee its service. Alongside these

important measures, ten new trolleybuses will be purchased and will fit into the existing system. In addition to these interventions on the local public transport service, part of the funds will be used for the creation in the city of several energy efficiency and extraordinary maintenance measures, the most important of which turns out to be that of the Palace of Justice. Finally, just six million euros of funding will be used to carry out interventions, not yet defined, to improve bicycle paths.

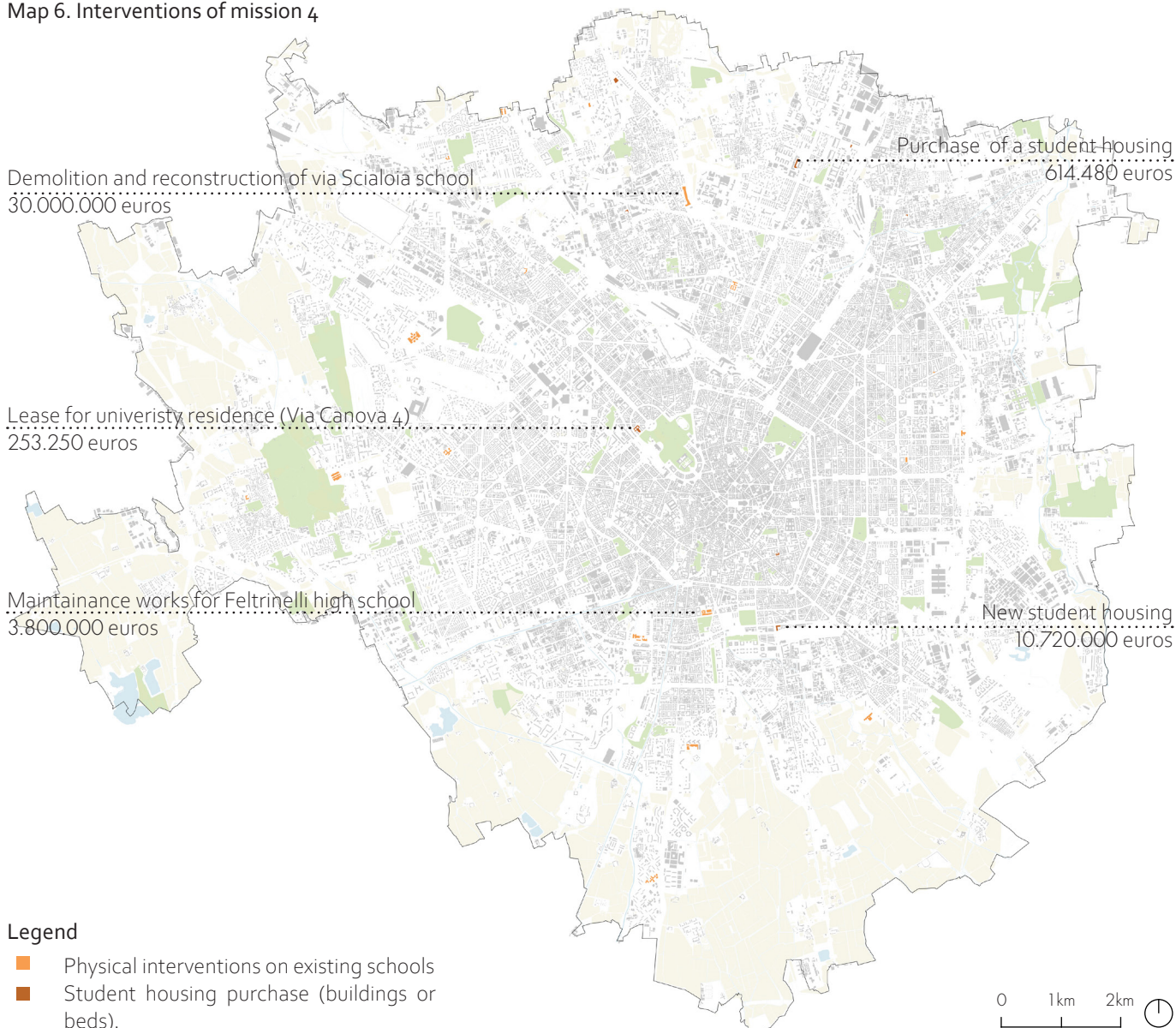
Final remarks

For the NextGenerationEU, the green revolution and ecological transition represent one of the three key pillars for the future development of countries. Milan was invested with a large amount of these funds but has not produced a more strategic and cohesive vision for this mission. As in other missions, there has been the decision to concentrate the resources mainly on one project, leaving behind other equally necessary interventions, such as those of bicycle paths. Is Milan, which gives wide space to this theme in its slogans, actually a city ready for the ecological transition?

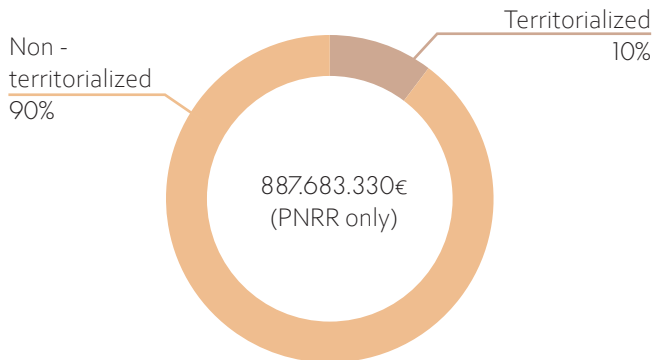
MISSION 4

Education and research

Map 6. Interventions of mission 4



42. Territorialized and non-territorialized projects



43. Implementing bodies of territorialized interventions



Mission 4 of the PNRR - Education, and Research - aims at strengthening a very relevant system in the country, that of education, having as its goal to put young people and their future in the foreground. This mission is one of the most important challenges for the national future, also seen in close relation to the cross-cutting priorities of equal opportunity and youth.

In the Milan context, M₄ sees a total of more than 300 interventions, in which the NRRP intervenes with the allocation of 923 million euros, covering 84% of the total costs of the interventions. In this mission, the implementing entities are multiple,

recognizing, however, a main role for city universities and research institutions. Interventions are structured according to two components: the enhancement of education services ("from nursery to university") and the support of research and innovation.

With regard to the physical interventions that are carried out in the city of Milan, it can be seen that in reality few schools actually receive maintenance interventions (about 8 comprehensive schools) and almost all of them have the Metropolitan City as the implementing entity. Instead, the City of Milan has decided to concentrate its resources mainly on one project, that of the new comprehensive institute in Via Scialoia. This project was strongly desired by the Milan municipality, which in 2019 launched an international competition aimed at creating a new comprehensive institute. The goal of this new facility - which will include a nursery, an elementary, and a middle school - is to become a new civic center for the Affori and Dergano neighborhoods. The project involves the total demolition and reconstruction of the institution, at a cost of more than 30 million euros fully funded by NRRP.

Another intervention that is being carried out in the Milan area is one related to student housing. Given the dramatic situation of the city, both in ter-

44. The types of interventions

Falcone-Borsellino middle school

Via Scialoia

Demolition and reconstruction

Via Pizzogoni 9

Reconstruction

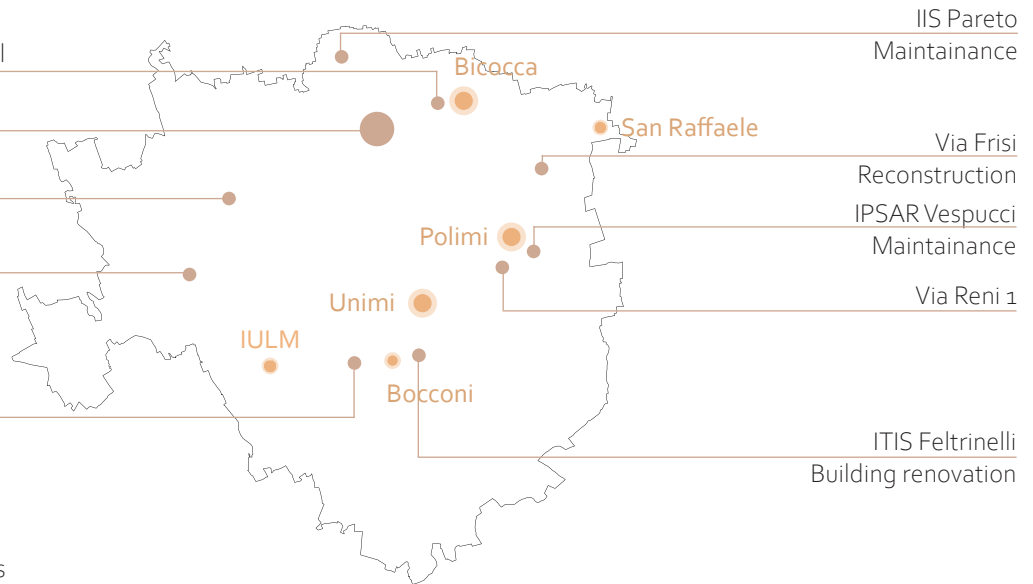
Via Anselmo da Baggio (Fracci)

Iss Giorgi

Maintainance

Legend

- Interventions on schools
- Universities receiving funds



ms of the shortage of beds and the large increase in prices, the aim of the measure is to encourage the construction and management of new beds, for which the Ministry of Universities and Research will cover the management costs for the first three years.

Finally, the majority of Mission 4 funds that fall on the City of Milan are non-territorializable funds, namely those funds for research and development. Out of a total of 828 million, about 122 million are allocated for the creation of new Ph.D. scholarships, while the rest of the funds will be used for research.

MUSA

As part of Mission 4, the NRRP finances the creation of so-called innovation ecosystems with the aim of establishing relationships among the research world, the productive system, and the territorial institutions. In the case of Milan, the ecosystem created is named Musa and involves the universities of Bicocca – the proponent – Politecnico di Milano, Bocconi, and Statale, but also public and private partners. The main topic of the research concerns the three dimensions of sustainability (environmental, economic, and social aspects). It is articulated into six spokes, which are the project focus.

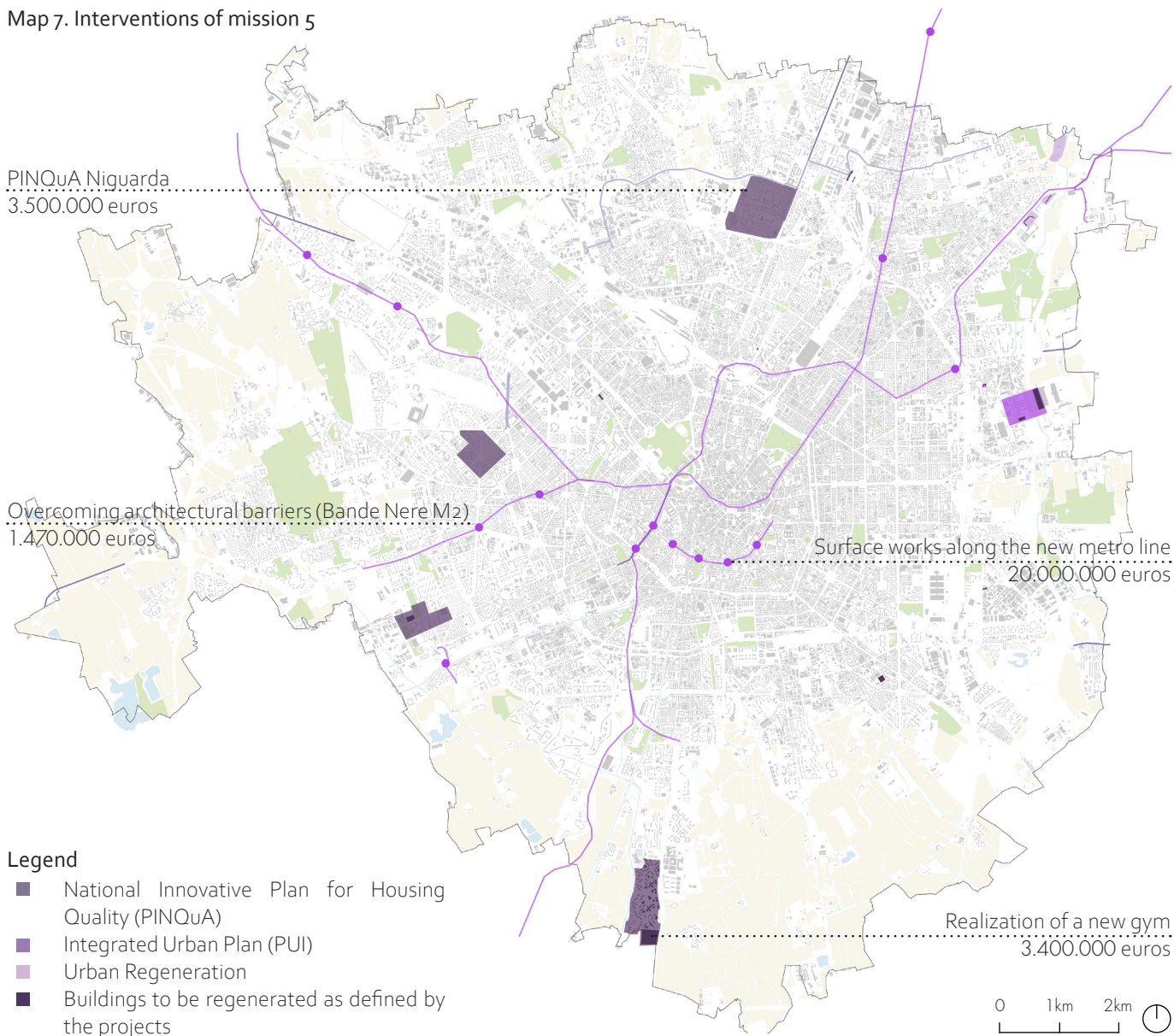
Final remarks

Mission 4 is crucial for the future development of cities and territories: investments on education and research are needed to make the country more resilient, competitive and with a solid economic development, attempting to reduce territorial, gender and generational gaps. The city of Milan, in this regard, has destined a significant part of its funds for the creation of new doctoral and research grants in the various universities. However, one aspect to consider concerns the actual conditions and infrastructure that Milan is able to offer to future students, especially given the dramatic price increases of the recent months. One step in this direction seems to be the acquisition of new beds in student housings, but will they really be enough? With regard to schools, then, the limited funds allocated to Municipalities have not allowed for school maintenance of many city institutions, and the Municipality has often found itself forced to place schools - maybe even the same ones - in different missions to carry out the various interventions: this is the case, for example, of the school in Via Reni where its demolition and remediation fall under the Mission 4, while the reconstruction under the Mission 5, thus denoting the difficulties due to the lack of a strategic structural vision of the missions.

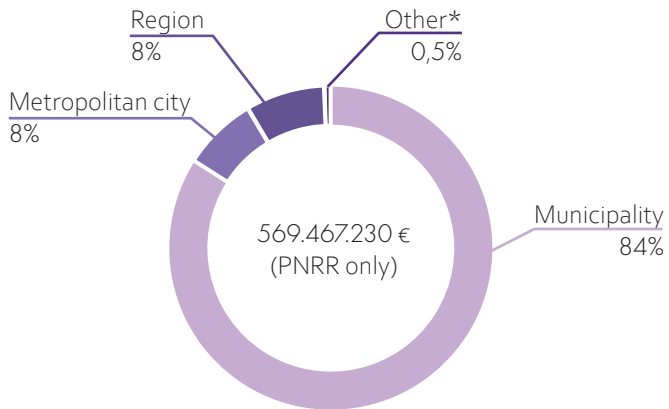
MISSION 5

Cohesion and social inclusion

Map 7. Interventions of mission 5



45. The funds according to the implementing body



* (Dipartimento delle Politiche Giovanili, Ministero delle Imprese e del Made in Italy, and missing data).

46. PNRR funds over the total value of interventions



Mission 5 appears to be one of the most impactful in terms of its territorialization on the city of Milan. The projects are evenly distributed, with the exception of the territory in the southeast of the city. In most cases, the implementing body for the M5 is the Municipality of Milan, followed by the Lombardy Region and the Metropolitan City. The cost of the interventions will be almost all covered by NRRP funds. The mission is mainly organized around 4 axes.

The **PINQuAs** - National Innovative Plan for Housing Quality - are a series of interventions aimed at

reducing housing hardship in the most fragile neighborhoods, through urban regeneration interventions, modernization, and energy efficiency of the building stock. In the Milan case, 13 interventions part of the PINQuA will be carried out with funds from the NRRP, concentrated in six areas of the city. The interventions are very different in terms of the type of work and cost of intervention. The plan for Gratosoglio - which is the only intervention that has the Region of Lombardy as the implementing body - with more than 42 million euros is the most financed PINQuA in the city of Milan. It envisages the energy efficiency of more than 200 public housing buildings. In the case of the Lorenteggio-Giambellino neighborhood, two main interventions are planned by the PINQuAs: first, the demolition and total reconstruction of three public housing buildings in Via dei Giaggioli (for a total of more than 45 million euros), and second, the demolition and reconstruction of the Lorenteggio library, given the request for modernization by the City of Milan. To what concerns the PINQuAs of the San Siro and Niguarda neighborhoods, these appear to be less funded than the previous ones, and at the same time, the punctual interventions that will be carried out have not yet been defined. In both cases, there are already neighborhood contracts that have led to a partial regeneration, so the interventions that will be carried out are likely – at le-

ast hoped – to involve a continuity with these. The last interventions that fall under these plans focus mainly on the urban regeneration of public spaces and are concentrated in the central areas of the city. Indeed, there are plans to improve the quality of the external areas of the M4 stations in the West, Central, and San Cristoforo sections (the latter will be part of a larger project on sustainable mobility), and the creation of a bike lane in Via Olona.

The **PUIs** - Integrated Urban Plans - are urban planning tools dedicated to participatory planning for the most vulnerable suburbs of Metropolitan Cities, aimed at the recontouring of urban and suburban areas. The Metropolitan City of Milan, together with its Municipalities, has implemented four programs worth, in total, 277 million euros to make the area resilient and cohesive. Among these projects, two will also be implemented in the territory of the City of Milan: CAMBIO and MICA. CAMBIO, with total funding of 50 million euros, involves the construction of five “super-cycleways” (with a total distance of 82 km) crossing 30 different municipalities and joining the existing network present in Milan. These five bikeways will be built at key entry points to the city, two in the north, two in the east, and one in the west. On the other hand, the MICA project - Milano Integrata Connessa e Accessibile (Integrated Connected and Accessible Milan)

- with funding of about 110 million euros, is aimed at the territorial regeneration of the Rubattino area and to promote the improvement of accessibility at some of the nodes of the Milan metro stops.

Urban regeneration interventions, then, represent a series of projects funded throughout the Metropolitan City aimed at reducing social marginalization and promoting urban quality. Interventions can, again, be of various kinds such as, for example, the maintenance or reuse of urban areas. In the Milanese case, there are two urban regeneration interventions (which fall under a single project): the energy efficiency of some public housing buildings in Via Rizzoli and hydraulic maintenance interventions in the floodplain areas of the Lambro River.

Sports and Social Inclusion is, finally, a component that focuses on improving sports facilities and parks in order to promote socialization and social inclusion. Two new sports facilities will be built in the City of Milan. The Cardellino swimming pool, in the Lorenteggio neighborhood, with funding of nearly 26 million euros, will be totally demolished and reconstructed. The Carraro sports center, in the Gratosoglio neighborhood, will benefit from 3.4 million euros for extraordinary maintenance of the entire complex.

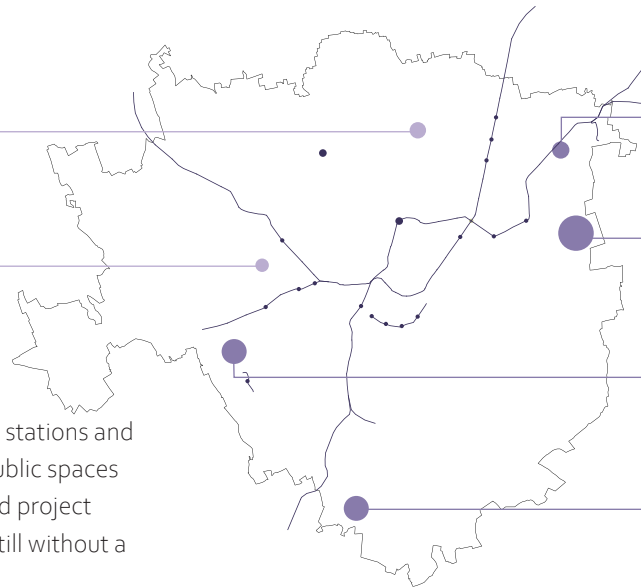
47. The types of interventions

PINQuA
Niguarda
12.500.000 €

PINQuA
San Siro
12.520.000 €

Legend

- Interventions on the metro stations and regeneration of outdoor public spaces
- Interventions with a defined project
- Interventions on the area still without a defined project



Urban Regeneration
Lambro-Via Rizzoli
20.850.000 €

PUI MICA
Lambrate-Rubattino
69.500.000 €

PINQuA
Lorenteggio-Giambellino
53.987.000 €

PINQuA
Gratosoglio
42.000.000 €

Final considerations

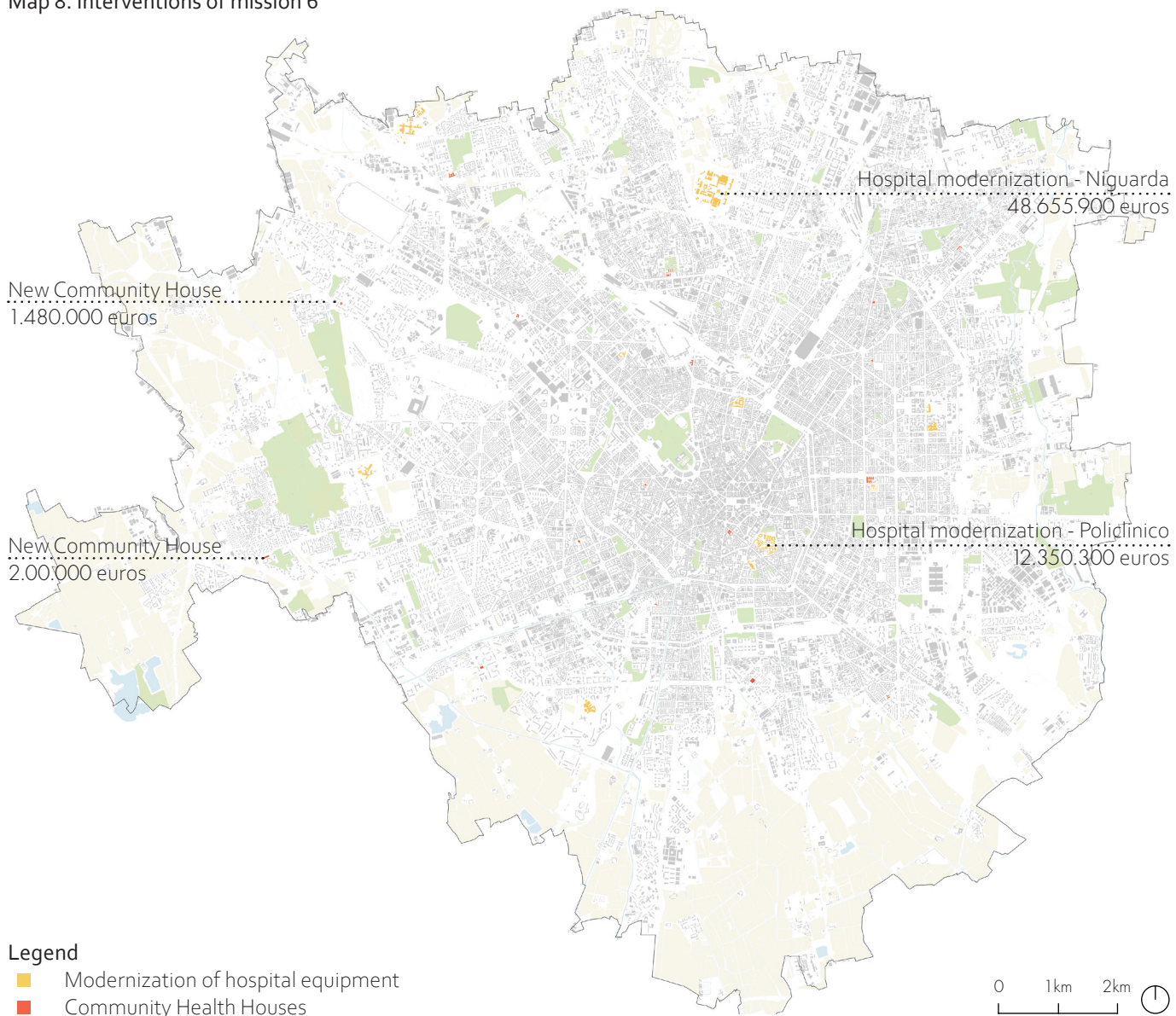
Looking at the interventions falling under Mission 5 it emerges a concentration of along a north-east and south-west axis, leaving out some areas of the city. For instance, the neighborhoods in the southeast of Milan are not involved in these measures but this choice may be explained by the fact that in recent years several interventions focused on this part of the city. In some of the interventions, besides, a solid structure and strategy seem to be lacking, for instance in the case of Lorenteggio, while projects like those of Gratosoglio and Lambrate-Rubattino appear with a stronger vision towards more

meaningful results. Another aspect that should be considered concerns the fact that these measures tend to finance mainly the physical dimension of the intervention, without providing resources and tools to finance the equally important immaterial policies that are required to reach an effective social cohesion.

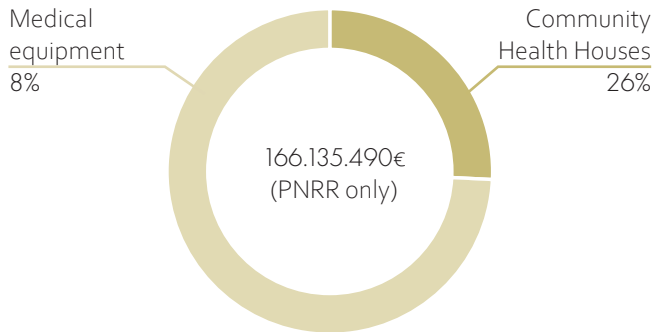
MISSION 6

Health

Map 8. Interventions of mission 6



48. The funds according to the implementing body



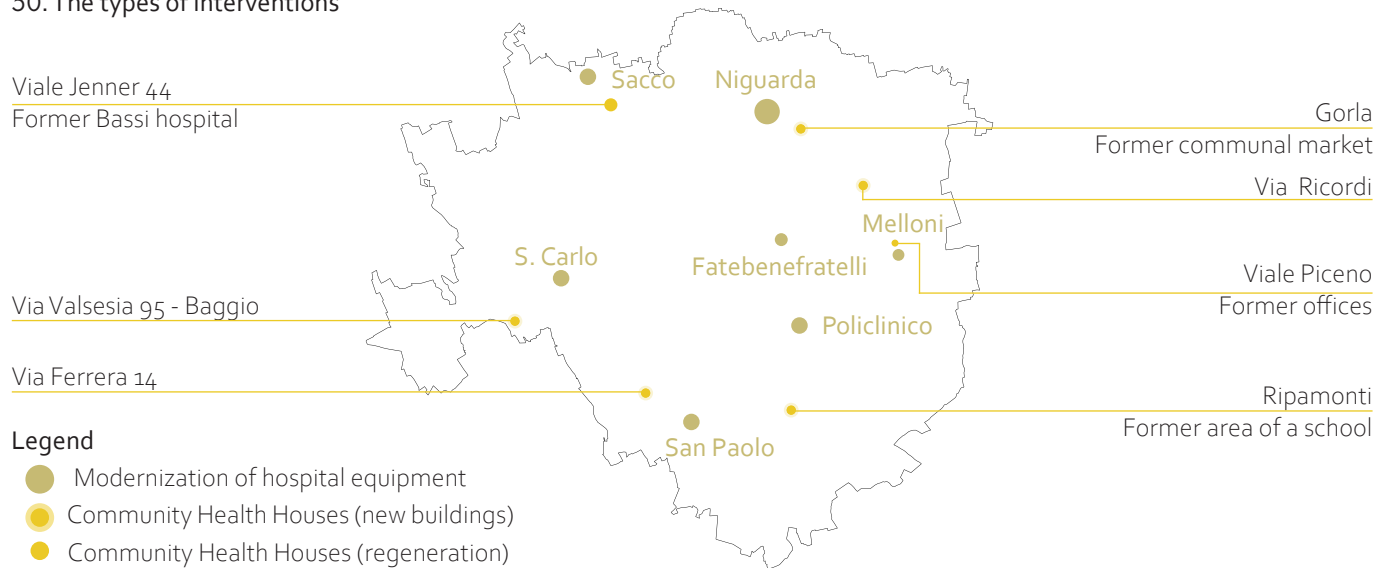
49. NRRP funds over the total value of interventions



Given the great difficulties demonstrated by the Italian health system during the COVID-19 pandemic crisis, especially in the Lombardy region, mission 6 is an essential component of making the territory resilient. NRRP mission 6 has a strong, though less territorialized, impact in the Milan context. Of more than 140 interventions - worth around 225 million euros - the NRRP funds 75% of them (around 166 million euros). The only implementing body for this mission turns out to be the Lombardy Region, as health, by law, is a concurrent matter between state and region. The interventions in Mission 6 are twofold in nature, with some involving only the purchase and modernization of new healthcare equi-

ment, and others concerning the construction of new facilities. The main hospitals involved in modernizing equipment are Grande Ospedale Maggiore Metropolitano, Policlinico di Milano, Sacco Hospital, San Carlo Hospital, and San Paolo Hospital, but, in general, resources have been distributed among all the hospitals in the Milan system. In addition, a key element of the mission was the implementation of the new service of Health Community Houses, which is expected to be realized uniformly throughout the territory. The funds dedicated to community houses enabled two main operations. In some cases, the modernization was given to similar facilities, for instance, the RSA (nursing home) in Corvetto. In other cases, instead, new buildings will be constructed. In this latter group, some will be newly built - as in the case of 95 Valsesia Street where the new community house will stand on a public parking lot - while others - which are rarer in that they are usually more expensive - will be the result of the regeneration of existing buildings, as in the case of Via Farini 9, an early 20th-century building that housed the mutual aid fund for ATM (Milan Transport Company) employees. As for future development, the newly built community houses will be under a 90-year lease to ATS (Health Care Agencies), while for the latter, the developers will have a 30-year concession to use the regenerated buildings.

50. The types of interventions



Final considerations

Despite the fact the NRRP was developed as a response to the global health crisis that has significantly affected Italy, many complain that the sanitary sector has been entrusted with a quite limited percentage of funds in comparison with the other issues. The pandemic has revealed the inefficiency of the healthcare service in the major Italian cities, claiming the necessity to invest the available funds in a diffused network of facilities, spread throughout the territory and ready to face the emerging needs related to the growing aging population. Regarding community health houses,

there has been a lack of a study regarding the location of these services both in terms of actual needs and future impacts on neighborhoods. On the other hand, the choice in some cases to regenerate existing structures is excellent, with an orientation that perhaps could have been the general line instead of constructing new buildings. Besides, the question of their future management remains open: will other policies be supporting their functioning, or will they become great cathedrals in the desert?

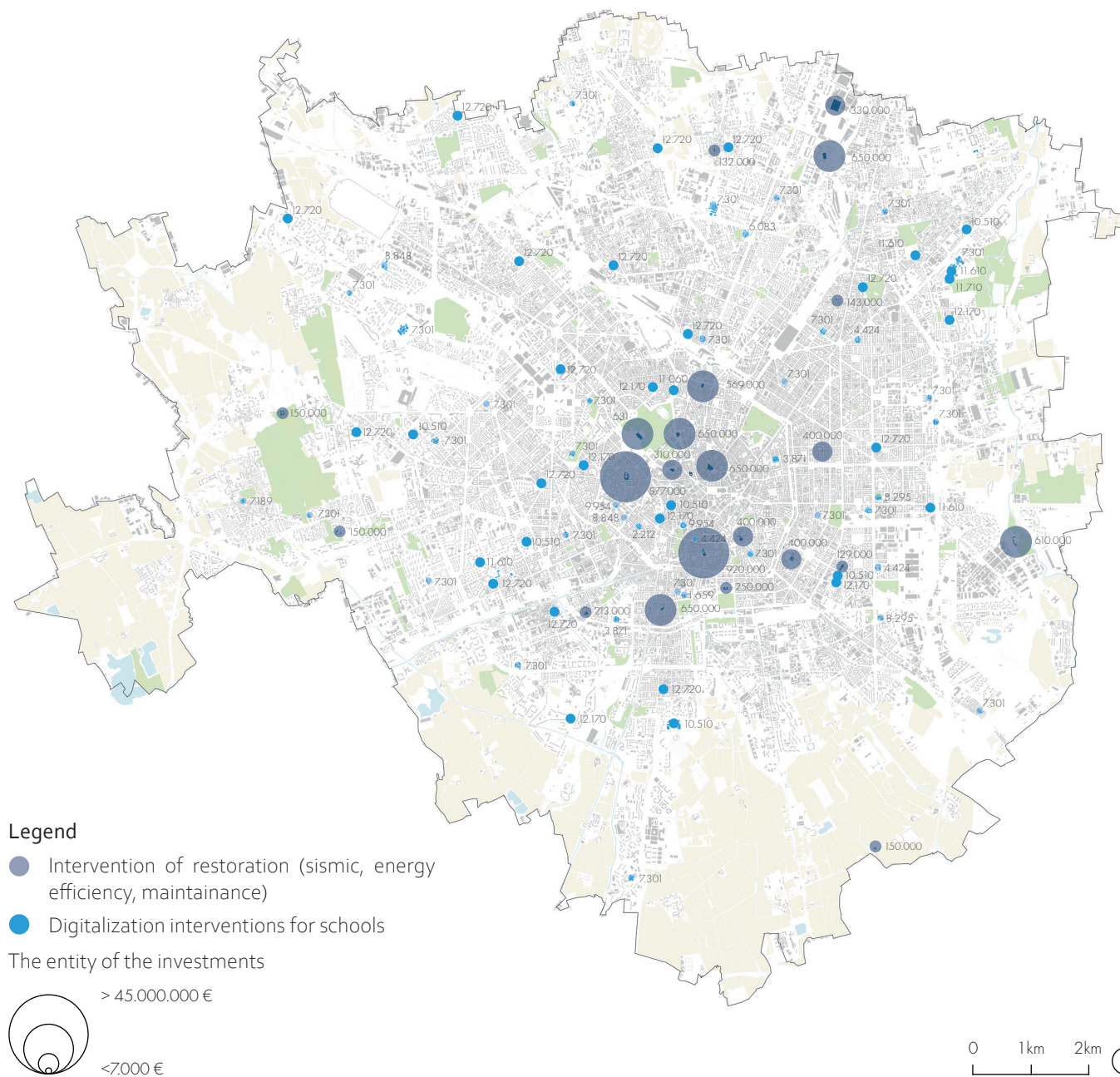
The Community Health Houses

The case of the realization of the Community Health Houses (M6C1 1.1) raises some concerns in part like the ones of the nurseries addressed in the previous chapter. This kind of structure is defined as a “proximate and easy-to-find physical location where the community can access the health, social and health care system” and the government allocated 2 billion euros to this measure with the objective of realizing - by June 2026 - 1350 renewed and energetically efficient Community Health Houses. There are two types of these structures according to their management: the Hubs, which have a territorial reference role offering both primary assistance and specialistic and diagnostic services, and the Spokes, closer to the local communities providing only primary assistance together with the general practitioners’ clinics

and the pediatricians. The sanitary crisis of the last years has clearly demonstrated the need for this kind of facilities, scattered in the territory and able to reduce the pressure on hospitals. However, the measure financed by NRRP funds does not include the management costs of these services, once realized, especially in terms of recruitment of the needed personnel. The Community Health Houses will require administrative employees, general practitioners, and nurses, but the resources for hiring them are not provided. What has been stated by the government is that the necessary funds will be collected thanks to a reorganization of the sanitary assistance at the national assistance. Will it be enough, or will there be brand-new health structures without the sanitary staff to make them work?

Map 9. The impact in terms of funds - Mission 1

Data in euros (up to July 2023)



4.4 LOOKING CLOSER

The reasons behind the choice of deepening three interventions in Milan

To better understand how the arrival of European and national funds impacted the city, which kind of mechanisms they started, and the potential room for innovation, three projects have been deepened. The three interventions chosen are the urban regeneration project for Lambro-via Rizzoli (M5C2), the new European Library for Information and Culture (Big Cultural Attractors Strategic Plan), and the integrated urban plan for Lambrate-Rubattino (M5C2).

The Lambro-Via Rizzoli includes two different interventions: on the one hand, maintenance, and energetic requalification work for two big complexes of public housing in the northeast of the city; on the other hand, hydraulic land protection works on a territory along the Lambro River, close by to the area of the previous one. The new European library, instead, is a project the city is waiting for for many years and envisages the realization of a new cultural center that is going to acquire the role of the central library of Milan: this facility is conceived as an attractive civic center for the whole city, collecting both traditional and innovative functions. The integrated urban plan as well merges parts of an old plan that was never completed: it involves the realization of a new school, the requalification

of an existing one, and the completion of the Lambretta park, along the river. Besides, this project is linked with another intervention financed by national funds, through the Decreto Aiuti, that is the Cittadella della Scala: the latter intervention, once realized, will eventually allow the regeneration of former industrial buildings in the east of Milan, providing completion of the same urban plan for Rubattino district.

They all have a relevant urban and spatial impact, but they differ in several aspects.

Firstly, the first and the last ones are financed directly by the European Funds of NRRP, and they both belong to mission 5 (Cohesion and Social Inclusion): the former is worth 20.850.000 euros (of which 500.000 euros are not covered by the NRRP), the latter 69.500.000 euros (to which 120.000.000 euros are added for the Cittadella della Scala). To what concerns the other one, instead, the resources assigned to it (more than 101.000.000 euros) are part of the National Complementary Fund, which is made of Italian funds collected and allocated by the government for some specific projects.

Secondly, these interventions allow us to see how different implementing bodies approach the arrival

of these funds. The urban regeneration project and the BEIC have been managed by the Municipality of Milan, while Lambrate-Rubattino is part of the Integrated Urban Plan that was first developed by the Metropolitan City which then recognizes the Municipality as the implementing body. The complexity of this latter project refers also to the several stakeholders that it involves: indeed, the Lombardy Region as well plays a role in the remediation work required by the park. Besides, the closeness with the intervention for the Cittadella della Scala introduces private stakeholders in the process.

Thirdly, the three measures have different reasons behind them, interpreting the NRRP as an occasion from various perspectives. In the case of Lambro-Via Rizzoli, the interventions were highly needed as the public housing buildings were waiting for a long time for ordinary and extraordinary maintenance works and the environmental project was ready to be realized. So, the European funds played the role of helping the Municipality in realizing interventions that it would have had to do anyway. In the case of the BEIC library, instead, the previous project had to be completely remade – through an international architectural competition – and it could have never been realized without such an arrival of funds. Finally, the Lambrate-Rizzoli plan

is made of interventions that were considered priorities for the neighborhood and the PNRR represented the chance to complete the previous plans, providing the inhabitants with the necessary facilities that were still missing. Besides, it offered the opportunity to regenerate the wider former industrial area involving private stakeholders and finally stitching up this part of the city.

LAMBRO - VIA RIZZOLI PROJECT

An urban regeneration project in the north-east of Milan

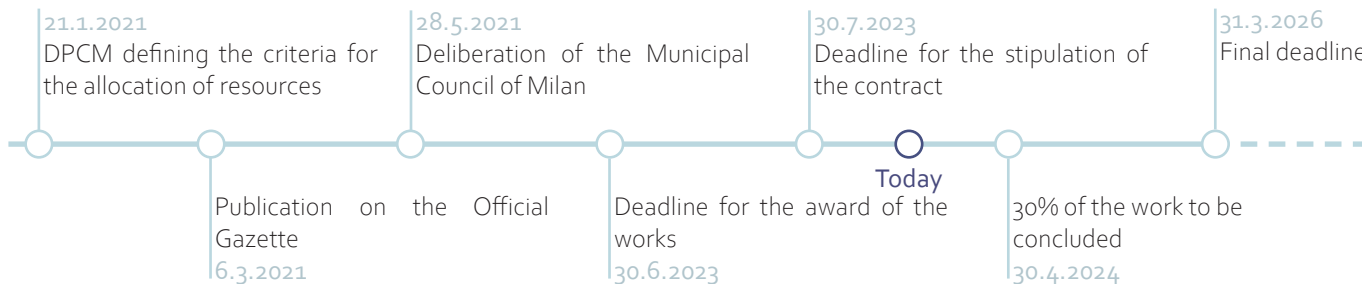
I. General overview

The Lambro-Via Rizzoli interventions are part of the urban regeneration project that the PNRR finances in the city of Milan. The urban regeneration projects are entitled to the Ministry of the Interior and are territorialized through national calls directed to Municipalities, which could be Provinces, Municipalities with a Metropolitan City or Municipalities with more than 15 000 inhabitants. Besides, projects in areas characterized by a higher index of Social and Material Vulnerability⁴³ (IVSM) are prioritized. The aim of the urban regeneration

projects, indeed, is to reduce marginalization and social deprivation, by improving the quality of the social, environmental and urban tissue. Considering these aspects, the area of the Lambro-Rizzoli project seems adequate, due to its conditions, characterized by the presence of socio-spatial inequalities, underused spaces, but also relevant resources, especially in environmental terms. Both the works were already forecast in the Three-year Plan of Public Works of the Municipality of Milan: the NRRP appeared to be the right opportunity to realize them.

NRRP Mission	Type of project	Interventions	Total funds	Amount financed
Mission 5 Component 2	Urban Regeneration	Hydraulic land protection interventions in the floodplain areas of the Lambro River and improvement of landscape and naturalistic aspects.	8.850.000 €	8.850.000 €
		Extraordinary maintenance and energy and plant upgrading - via Rizzoli 13-45 e 73-87	12.000.000 €	11.500.000 €

51. Timeline of the urban regeneration project



52. View of Lambro River














II. The context

The project takes place in the north-east of the city of Milan, inside a territory which approximately corresponds to the three administrative units⁴⁴ (NIL) of Adriano (n.17), Cimiano – Rottole - Quartiere Feltre (n.18), Padova – Turro – Crescenzago (n. 19), in parts at the border of the Municipality.

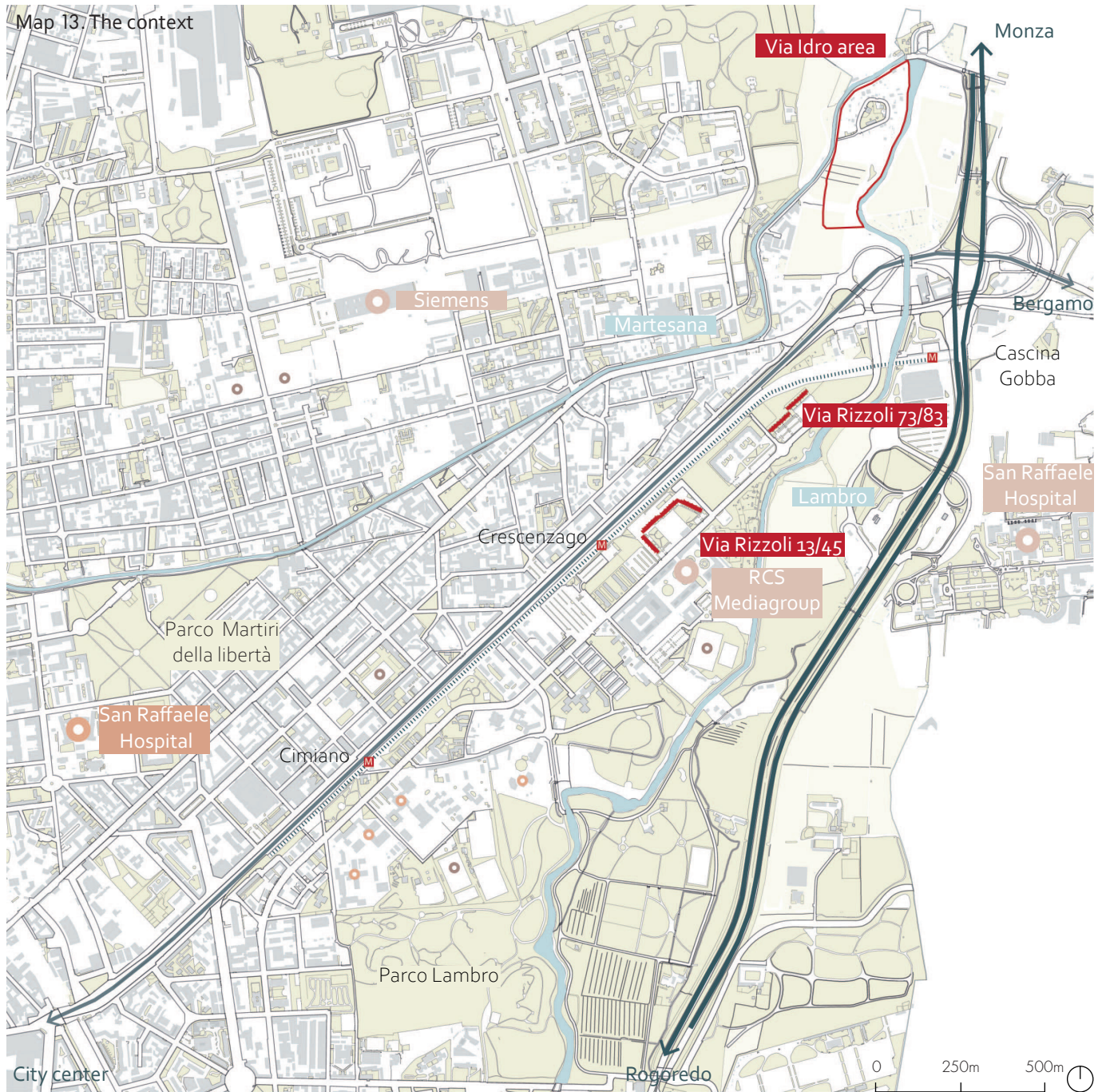
This part of the city is characterized by a very high accessibility related to the presence of important infrastructural systems, such as via Palmanova for the car traffic, the green line – in this part running on the surface - and the A51 highway on the east. Together with those, another important axis is represented by the Lambro River, which crosses Milan from north to south. This concentration of infrastructures has determined the settlement in this area of various specialized attractors, often working at the urban or supra-urban scale as well. Just to provide some examples, San Raffaele Hospital and the RCS Mediagroup Offices, but also many sport centers that attract people from the whole city. The combination of these two aspects – high accessibility and presence of specialized areas - led to a diffuse presence of barriers, isolating whole neighborhoods and their relative population. Indeed, looking at the infrastructure system, a predominant flow from south to north emerges, dividing the district in two and often preventing passages from east to west. This double dimension

has been underlined in the Studio d'Area⁴⁵ as well, through the definition of two profiles: Active City, due to the environmental system and the several facilities, and Unaccessible City, referring to the fenced functional areas and the infrastructures. The urban regeneration project involves an area that is characterized by a relevant presence of green spaces, with various natures, ranging from agricultural areas - especially towards the north and along the river - to urban parks – such as Parco Martiri della libertà and Parco Lambro), but also resulting and abandoned spaces. Indeed, another aspect that characterizes the area is the number of vacant spaces, referring with this term to underused, oversized, abandoned, suspended and misused spaces. The perceptions of the inhabitants collected in the Studio d'Area underline an overall low quality of the green and open spaces, the lack of neighborhood shops and local services, with

Legend

	Green spaces		Metro station
	Agricultural spaces		Supra-urban function
	River		Education facilities
	Via Palmanova		Sport facilities
	A51 highway		PNRR interventions
	Metroline (M2)		

Map 13. The context



a general feeling of insecurity. The main critical aspects are often referred to the lack of connections and a low accessibility of green areas.

At the same time, however, it is an area in strong evolution, with ongoing and future projects investing the neighborhoods, as represented in the following map. Some of the transformations characterizing the area foresee new offices and residential complexes, like the regeneration of a part of RCS, Urbana new Living and Green Between. The green system as well is involved in some interventions, ranging from the areas that are part of RELambro project to the maintenance and revitalization of Parco Lambro. In such a changing environment, the Municipality used the PNRR funds for maintenance works for the public housing complexes that, close to cutting edge residential developments, are strongly in need of resources.

The main transformations

■ Completed

Abitare Milano 1 2019
It is the outcome of the International Call "Abitare a Milano" and led to the realization of residential buildings, a new public park, commercial activities and facilities.

Urbana New Living 2010
It is a residential project in via Rizzoli recently completed, with the realization of 137 housing units. The aim is to promote an inclusive, sustainable and participatory housing, co-existing with commercial activities and local associations.

▣ On-going

Vivere Parco Lambro
Partially financed by React-EU funds, the project is the result of a Participatory Budgeting dating back to 2015/2016. The project of requalification of the park and its facilities is today at the phase of realization of the works.

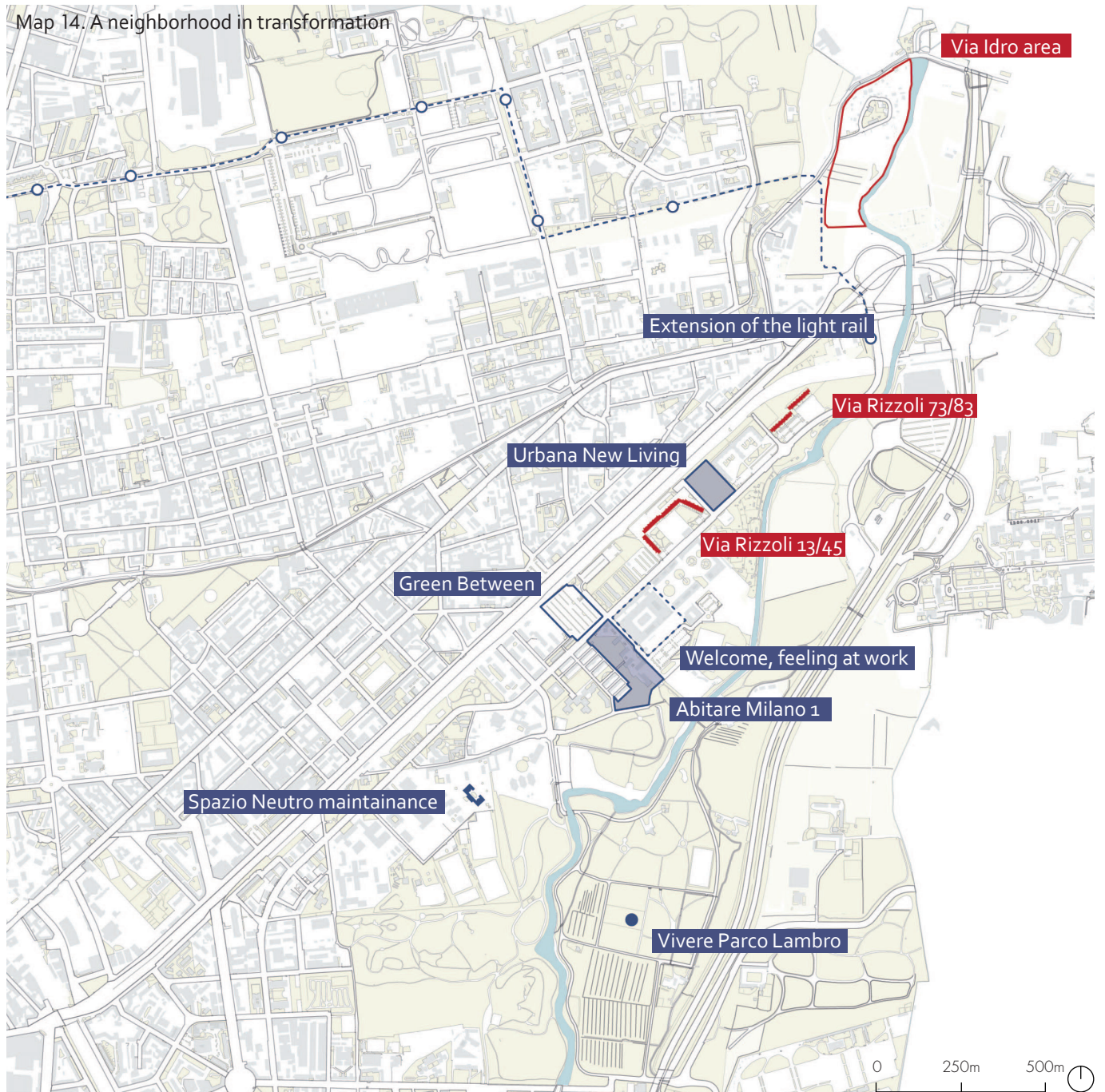
Welcome, feeling at work 2024
The project regenerates the previously industrial area close to RCS Mediagroup. It envisions the realization of a new workplace designed according to biophilic principles that means integrating architecture and natural elements, exploiting all the benefits nature can have on people's quality of life. Coherently, the building will be N-Zeb, relying on renewable energy power, and characterized by an immersive green environment.

Green Between
Winner of the second call of Reinventing City for Crescenzago, Green Between is a social housing project that aims at establishing a new entrance to Parco Lambro assuring all the sustainability standards. The intervention takes place on an area currently used as a public parking and realizes 360 housing units reconnecting the area to the surrounds.

Spazio Neutro maintenance 2026
The React-EU finances the maintenance works for the Servizio Spazio Neutro building, which is a space owned by the Municipality of Milan to deal with child custody issues.

Extension of the light rail 2026
A part of the PNRR funds finances the extension of the light rail, still under construction, connecting the Via Adriano to Cascina Gobba. The track should go along the Lambro River in via Rizzoli.

Map 14. A neighborhood in transformation



III. The environmental project along Lambro

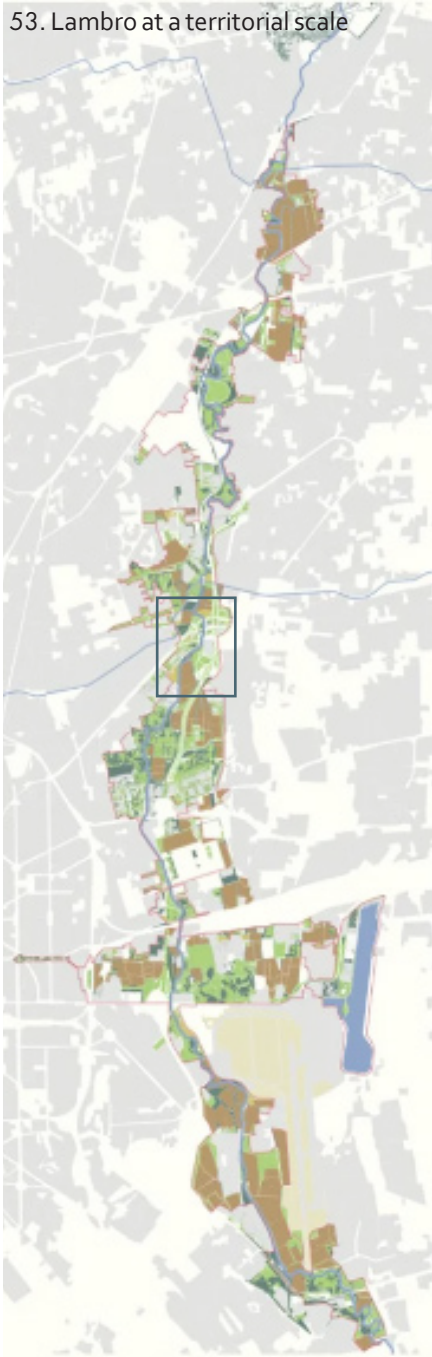
Inside the framework of the River Contracts

Lambro is the only river still flowing in surface that crosses vertically the city of Milano but, due to its traditional management, from the '60s, it suffers today from several problems. In 2012, a River Contract has been signed by 83 stakeholders for the northern Lambro. This tool is an agreement among public and private actors and becomes effective through Programs of Actions, which are made of projects to be realized in the medium-short term inside a wider long-term vision.

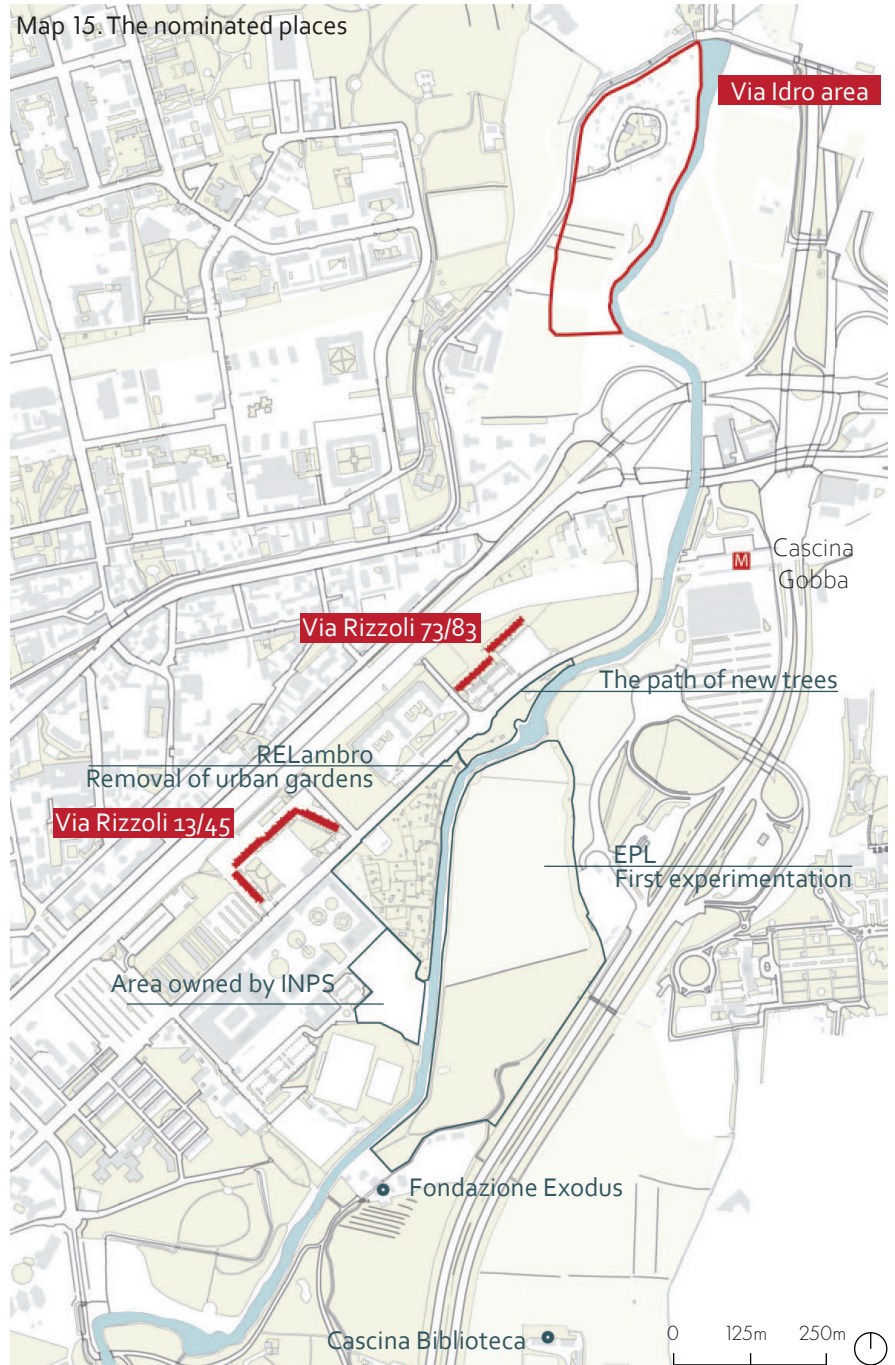
Inside this framework, ReLambro is the most relevant project, funded by Fondazione Cariplo. At the beginning, it was born as a feasibility study that progressively involved new areas in the north and in the south. In 2015, the outcomes of the study demonstrated the presence of underused, abandoned, or vacant areas that could strategically work inside the ecological corridor and a vision in this direction was provided. This then allowed to start some implementation experimentations, realized in the part named "Parco Lambro Extension", which goes from Cascina Gobba to the whole Parco Lambro. In this phase, the strategy adopted aimed at regenerating a wide part of the territory - at that time highly degraded - with a different approach: the attempt was to structure the vegetational system towards a natural morphology made not only of

green urban areas but of habitats. Often actively involving the local population, some illegal urban gardens were removed and substituted by some vegetational structures⁴⁶. This intervention found some obstacles due to land property issues⁴⁷ that, in the end, were solved thanks to the involvement of several stakeholders – ranging from the sectors of the Municipality of Milan, the Metropolitan City, to some associations. Similarly, the participation of various actors helped to intervene on another area where the so-called "path of new trees" was realized. The latter is a flooding area previously used for urban gardens that was then regenerated applying new techniques for sensorial stimulation and experiences. Besides, during the PreCOP 26⁴⁸, a new urban forest was realized, by planting 400 trees in order to symbolically demonstrate how even a small intervention could have an effect on the CO₂ absorption. Finally, some interventions were realized inside Parco Lambro: these included replacing an eroded bank with cottonwood stripes, an intervention generally prohibited by the law⁴⁹ that was made possible thanks to the participative approach in which all the stakeholders are involved and aware of the final objectives, overcoming the sometimes-excessive generality of some norms. A second relevant project is then EPL (Parco Lambro Extension), which starts from RELambro approach – moving from a simple evaluation of the

53. Lambro at a territorial scale



Map 15. The nominated places



potential natural capital or ecological connection to working on the river hydro morphology – with the aim of reconnecting a continuous river park from Monza to Melegnano. The final scenario is made of a series of small interventions to be realized one step at a time, exploiting contingent opportunities. What is interesting in this second project is the idea to look for areas where the river could be free to overflow, following adequate interventions on its morphology towards a situation as natural as possible. Such an approach is necessary in a context like that of Lambro, which still suffers from the management of the '60s, based on the realization of rigid banks to control and limit its flow. The analyses provided 13 areas that could be adequate for this function. A prime example is the intervention realized on the left hydrographic bank of Lambro, constituting in the removal of the banks leaving room for the river to overflow, following its natural dynamics. This action, however, assures the protection of the surrounding existing activities, specifically the Fondazione Exodus in the south and the agricultural area on the east with Cascina Biblioteca⁵⁰. Summing up, this intervention can have a triple effect: supporting agriculture and biodiversity, improving the faunal and vegetational structure of the ecological corridor, defragmenting and giving the space back to the river, pursuing the objectives of the River Contracts.

The project for via Idro funded by the PNRR

The Municipality of Milan decided to invest part of the PNRR funds over the area named “via Idro” and, thanks to the already on-going work of RELambro, it was considered as an opportunity to adopt the same approach. The area was previously occupied by a vehicle dismantling factory that polluted the soil. A first project provided by MM⁵¹ consisted of a traditional urban park, lacking the necessary concern to the needs of the river and the ecological corridor. A dialogue with the ERSAF⁵² re-oriented the project according to a different approach, trying to insert this area into the wider view of the RELambro and EPL. After a necessary soil remediation, the project consists in the realization of a new innovative metropolitan river park, in order to improve the ecological performance of the river, controlling the hydraulic risks and let the citizens use the area, exploiting some already existing bike paths⁵³. According to dr. Masotti, who works for ERSAF, underlines how this area could have been a perfect occasion for trying to replicate the experimentations carried out by EPL, working more on the removal of the bank, with a more radical intervention.

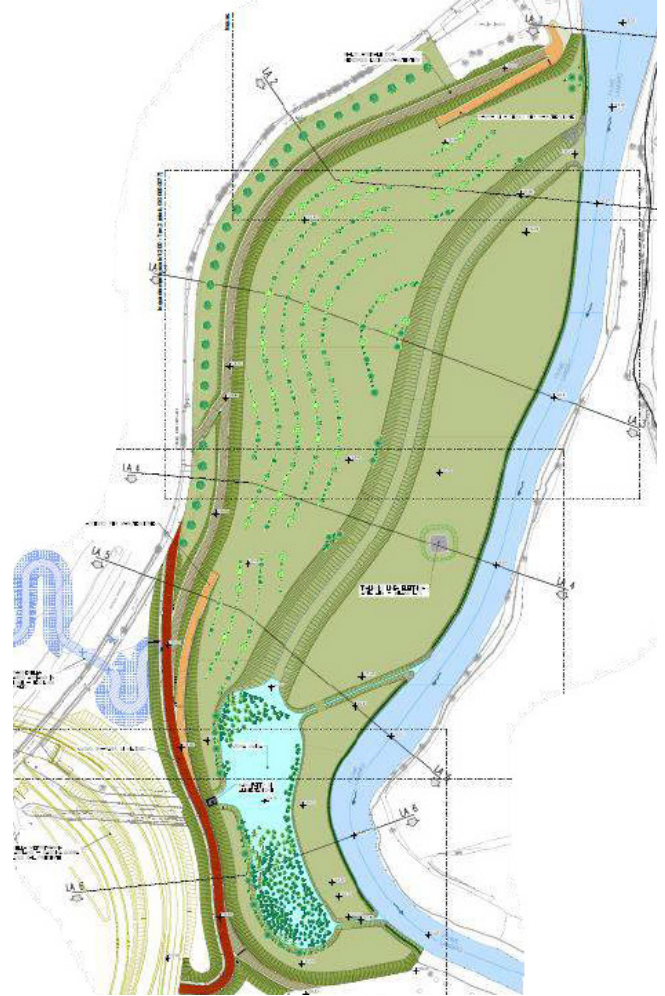
54. Rendering of the project



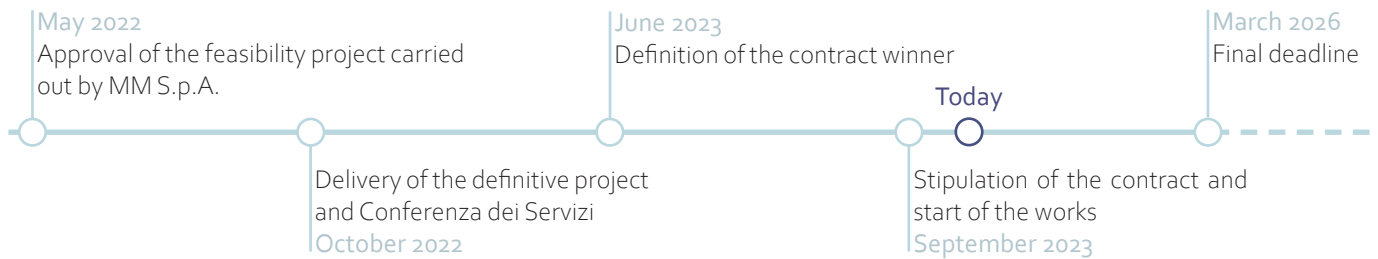
55. Rendering of the project



56. Plan of the project



57. Timeline of the project



IV. The intervention on the public housing complexes

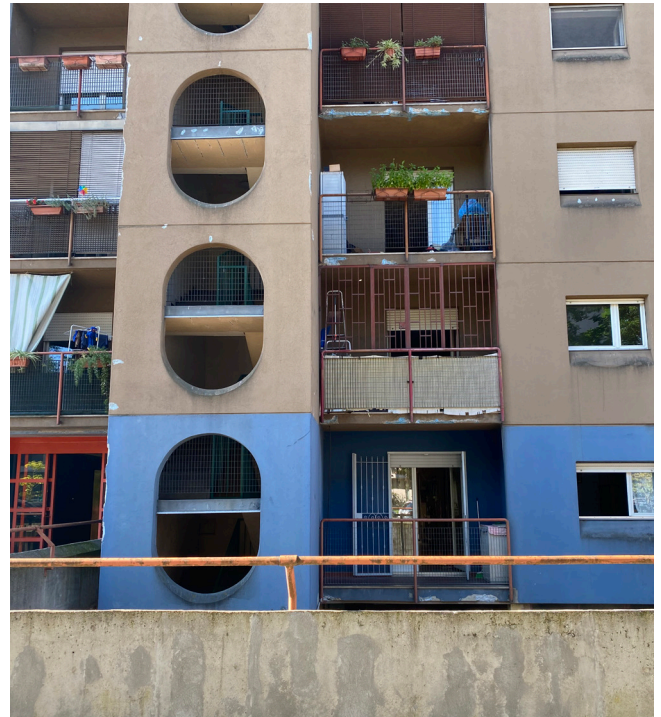
The energetic requalification and general maintenance works have been on the municipal agenda for a long time and the NRRP seemed to offer the right chance to realize them. The tight schedule imposed by the NRRP funds made the administration look for already defined interventions – generally at the level of the preliminary project – in order to be able to cope with the short time and this is the case of the

requalification of these residential buildings owned by the Municipality. The intervention involves four public housing complexes that, in total, host 563 residential units. The aim is to improve the housing quality and guarantee the energetic sustainability of the buildings. The interventions forecast the realization of thermal barrier coatings and the substitution of the windows. These two main actions imply a series of smaller interventions that are mainly of three types: structural, building, and plant works.

58. View of one of the buildings



59. Detail of the facade



V. Final remarks

The case of Lambro—via Rizzoli intervention is quite exemplificative of a recurrent *modus operandi* of the municipality: due to challenging schedules, it was in some ways forced to invest in projects already defined and developed until a certain level of detail. Indeed, it has been underlined how the plan aims at bringing innovation but poses the dilemma of whether to promote new resilient projects or realize the interventions on time. The renovation of the public housing complexes was one of the projects the Municipality needed to realize in order to improve the energetic sustainability and assure maintenance works to residential buildings where lots of people live. Similarly, the area along via Idro had been pointed out to the Municipality by some Municipi (one of the 9th boroughs of the city) and ERSAF, inside the wider project for Lambro River. Besides, the choice of the municipality to work on this part of the city, apart from the pressing needs, may be related to the rapid pace of transformation of the neighborhood.

But what can be the relationships between the two interventions? This part of the city is characterized by a very high demand for green spaces, even if the amount of them and the relative size, as already shown, is quite relevant, especially in comparison with the rest of Milan. However, this periphery suffers from the arrival, in the passing of time,

of the overmentioned specialized functions and infrastructures that caused the rise of closed and separated spaces and, consequently, barriers of different types. As the Studio d'Area reports, "the extent and extension of this [green] heritage make this quadrant among those with the highest degree of presence of green areas in the entire city. However, strong criticalities emerge in access that is often denied by the presence of infrastructure and fenced-in production and plant areas⁵⁴". Looking at the map related to the accessibility of green spaces, it emerges the fact that especially in the area where the public housing complexes stand this value is quite low. In developing the project for the green area along via Idro, this aspect has been taken into account but with a new approach: a traditional urban park is no more adequate to face the current needs and problematics of the river, other solutions are required still assuring its enjoyment by the inhabitants. Besides, such an orientation is needed to comply with a European Directive that imposes to all the member states to have their rivers in good conditions⁵⁵. Indeed, a river that is left free to have its natural dynamics is, at the same time, a river able to realize its self-purification processes. Finally, the management of a river in its current state is no more economically sustainable for the Municipality.

BEIC

The new European Library for Information and Culture

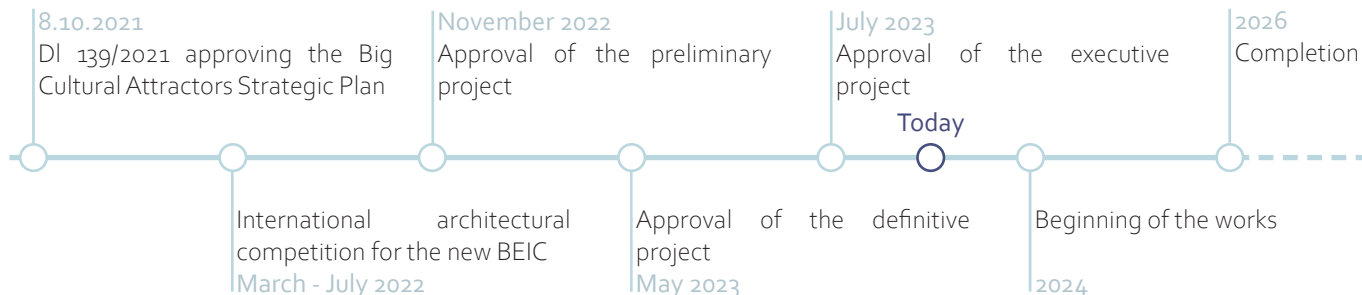
I. General overview

The realization of the Biblioteca Europea di Informazione e Cultura (European Library of Information and Culture) is financed by the Complimentary National Funds, which is made up of 30,6 billion euros allocated by the State to integrate the NRRP. More specifically, it is one of the interventions of the Piano Strategico Grandi Attrattori Culturali (Big Cultural Attractors Strategic Plan) entitled to the Ministry of Culture. It aims at strengthening the territorial competitiveness working on the culture and tourism sectors—strongly affected by the pandemic - to boost employment

and the national economy. It foresees 14 projects to recover, promote and realize cultural and artistic sites, involving 12 capital cities across Italy. The BEIC project is the third in terms of entity, being worth 101, 57 million euros, following the redevelopment of some spaces of the Venice Biennale (169,56 million euros) and the revitalization of the museum system of the city of Rome (105,90 million euros). The project to be realized, whose origin dates back to the '90s, is the result of an international architectural competition won in 2022 by the team led by Onsitestudio, and, like the other NRRP-financed projects, it should be completed by 2026.

NRRP Mission	Type of project	Holder	Interventions	National funds
Mission 1 Component 3 (Culture 4.0)	Big Cultural Attractors Strategic Plan	Ministry of Culture Implementing body: Fondazione BEIC	Biblioteca Europea di Informazione e Cultura in Milan.	101.570.000 €

60. Timeline of the BEIC project





61 Rendering of BEIC

II. The context

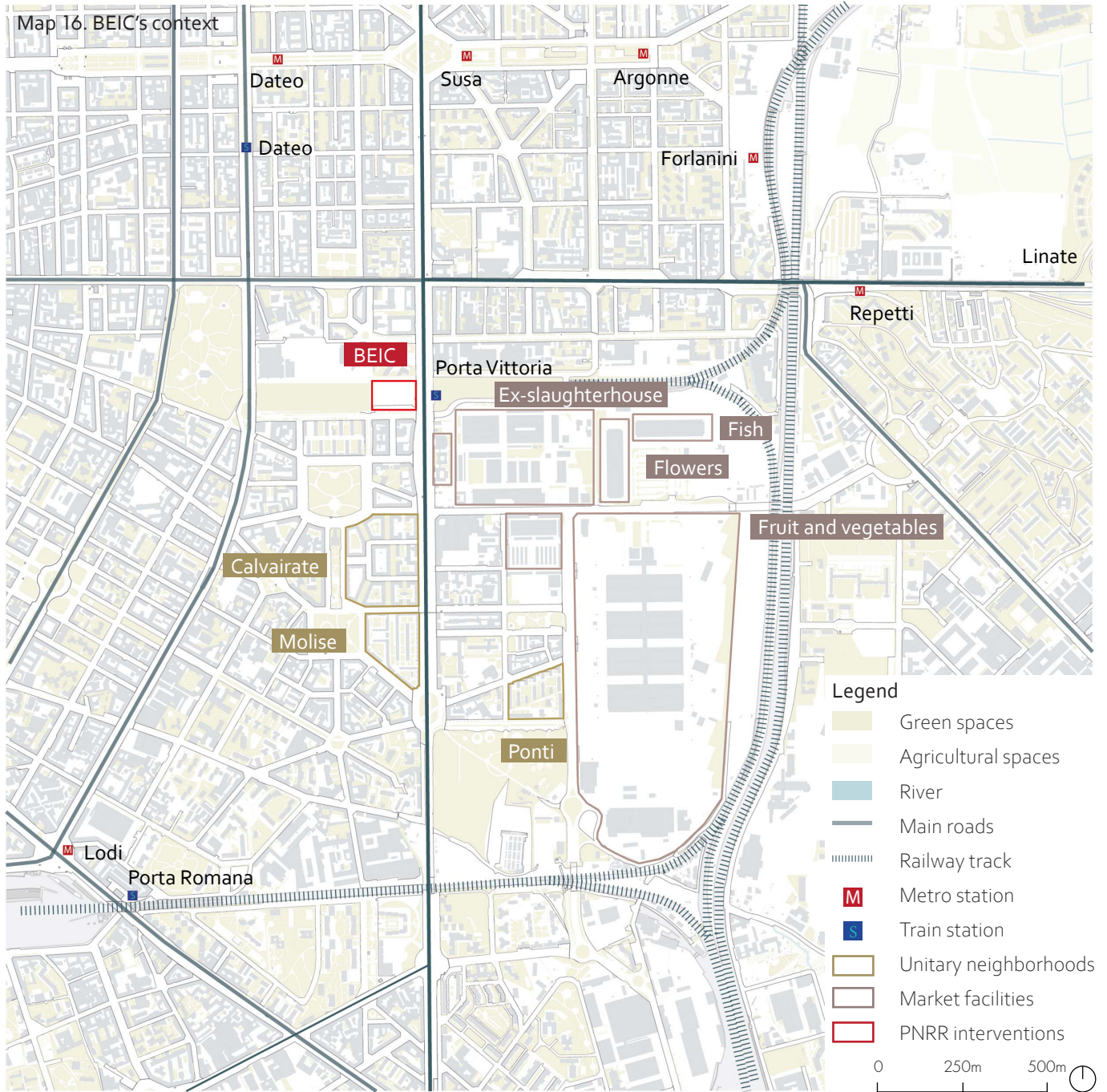
The project for the new European library is located, since the first proposal, in the eastern part of Milan, at the border of the Beruto plan (1889). With the following Pavia-Masera plan (1912), the area was involved in the expansion of the city, together with a reorganization of the railway system. In 1911, the new station of Porta Vittoria was here realized as the freight yard to serve the market area close by. Indeed, in the surroundings, several structures were realized – some of which are still visible today – ranging from the fruit and vegetable market, the municipal slaughterhouse (dismissed in 2005), the poultry market (1925-2016), the flower market, the fish market, and the cold stores. These specialized functions, occupying wide portions of the lots, determined the presence of enclosed functional clusters that today require interventions of regeneration and recovery. The station kept its function until WW2, then it started to host passenger services as well, until it was dismissed and substituted by the underground station Porta Vittoria for the suburban train (passante). The area also saw the building of several public housing complexes, especially those promoted by the Autonomous Institutes for Public Housing, like Calvairate (1929), Molise (1933-1938), and Ponti.

Today, this area of the city is characterized by the

presence of important mobility axes, like viale Umbria, viale Molise, and viale Corsica, heading to Linate Airport. At the same time, however, they act as barriers for the pedestrian and cycling flows, due to the high speed of cars and the scarcity of pedestrian crossings. Talking about barriers, the railway on the east represents a relevant scar in the city, preventing access to the neighborhoods beyond it. To what concerns public transport, then, these districts are well served, thanks to the presence of the suburban train, various bus lines, and, in the north, the new metro line 4. The green areas, ranging from public parks to underused and buffer spaces, define a fragmented system to reconnect. Indeed, some recent interventions and the project for the BEIC itself are trying to establish a network among these green areas to create an environmental corridor.

This part of Milan is today characterized by the presence of numerous urban transformations, already completed, ongoing, and forecasted in the next years. The context - as in the case of Lambro-via Rizzoli that was analyzed in the previous section - is in a dynamic process of change due to the several lots that require regeneration interventions: the reuse of the remaining buildings of the market area, new residential developments, cultural spaces, and some local-scale projects. Moving at the scale of the project area, the

Map 16. BEIC's context



new BEIC will stand in a lot surrounded by quite heterogeneous fronts, attempting to provide a sort

The main transformations

■ Completed

Parco 8 marzo 2023
Connected in a green axis to Parco Formentano, it is the most recent intervention, completed in 2023. This new urban park, characterized by a variety of green areas, stands on the area where the first BEIC project was planned and that remained empty for many years.

Calvairate Library 2023
The project, part of the Piano Quartieri, envisages restructuring works for the library, improving the offer and the quality of the services and its energetic sustainability.

Sassi 11 2023
A former industrial building of Motta company was for long used for tertiary functions; today a new project envisages a requalification of the buildings.

Frigoriferi milanesi 2016
It is a former industrial complex made of the old cold stores and a liberty-style building that, until 2002, hosted a covered ice-skating rink. In the '00s it was renovated and transformed into a polyfunctional space, hosting artistic and cultural associations and professional studios.

Wow - Comics Museum 2011
Since 2011, the Museo del Fumetto was realized over the former Motta industrial site inside the only building that wasn't demolished and that was given to the Ministry of Culture and, then, to Fondazione Franco Fossari.

Palazzina Dario Fo e Franca Rame 1992
The former restaurant of the fruit and vegetable market is the only building remained and, after a period of abandonment, it is today used as an auditorium that hosts various music events

of cohesion and integrity to this urban void that is waiting for a long time to be regenerated. Indeed,

▨ On-going

Foody 2025 2025
The still-working fruit and vegetable market will be transformed in an agrifood hub, with new pavilions, logistic platforms and the renovation of the existing Palazzo Affari.

The HUG 2024
By 2024, a former office building will be transformed into a residential complex with 99 apartments.

Metro line 4 2024
A fourth metro line (M4) will link San Cristoforo to Linate Airport crossing the city center of Milan.

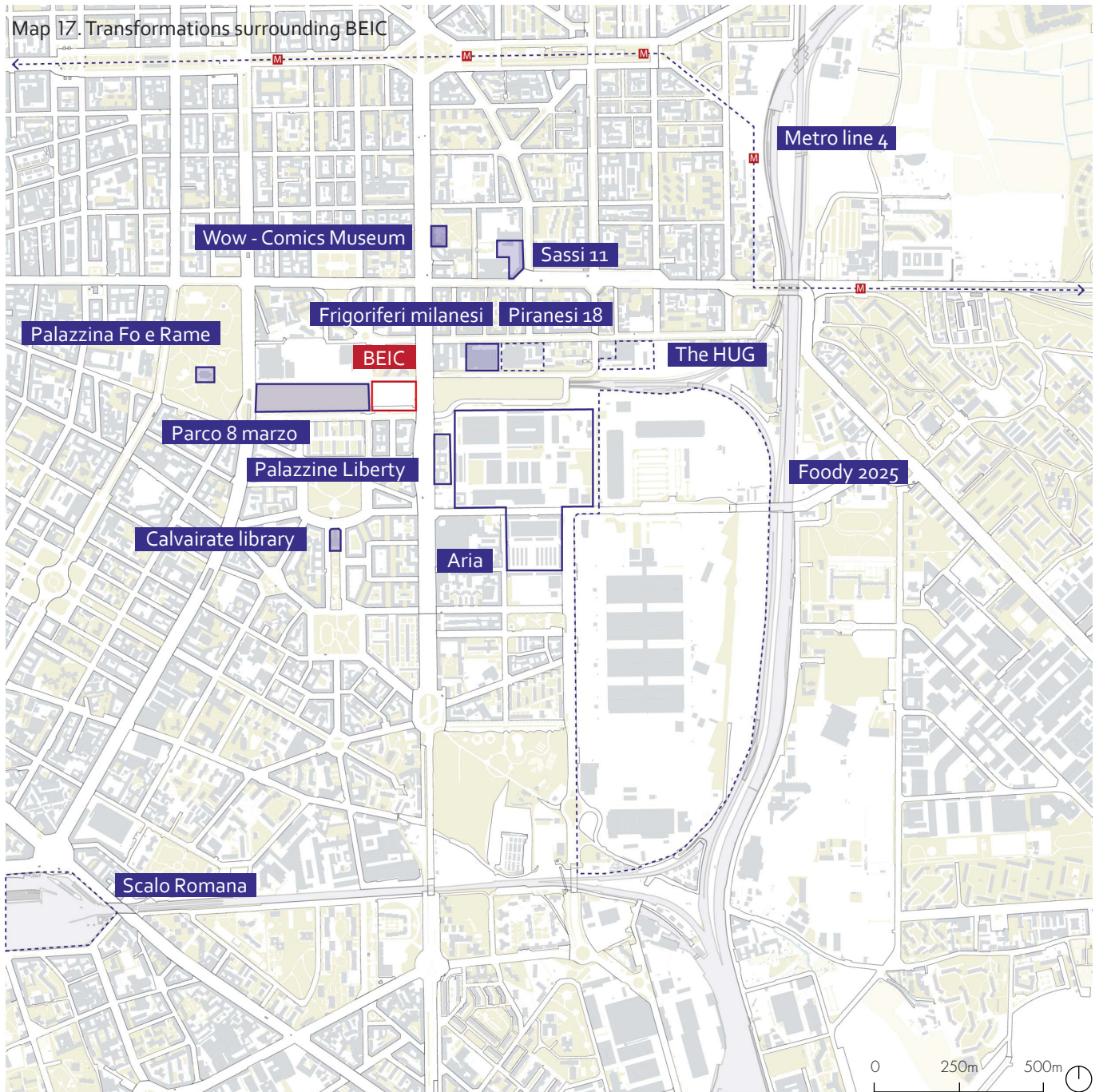
Piranesi 18 2023
On-going requalification of an old warehouse in order to realize three new residential buildings, managed by a housing cooperative.

□ Forecast or suspended

Aria
Dismissed in 2005, it was the old slaughterhouse that, thanks to a Reinventing Cities call, will be regenerated. The winning project provides a new social housing district the campus for the Istituto Europeo di Design and a student housing. The existing buildings will be renovated to host various functions, ranging from fablab, coworking, offices and spaces for local associations, with a special attention to sustainability aspects (it will be the first Carbon Negative Area of Milan).

Palazzine Liberty
Previously part of the slaughterhouse, these liberty-style buildings were the objects of the second Reinventing Cities call but no projects were proposed.

Map 17. Transformations surrounding BEIC



this area was part of the Programma Integrato di Intervento PII (Integrated Program of Intervention) inside the wider Programma di Riqualificazione Urbana e di Sviluppo Sostenibile del Territorio PRUSST (Urban Redevelopment and Sustainable Land Development Program) developed in 2000. It envisaged a variety of functions and the realization of the European library. The development of the plan encountered difficulties and obstacles, leaving the area unfinished and abandoned for a long time. The BEIC is the last piece of this urban regeneration plan.

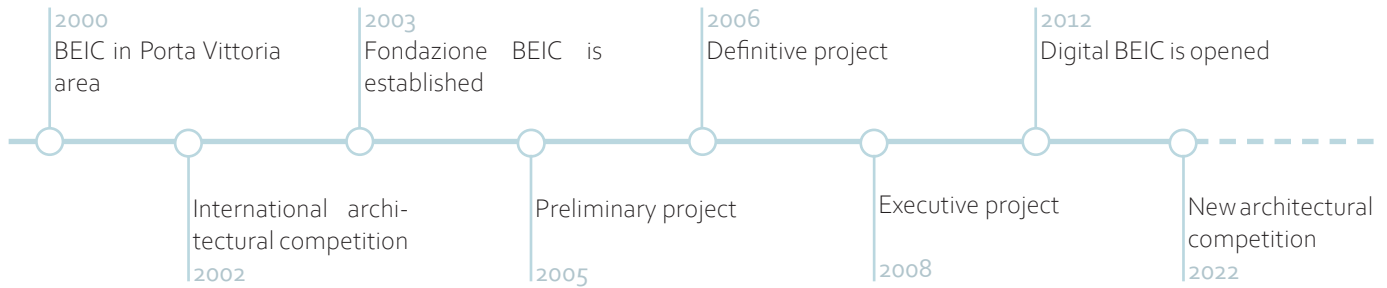
III. The project

The origin and the reasons for the project

The European Library for Information and Culture is in the thoughts of the Milanese people since many years. The first project dates back to the end of the '90s when a new "temple of culture"⁵⁶ was foreseen as part of the Piano Integrato di Intervento for Porta Vittoria, together with residential, tertiary and commercial functions. For this reason, in 1996 a new association is formed: *Associazione Milano Biblioteca del 2000*, with the aim of promoting its realization. The idea of building a new big library in Milan was born from the observation that Italy lacked those cultural centers that, instead, were flourishing in many other countries with successful results. At that time, at the national level, the most recent relevant

library realized was the one in Rome, built in 1975. These structures can play a twofold role: on the one hand, they provide visibility to the access to culture and books; on the other hand, they are big cultural centers able to offer and favor opportunities for interaction and exchange. Besides, they can be successfully rooted in the territory as meeting and knowledge sharing places, bringing together the traditional functions of a library and other forms of expression. Among the examples that can be recalled, there are the British Library in London, the Bibliothèque Nationale de France in Paris or, overseas, the New York Public Library. Looking at these experiences and vision, in 2000, Fondazione Cariplo financed a feasibility study for the project and an international architectural competition was launched. The winning project was the one proposed by the temporary joint venture BEIC Milano, leaded by Bolles+Wilson studio. In 2003, the Fondazione Biblioteca Europea di Informazione e Cultura (BEIC) was created, involving the Ministry of Culture, Ministry of Education, Ministry of University and Research, the Municipality of Milan, the Lombardy Region, Università degli Studi di Milano, Politecnico di Milano, Istituto Lombardo Accademia di Scienze e Lettere, and Associazione Milano Biblioteca del 2000. In 2008, the executive project was delivered and approved; the following year, the BEIC was inserted in the lists of public

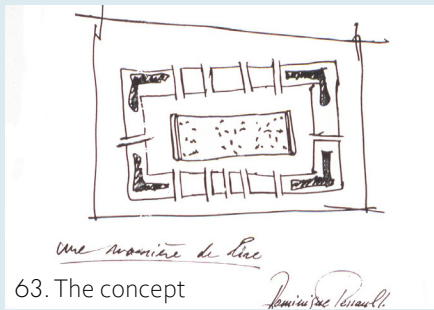
62. Timeline of the BEIC evolution



François-Mitterrand - BNF

Paris, 1997

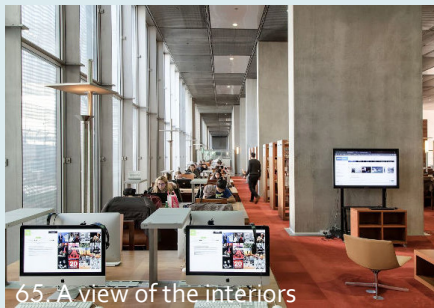
On a former industrial site in the 13th arrondissement, a new seat/location for the Bibliothèque Nationale was opened to the public in 1996. The new construction responded to the need to enlarge and modernize the historical library and the project was realized by Dominique Perrault, who was the winner of an international competition. The library is characterized by four large angular towers that recall four open books and are organized around a plinth. This latter is a pedestrian esplanade constituted by the basement of the complexes. This structure is organized as a cloister, due to an internal garden, situated 10m below the level of the river, and hosts reading rooms. The whole complex faces the Seine through large steps. The stores are located both in the basement and on the upper floors of the glass towers. The concept behind the project is to enlarge the accessibility to culture and knowledge, merging the public and more private services. The building also hosts some exposition spaces and two auditoriums for events.



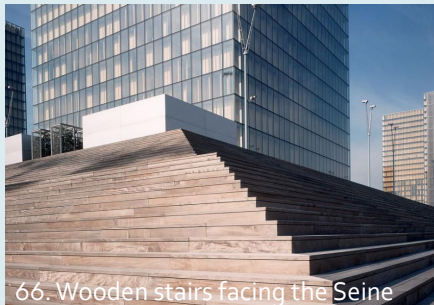
63. The concept



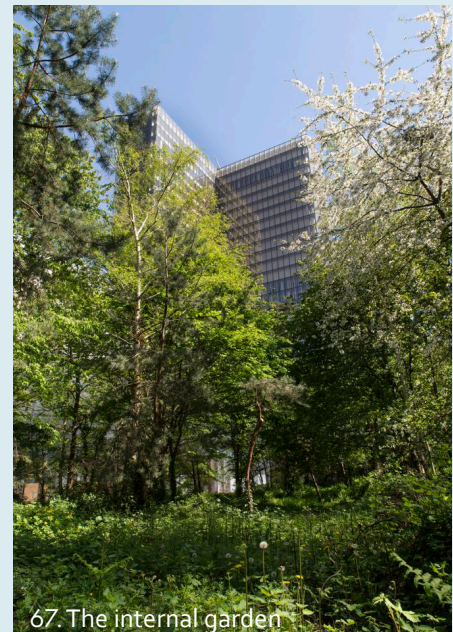
64. View over the esplanade



65. A view of the interiors



66. Wooden stairs facing the Seine



67. The internal garden

works to realize to celebrate the 150th anniversary of the Unification of Italy. However, due to a series of financial and economic difficulties, the project never started, apart from the digital platform (BEICDL) that was opened in 2012.

The evolution of the project

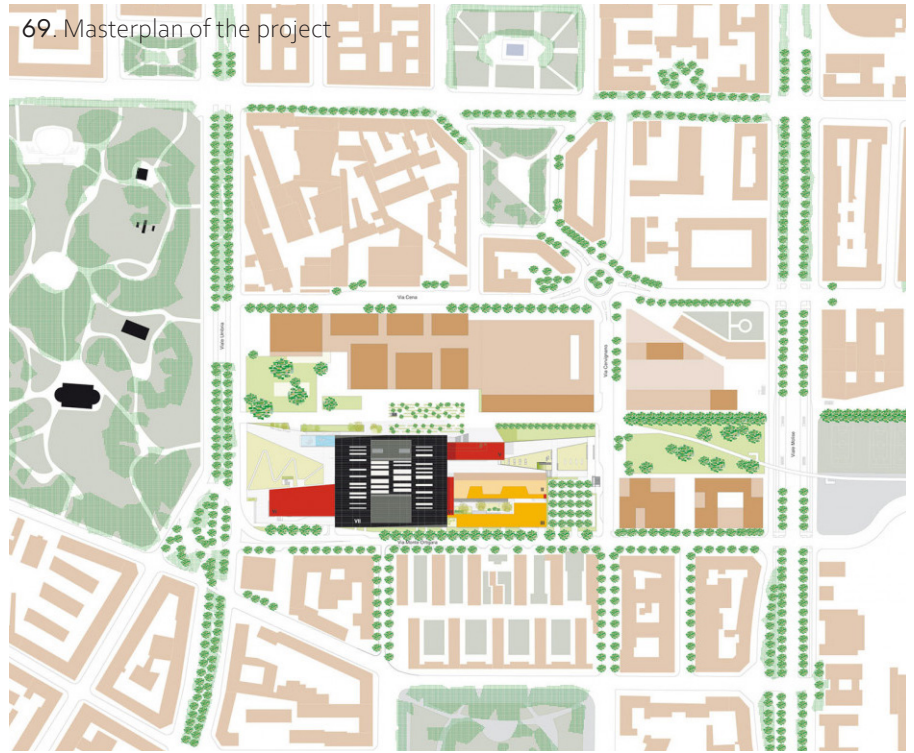
With the arrival of the European Funds and, more specifically, with the decision of the Italian government to allocate additional national resources through the National Complementary Fund, the possibility of eventually realizing the BEIC showed up. However, the original project – which had reached the executive level of design – appeared to be inadequate for several reasons. First of all, the project area has changed: indeed, on the first site – adjacent to the new one - the Municipality, after years spent waiting for the new library, decided to realize the new urban park - Parco 8 marzo - recently inaugurated, to provide the neighborhood with the necessary services. Apart from this aspect, the first project had a significantly bigger size, being worth more than 300 million euros. The BEIC will be smaller and on a morphologically different plot. Furthermore, to develop a public service able to fit into the contemporaneity, a rethinking of the whole project – both the building and its function - was necessary, taking into account all those transformations that occurred with effects

on the city, the society, and the way of accessing culture. Already in 2014⁵⁷, a reflection was made, concerning the impacts that the rapid innovations in the way culture is accessed and spread could have on the future BEIC. Indeed, in the last years, there has been the rise of new requests and needs, different functions and uses of library spaces, but the successful examples of other cities seem to suggest that these cultural centers still hold a very important role and attractivity, enhancing their potentialities. Facing this transition, the tendency in the design of libraries is to shift “from collections to communication, and from storage to access”⁵⁸, considering the new centrality played by a more interactive and laboratory dimension, in addition to the traditional services. To this concern, Professor Solimine underlines how the new project seems to be aware and receptive to these aspects. It displays a strong integration between the classical functions and all those activities that fall under the definition of BEIC Forum. Besides, a design assuring a flexible use of the spaces allows the future users of the library to shape it according to their evolving



The first BEIC project "A vessel of culture and information, invitation, frame and enabler to multiple passages and trajectories"⁶¹ is the description of the project through the words of the designers. One of the main principles is the attempt to show what is happening inside the building so that those passing by are invited and attracted to enter. The central atrium is conceived as an interior space opened to the city, on which all the sections of the library are looking out. The building is crossed by a longitudinal path completely accessible by the public that links the atrium, located at 5m on the level of the street, to the outdoor space through wide ramps. The reading rooms extend out from the main building towards the light and the context.

69. Masterplan of the project



70. Maquette

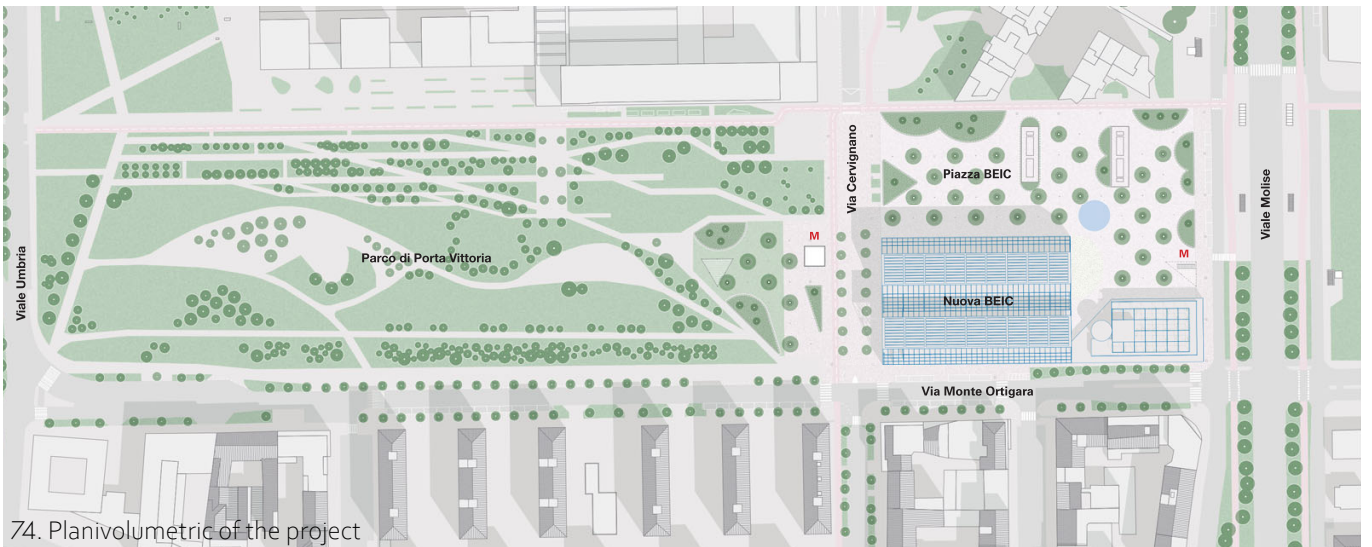
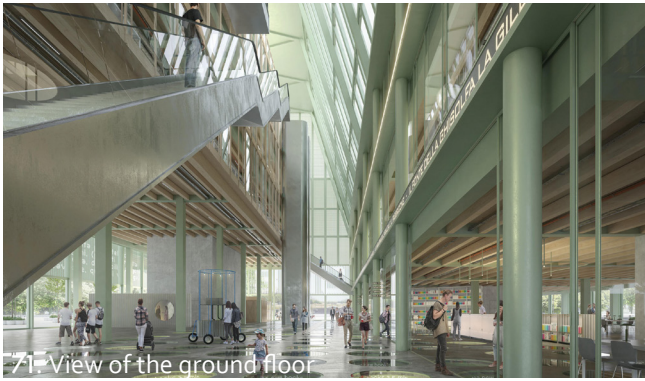


needs, contrasting the risk of becoming obsolete. Finally, another aspect to keep into account refers to the wider context in which the library will be built: Milan. Indeed, in these 25 years, the city has notably changed, acquiring a vitality and dynamism that in the past were only hinted at. A project like this, today, seems more coherent and integrated in the context than it could have been in the past, able not only to serve the whole city but also to play an exemplary role at the national level.

The architectural project

The project has to deal with a context highly shaped by the 19th-century planning culture, with a rigid orthogonal grid. The location of the building in the southern part of the plot allows an east-west continuity of the green system and an opening of the building towards the city. In the north, indeed, a wide public square is filled with trees and works as a large self-sufficient tank, through some strategies of water management. "The building is immediately recognizable as a monument and productive place, being at the same time archaic and futuristic: double cathedral and double spaceship"⁵⁹, as defined by the authors of the winning project. The dominant theme of the project is, indeed, the twofold nature of the library, as the place of conservation of the library heritage and, at the same time, a culturally productive

space. With a simple and compact nature, the building has two trapezoidal-section naves that explicitly recall an industrial function (they are also defined as "Officine milanesi"⁶⁰). This double figure, unified at the base by a common ground floor, allows to keep the areas for the BEIC Forum - in the northern wing, more open and permeable towards the square – and those for the departments – in the southern wing, requiring more silence - separated. A further structure completes the project, hosting the auditorium and the so-called Imaginarium. Underneath the building, then, avoiding any interference with the railway infrastructures, there is a robotized depot. Although in the basement, this latter reveals its presence thanks to some light wells that characterize the dynamic floor of the entrance spaces. The buildings, with a highly transparent covering structure, work as a Wintergarten. Specific attention, indeed, is given to the sustainability of the building, especially considering the energetic matters: apart from the now necessary attention to the issue in every situation, the preliminary design document itself requires that the buildings realized are nZEB. Such a requirement, together with the mandatory reduction of soil consumption, is extraordinary for a public building, but coherent with European guidelines and with the necessity to fight against climate change.

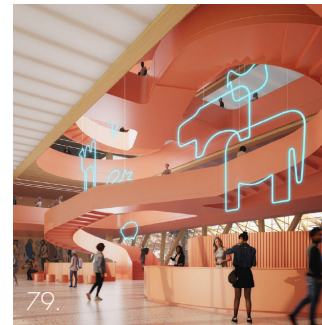
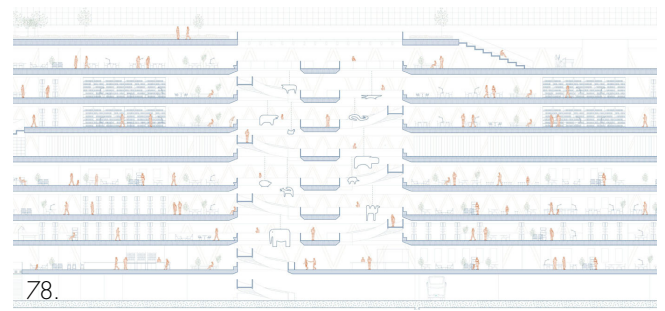


Alternative projects for BEIC building

The second place (Michele De Lucchi)

The project envisages an autonomous building east-west oriented that assures and favors a green corridor among the surrounding green areas. Starting from the buildable area, the new library dialogues with the context respecting the different characters of the spaces it overlooks. Indeed, along via Monte Ortigara, in the south, it presents a rigid urban front, aligned to the surrounding buildings in terms of heights and character. On the contrary, towards the south and a new green area, the structure opens up with a “draped curtain” – as defined by the architects themselves⁶² - that invites people to enter, defines a covered promenade, and connects the park, the suburban train station and the entrances of the library. The building is made of 8 floors connected through a spectacular staircase that plays a central role in vertical circulation. The departments are

located between the first and the fourth floor, while, on the last two floors, there are study areas with outdoor terraces. In the basement, the Imaginarium is designed as a greenhouse with tropical plants offering spaces for creativity and learning games, taking lights from the promenade. The proposal is based on the biophilic design principles and envisages the structure – in wood, glass, and photovoltaic panels – as a solar collector. Finally, the new park is made of different areas, ranging from flower fields to an outdoor amphitheater, multifunctional spaces, and pedestrian routes. The jury has especially appreciated the integration of this project in the context - providing both an urban front towards the street and a covered promenade towards the park – and the relation, thanks to the big staircase, between the public spaces at the lower floors and the departments. Besides, it shows the attention for sustainability issues.

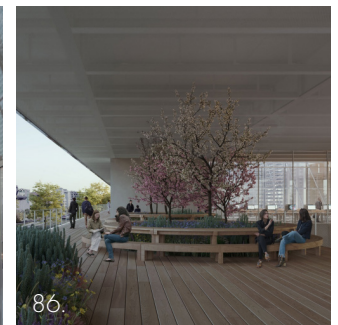
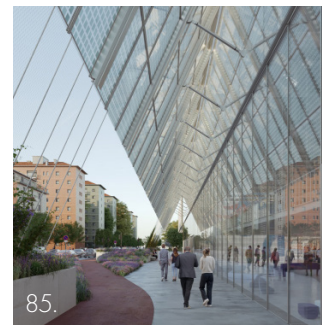
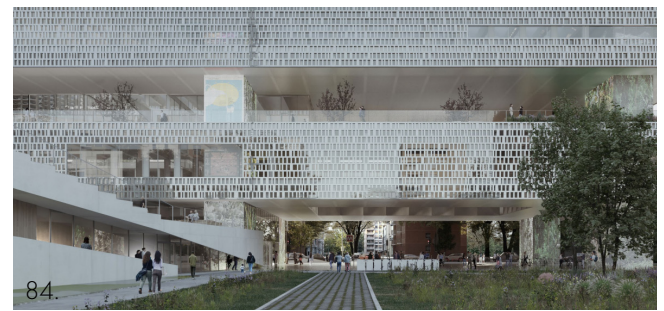
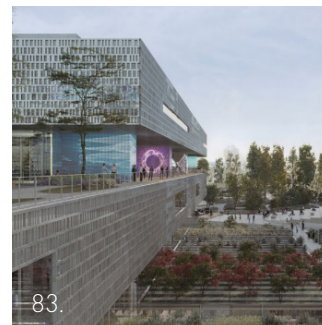
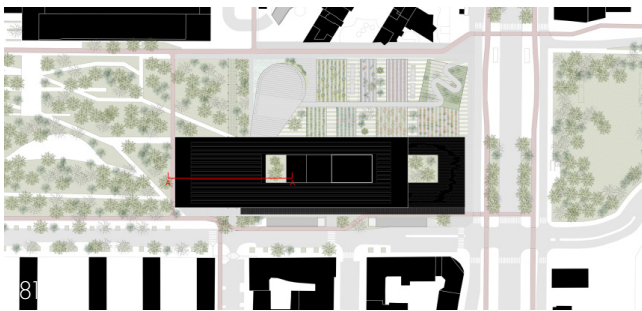


The third place (Andrea Caputo)

This project proposal envisages a podium building located in the southern part of the plot and developed with an east-west orientation. It dialogues with the street in the south through a covered gallery that recalls the classical architectural element of the loggia and offers direct access to the entrance spaces of the new library from via Molise. The podium is made of two main levels that allow a separation between different functions. On the top of the first one, a wide terrace faces the park and the surrounding city, providing both working and meeting rooms, but also the space to organize events and initiatives. The Forum BEIC is then realized inside an expansion of the first floor towards the north: it is designed as a sequence of courtyards connected in a fluid way, determining a visual continuity among the areas and a welcoming atmosphere. On its roof, a sort

of botanical garden is accessible to the whole population, also through some digital devices and programs. The podium is characterized by some carved voids that bring light and air inside the building. Ten structural cores support the building and define the spatial rhythm of the whole building; besides, they are designed to perform additional functions, serving as landmarks, multimedia devices, and way finders. An interesting aspect is that the whole design takes into account the universal design principles, paying attention, for instance, to the avoidance of architectural barriers and hierarchies in the paths, and the provision of tactical devices.

What has been especially appreciated by the jury was the clarity of the plan, enriched by wide terraces that act as new urban spaces overlooking the neighborhood and the new park.



V. Final remarks

In the case of the BEIC, the arrival of the NRRP and its related funds – the National Complementary Fund in this situation – has represented the opportunity to realize a long-standing project and complete an urban regeneration process, healing a scar in the city. Indeed, Porta Vittoria area is characterized by urban voids of unfinished plans that require to be filled and given back to the community. Besides, this part of the city has been undergoing several transformations, with various forecast projects that will inevitably change its aspect. In a context that will be so rich in terms of artistic, university and theatrical realities, a new cultural structure seems necessary for the city of Milan in 2026. As for the other interventions funded by NRRP, the short schedule is at the same time a challenge and an opportunity to see the library realized in few years, providing the neighborhood and the whole city a new cultural center. Just to have an idea of the nature of the challenge time represents, it is sufficient to make a comparison between the years required by the first BEIC to develop the three levels of the project and the months available for the architects in the case of the new BEIC.

What is interesting to notice, then, is that the project for a new library was included among what has been defined as “big cultural attractors”, recognizing a relevant role to this urban function that has

generally seen a progressive loss in its importance at the national level. It is also true, however, that the new BEIC does not coincide with a traditional library but, as explained before, it is closer to the so-called public libraries that can be found in other European cities. It merges several dimensions: educating and favoring access to the world of books and culture on the whole, directly involving citizens for cultural production, offering digital literacy activities – also through horizontal and peer-to-peer learning mechanisms -, competencies and tools.

To what concerns the choice of the winning project for the new library, looking at the various proposals that were presented (44 in total), the jury has valorized a simple and clear solution, able to cope in a convincing way with all the requests. The flexibility of the plan, with a clear two-fold nature, is able to host the various activities and adapt to future changes and needs.

However, this project has gone through some criticisms during its whole story, and still today there are some contrasting perspectives. Already at the time of the first idea for a new library, some voices were raised against the project for several reasons. The first project appeared to be unnecessarily big and expensive for the city of Milan: for many, it would have been better to invest in the already existing libraries, whose destiny was perceived at

risk with a new resource-intensive project.

When the BEIC Foundation communicated the intention to recover the BEIC idea using national funds in 2021, some additional concerns emerged. Firstly, the need to rewrite the previous project all over again – for the reasons explained in the previous section – and throw away an executive project financed through national resources was considered by many a loss of money and, overall, a red flag related to the fact that it aged quickly. Indeed, one of the main considerations made deals with the role libraries can have today in our society. The supporters of this intervention argue that such a building has several potentialities and benefits for the whole city - being able to bring together the traditional services and more interactive and creative activities – as demonstrated by other successful European experiences. On the contrary, voices like Di Bello states that the city doesn't need a big structure but a network of modern public libraries, a concept that refers to a community-related idea (Di Bello 2020). Even with all the innovations in the diffusion and production of culture, public libraries don't risk losing their role when they are conceived as neighborhood-related services, close to the inhabitants of the area, offering not only free access to culture but also meeting opportunities and social activities. And this

role, strongly rooted into a territorial dimension, can be performed by smaller but well-functioning libraries scattered across the whole cities, reaching especially the peripheral areas where their role is even more relevant. This perspective argues that Milan should invest more resources not to create a brand-new big library but provide the Municipal ones with better services. Among the activities that can be financed, as underlined by dc. Seghetti⁶³, there can be the digitization of the Sormani library's periodical holdings, providing citizens with the ability to consult them in an easier way or, in some cases, directly from home, similarly to what the Braidense library did⁶⁴. Other examples are the necessity the city has is to have an improved central depot, for instance renovating the one of the Sormani library, or the potentiality to create a rich musical archive



87. Mediateca Santa Teresa

as Milan is the Italian city that has produced more music, but the collections are often dispersed or forgotten. This disenchantment is also the result of a series of unsuccessful initiatives occurred in the previous years, like in the case of the experiences of the Braidense to realize the Mediateca Santa Teresa and the Cavallerizza. Indeed, these two projects didn't end out positively due to a general disinvestment and lack of attention to the issue. The Mediateca Santa Teresa was conceived as the multimedial department for the Braidense library, collecting sound and audio-visual documents; however, this space was soon closed for the lack of personnel and resources. The Cavallerizza, then, was realized to be the new Braidense newspaper library, with wide underground archives. After a long construction process, the building was then in part given to FAI (Italian Environment Fund) reducing the space for the Braidense activities.

To this concern, a different approach that may be interesting to consider is the one of the Rome: indeed, the Municipality and the Metropolitan City, through the NRRP funds, defined an Integrated Plan (M5C2) aimed at strengthening and renovating the network of libraries of the city. The plan, worth 50 million euros, envisages the realization of 9 new civic cultural centers (*Nuovi Poli Civici Culturali e di Innovazione*) located in districts that today are

lacking libraries; besides, 21 existing structures will be renovated – especially from an energetic point of view – and requalified. The vision pursued is to enlarge as much as possible the access to culture, including peripheral areas in the network and regenerating, at the same time, underused or degraded buildings. Besides, a further intention is to promote in these places not only the traditional activities but also further services ranging from legal and psychological assistance to coworking and training spaces.

The director of the Library Sector of the Municipality of Milan, Parise, answered this kind of argument underlining the differences between the BEIC project and the other local libraries. The former is a project that could have been realized only through such a relevant arrival of national funds and does not interfere with the other services. The latter, indeed, keep receiving municipal funding and Milan has not seen a relevant decrease in the investment for these services, considering other national cases or sectors.

Furthermore, a great deal of skepticism about the BEIC project concerns its collection and future management. Firstly, the BEIC doesn't start with a library asset of its own, apart from some collections acquired in the years, and differently from the exemplary case of TGB in Paris (Di Bello 2020), and

the detailed librarian project seems to be still to make and that it will be ready for the inauguration of the building. This doesn't seem a side issue as it implies a wider discourse on the destiny of the other municipal libraries today active in the city. Which relationship will the BEIC have with the Sormani library, will it take its whole collection, just a part of it? And how the future management of BEIC library will impact the life of the other ones, also in terms of economic and personnel resources, in a sector that has seen a general tendency of disinvestment? Even if Professor Solimine argues that, looking at the European libraries, these interventions cannot but revitalize the other cultural services, and not substitute their role, the uncertainty over its management and its possible relations with the Sormani seems to require a certain carefulness and attention. Up to now – July 2023 – it seems that Sormani – which will cede its function as central library of Milan to BEIC – will keep a book-related function, due to its long-standing value for the city. The President of the Italian Association of Publishers (AIE), Levi, proposed to transform Palazzo Sormani into a museum of books and publishing, to keep its relationships with the librarian culture. Anyway, everything has still to be defined.

Due to the tight schedule, the Municipality of Milan asked to Lombardy Region a waiver to the

public debate – which is a procedure required by the law for projects worth more than 100 million euros⁶⁵ - for the BEIC project. This kind of request is understandable in a complex situation like that determined by the constrictions in the use of NRRP funds. However, it would be necessary to put into place alternatives participatory processes at least dealing with the management of the services and the use of the library by the public (Arruabarena and Bruzzese 2023). Trying to deal with the lack of community involvement during the design phase, the Municipality aims at organizing a series of activities during the construction of the building. These may be events and digital platforms to update and inform citizens about the ongoing works, meetings with the several stakeholders, and processes of co-design of some future services of the library, as explained by Parise.

What emerges from this picture is the complexity that characterizes such an urban transformation, involving questions at different scales and multiples perspectives that require to find a place in the whole situation. On the one hand, the realization of a new cultural hub aimed at promoting and favoring the diffusion and the creation of knowledge and the allocation of national funds over it is undoubtedly an extraordinary occasion that can provide the citizens with new and necessary services. The

Chapter 4 - The Milanese case

NRRP proved to bring the necessary resources to let a long-standing process become reality. On the other hand, however, the impact on the city should be carefully take into account, ranging from the destiny of the other libraries to the risk of gentrification and increase of already existing differences in the city.

LAMBRATE - RUBATTINO

Integrated Urban Plan

I. General overview

By 2026, the Metropolitan City of Milan will see on its territory the realization of four integrated urban plans financed through PNRR funds and, in some cases, also by the Complementary National Fund. This measure belongs to Mission 5 and has the objective of improving peripheral and vulnerable areas through the requalification and regeneration of underused urban areas and providing new services to the neighborhoods. These interventions may include private investments and a process of co-design with third-sector entities, with the further objective of giving back to the community involved a sense of identity promoting social,

cultural, and economic activities. The Lambrate-Rubattino plan was proposed by the Municipality of Milan, which is the implementing body, by merging two orientations: on the one hand, a series of interventions in the Rubattino neighborhood and, on the other hand, requalification works of some infrastructural nodes to improve their accessibility. In this analysis, it was decided to focus on the first category of projects located in the neighborhoods of Lambrate and Rubattino. Besides, the project for the Cittadella della Scala financed partially by the Decreto Aiuti seemed an interesting intervention to keep into account due to its proximity with Rubattino and the future impact it can have.

NRRP Mission	Type of project	Interventions	Total funds	Amount financed
Mission 5 Component 2	MICA - Integrated Urban Plan	Construction of a new primary school in Via Caduti in Missione di Pace, in Rubattino neighborhood.	13.500.000 €	13.500.000 €
		Conservative rehabilitation of the building located in Viale delle Rimembranze di Lambrate 24 to be used as a school.	18.000.000 €	18.000.000 €
		Lambretta park expansion (decontamination)	16.000.000 €	16.000.000 €
		Lambretta park expansion (greenfield work)	22.000.000 €	22.000.000 €
DI Aiuti		Cittadella della Scala	120.000.000 €	20.000.000 €



88. View of Lambretta Park

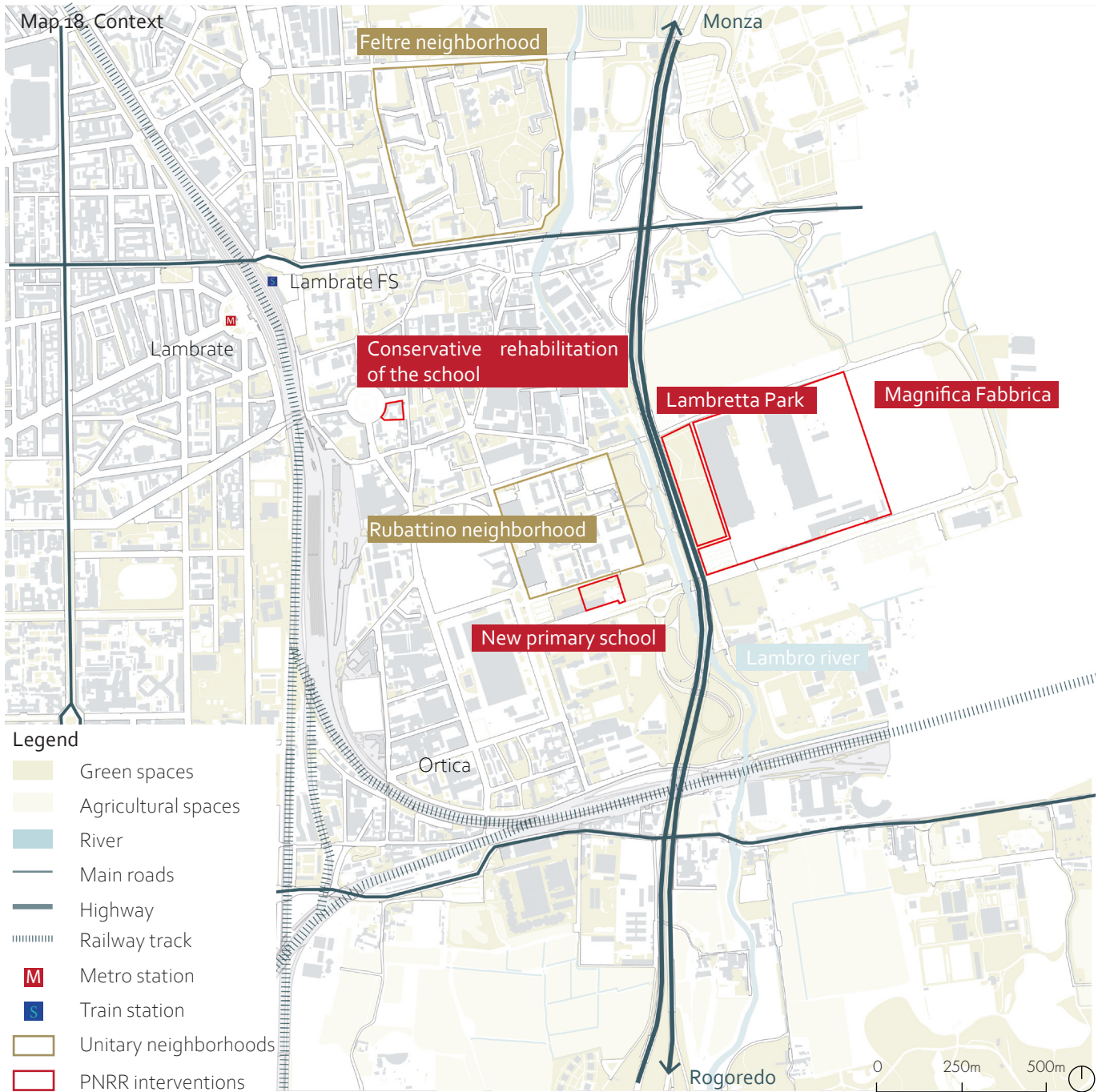
II. The context

The integrated urban plan involves the administrative unit of Lambrate - Ortica (NIL 23), located in the eastern part of Milan, at the border with the Municipality of Segrate. This portion of the city has some peculiar characteristics that make it unique in the overall picture. From the '50s, the area was characterized by the presence of large industrial plants, situated beyond Lambro River, that impacted the development of the neighborhood itself, leaving traces still visible today. With the process of industrial dismantling from the '70s, a period of deep transformation took place, leading to the construction of a new residential neighborhood commonly recognized as Rubattino. However, the process has not been completed yet, and a strong image and identity of the area is still in the making. The analyzed project aims at completing the transformation trying to solve a scar in this part of the city.

The portion of the city of Rubattino neighborhood is at the border between the highly urbanized tissue of Milan and the agricultural fields towards the east. Several infrastructures – both mobility-related and natural ones - strongly characterize and impact the area. Indeed, with the underneath neighborhood of Ortica, Rubattino developed as a sort of enclave, surrounded by the railway that isolates it from the

rest of the city, also because of a lack of sufficient pedestrian and vehicular crossings. Besides, many functions that are present in the area act as enclosed and fenced realities, establishing few or no relationships with the surroundings. Another relevant mobility infrastructure is then represented by the highway A51 crossing the border of the city from north to south and via Rombon in the north. These two axes – especially the former – have a significant negative impact on the Rubattino neighborhood, for instance in terms of noise, smell, and pollution. Eventually, Lambro River is a blue infrastructure that characterizes the area: nowadays, it suffers from some critical conditions, mainly related to its level of pollution, represents a risk for the damages it brings when it floods and, in some parts, may be seen as a barrier as well. However, many are its potentialities, and the integrated urban plan aims at exploiting them. The unfinished nature of the urban plan developed after the industrial dismantling determines the absence of some necessary services for the living population: this is the case, especially, for education services initially forecast but never realized.

To what concerns the population, in the last 10 years, there has been a peculiar trend related to the fact that the number of inhabitants increased by 15.6%, a value that is higher than the average



of the city. Besides, this kind of rise has reversed a previous trend that was lasting from almost 15 years: the number of Italian residents has increased at a 20.8% rate, while the number of foreigners decreased (-4,4%)⁶⁶.

Due to the wide availability of former industrial areas requiring regeneration processes, the Lambrate-Rubattino neighborhood has experienced several transformations that are changing its face. Such

The main transformations

Completed

The ex-Faema area

The former industrial area of the Faema company – producing coffee machines – was transformed into a polyfunctional space. A part of it is today occupied by the Scuola Mohole, which is a school of Film, Communication, and Storytelling.

Cohabitat Lambrate

In 2019, a new social housing complex with very high energetic standards was realized. The residential units are managed by two housing cooperatives that made it possible to sell properties at very low prices compared to the average of the city. Besides, some common spaces are provided on the ground floor.

Ongoing

Ex de Nora

On a former industrial site close to the railyard, a new residential complex is under construction. It will be made of four nine-story towers surrounded by green spaces. A part of the future residential units should be of social housing.

changes have to deal with some pre-existent historic centers – such as those of Lambrate and Ortica – that have maintained their identity and aspect imposing to new developers to find an adequate relationship with the context. The relevance and strategic role of some of these areas is demonstrated also by the fact that the Piano di Governo del Territorio Milano 2030 recognizes for Rubattino the presence of a Grande Funzione Urbana (Big Urban Function), as it will be deepened

Forecast

Palazzo Sintesy

On a former industrial site close to the railyard, a new residential complex is under construction. It will be made of four nine-story towers surrounded by green spaces. A part of the future residential units should be social housing.

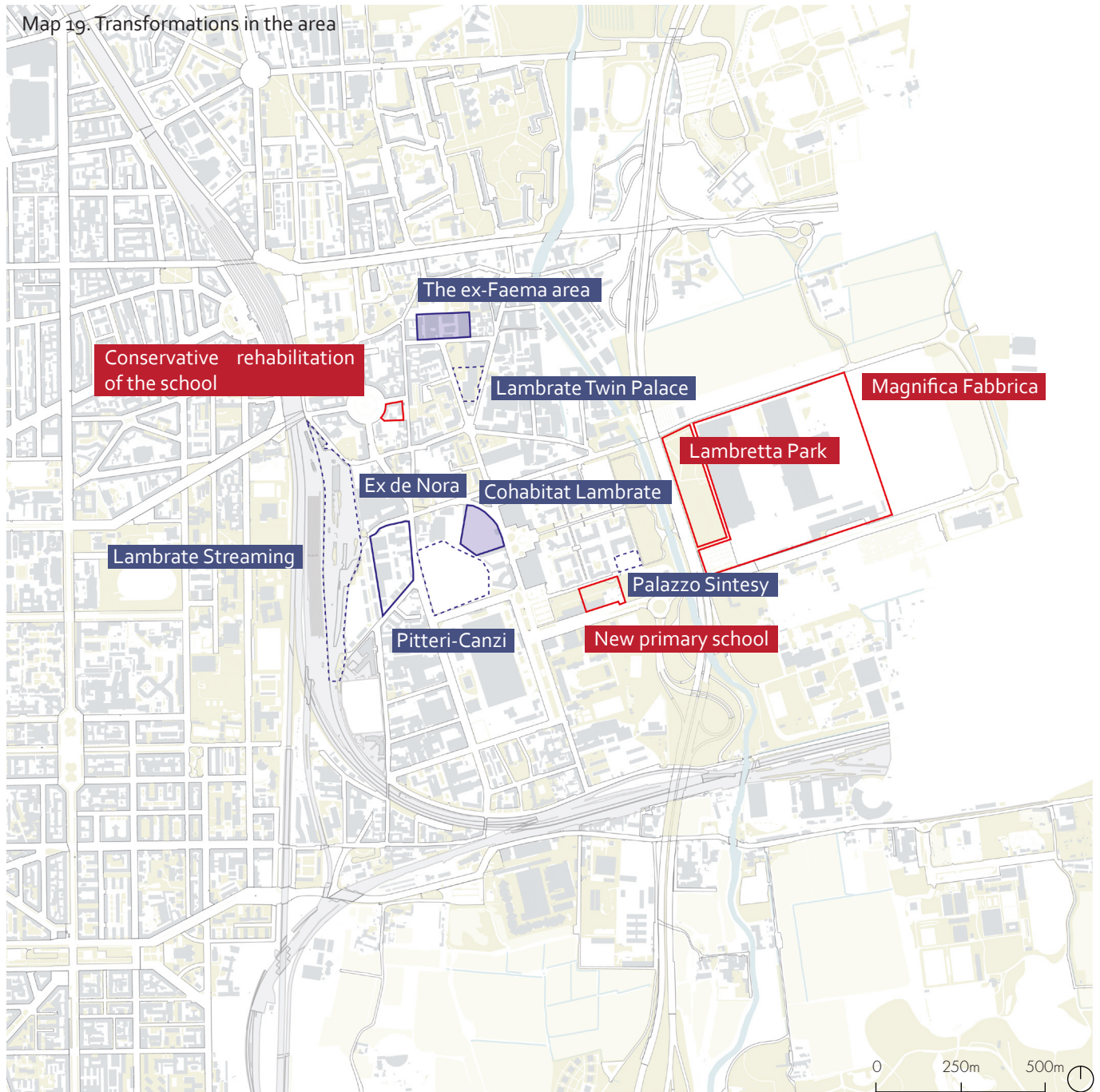
Lambrate Twin Palace

Close to the historical center of Lambrate, a new residential complex made of two buildings will be realized. On the ground floor of the buildings, several facilities are forecast and a private garden connects the two bodies.

Lambrate Streaming

Winner of the second call of Reinventing Cities, the project is conceived as a system of squares and green areas providing various facilities. In the frame defined by the green elements, several residential buildings will be realized, with units of social housing mainly addressed to students and young workers. Besides, neighborhood services and activities will be realized like a cultural center, coworking spaces, local shops, and recreational and children's facilities.

Map 19. Transformations in the area



in the next section. Simply looking at the Urban Regeneration Atlas made by the Municipality of Milan, it emerges how Rubattino will be invested by a relevant number of transformations, apart from those that have already been completed. One of the most relevant future transformations is represented by the wide regeneration intervention for the Lambrate railway yard: Lambrate Streaming is the winning project of the second call of Reinventing Cities that will be realized. Close to this huge transformation, there are several smaller projects – mainly residential buildings – that are being developed in the surrounding areas, as shown in the map.

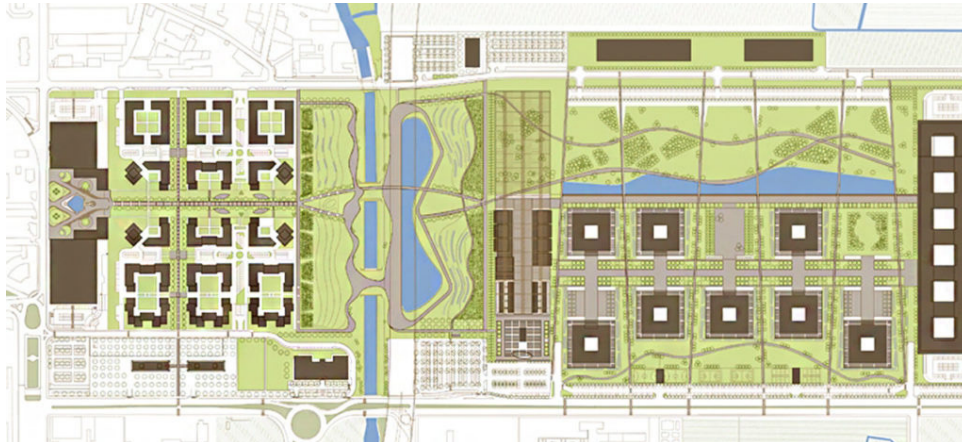
III. The plan and its origin

The industrial activity in the Rubattino neighborhood mainly concerned the Innocenti factory that was specialized in car production and became particularly famous for the Lambretta, a scooter that took its name from the closeness of the plants to the Lambro River. As it happened in other neighborhoods of Milan – for instance, Sesto San Giovanni – the area has been strongly characterized by the presence of this industry that became part of the local identity. From 1966, some changes in the property and management of the industry occurred until the plants were closed in 1993. In the following

two years, a new company – named Rubattino 87 - was created and it promoted a plan to reuse and regenerate the industrial areas defined by via Crespi, Pitteri, and Rubattino. Their proposal – an urban requalification program – was approved by the Municipal Council in 1995 and signed by the Municipality of Milan, the Lombardy Region, and the Ministry of Public Works. In September 1998, the Municipality and the Rubattino Company, which in the meanwhile had become the owner of the land, defined the starting of the works. The approved plan for the area was forecast to be carried out in two phases, with different schedules. In six years – by June 2004 – the area between via Pitteri and the Cristal Palace – which is the last industrial pavilion that remained just beyond the highway – should have been redeveloped with the construction of new residential buildings, commercial activities, and a public park. For the rest of the area, instead, ten years were provided to build other residential buildings, and structures for productive activities, and complete the park - later named Lambretta Park - keeping the Cristal Palace intact.

The first residential buildings were delivered in 2002 and in the following years, until 2008, the first part of the plan was almost completed. The second phase, instead, has never started. In 2008, the Municipality and the Rubattino Company registered the current

89. Masterplan of the PRU Rubattino (1996)

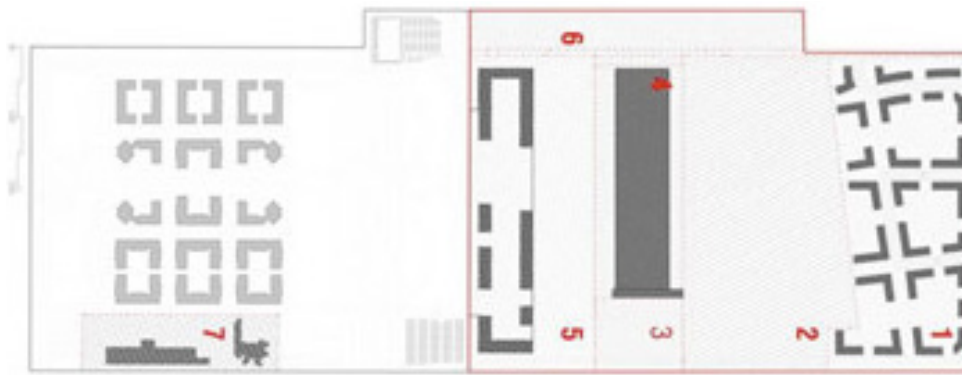


The initial Urban Requalification Plan (PRU) for the Rubattino area proposed by the Rubattino Company 87.

On the west, the neighborhood that has been realized, culminating with Piazza Vigili del Fuoco. Then, the Lambretta park along the sides of Lambro river and with the Cristal Palace.

On the east, a new residential development facing a wide green area that has never been completed.

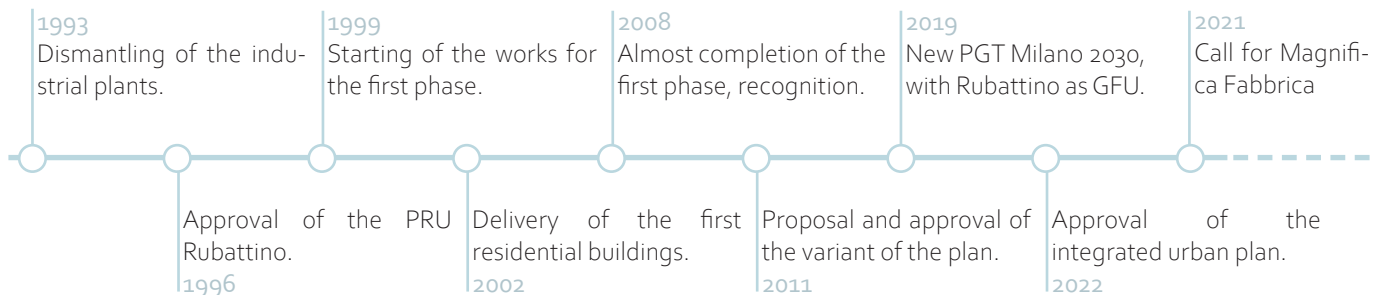
90. Variant of the PRU Rubattino (2011)



The new functional layout defined by the variant to the urban plan. A part from the already built neighborhood in the west, the new functions forecast are:

1. New residential development
2. Public park
- 3-4. Productive function.
5. Offices
6. Green spaces
7. Building T9

91. Timeline of Rubattino neighborhood



state of the plan, considering what was forecast and what had been realized. As a result, a redefinition of the public and private interventions was made, by giving priority to the building of residential units beyond the Cristal Palace. However, some primary services related to the development of the first phase were still missing: among those, some education facilities, street furniture, and play areas in the park. For this reason, in 2011, a Variant of the plan was promoted. The main changes concern the definition of the residential district in the easternmost part of the whole area, offices, and productive functions in the middle, and a new school, which was one of the most needed facilities. For this plan to be realized, ten years were forecast. Progressively, some interventions were carried out: for instance, in 2013 Lambretta Park was provided with new basket and football fields, and in 2015 a kindergarten was opened. Like in the past, the easternmost part of the plan had not been realized.

Nowadays, in the current land-use plan of Milan (*Milano2030*) all the areas that were part of the PRU Rubattino and never requalified are identified as one of the six Big Urban Functions - *Grande Funzione Urbana* (GFU) - of the city. These elements were introduced as part of a polycentric strategy for the city aimed at revitalizing and enhancing the nature of Milan as made of several neighborhoods.

In this framework, cultural and green facilities are seen as crucial drivers for the regeneration of underused and peripheral areas, and Rubattino is an example of it. The Big Urban Function of Rubattino is made of both public and private areas – which were reorganized through a series of changes of properties - and it has been subdivided into several zones with a new functional layout, as shown in the map.

The project financed by the NRRP

The Integrated urban plan for Rubattino financed by the PNRR deals with some specific territorial challenges that characterize the area. On the one hand, it is an instrument to requalify former industrial areas today polluted and underused that are decreasing the overall quality of the surrounding neighborhood as well. To this concern, the remediation and the following interventions for the public park along the Lambro River aim at both requalifying the land and the environmental quality and improving the use and accessibility of this urban facility. On the other hand, this plan answers to the need of providing education structures to a neighborhood in need, trying at the same time to embrace the idea of a more inclusive and sustainable schooling offer.

As explained at the beginning, the urban plan

92. The Big Urban Function of Rubattino in the PGT Milano 2030



The definition of the Rubattino area as a Big Urban Function determined a reorganization of the layout and its related functions. This scheme already implies the presence of the Teatro alla Scala laboratories and other additional services as driver of the whole regeneration of the area.

The building among sub-lotto 1 and 4 is the already present INNSE, an engineering industry.

Sub - lotto 1

88.990 sqm - public property.
Area for the realization of the laboratories and the storage for the Teatro alla Scala.

Sub - lotto 2

16.030 sqm - private property.
Area for a center for research, formation and technological and economic innovation.

Sub - lotto 3

11.270 sqm - private property.
Area for productive, logistic and tertiary functions.

Sub - lotto 4

68.340 sqm - public property.
Area for the creation of a public park with some public interest functions.

Sub - lotto 5

4.560 sqm - private property.
Area for the realization of a commercial building.

Sub - lotto 6

4.560 sqm - public property.
Area for the realization of a public school or other facility.

merges four different interventions that, however, are all part of the same strategy and linked by the historical development of the area, as it will be shown.

The project for a new primary school in via Caduti Missione di Pace envisages the realization of a new structure, hosting various activities: the school, an auditorium, a library, and a gym. Even if an executive project is not available yet – up to July 2023 –, from the information provided by the Municipality, it

emerges that the new school will be designed as a nearly zero energy building, by implementing bio building criteria, exploiting renewable energy sources – integrating photovoltaic and geothermal solutions – and assuring a reduction of the impacts and energy saving practices. Besides, principles of design for all are assumed as crucial in improving social inclusion and granting the accessibility of the spaces to everyone. Furthermore, the green outdoor spaces are designed to enhance the

relationship between children and the environment, also with some educational aims.

93. Ground floor plan of the school in viale Rimembranze



The second intervention, then, envisages the recovery of an underused building – the former Maroncelli school - close to the historic center of the Lambrate neighborhood in order to use it as a middle school. The forecast works will determine the realization of the school spaces together with a gym, a future library, and a smart working hub as well. Besides, the intervention aims at improving the energy rating, the security, and the soundproofing of the building.

At first look, these two projects may seem unrelated and put together just to obtain the funds. However,

some historical events reveal their connections as the places taken into account to complete the urban plan for Rubattino. To understand this relation, it is useful to recall the history of the two structures and areas.

Maroncelli Institute was an elementary school that remained underused for a long time. Then, for some years it was chosen to host the hotel school “Vespucci” which temporarily needed to move out of its main seat to allow some restoration works. In those years the building was under the competence of the Metropolitan City of Milan, as it was used by a high school. After this period, the local administration requested several times to have the building back in its availability: the idea, indeed, was to transform it into the school that was forecast but never realized by the urban requalification plan for Rubattino. At first, the Municipality – at that time led by Moratti (2006-2011) - answered this request arguing that the neighborhood did not need education facilities since still few people were living there. However, with the passing of time, the number of inhabitants continued to increase. With the Variant to the plan approved in 2011, a new provision was made: indeed, with the new neighborhood in the east of the area, the plan forecast a reuse of the so-called building Tg to realize a school. This private structure was the former canteen for the workers

of the factory and, through the infrastructure costs (oneri di urbanizzazione) of the new development, it could have been transformed into an elementary and middle school. Of course, this could have been possible only with the successful completion of the new development. Being aware of this situation, the local administration had often requested an alternative to this project for the construction of a new school and the former Maroncelli was a plausible solution. Then, with the already mentioned new urban plan for Milan, the T9 building was included in the Big Urban Function. Thanks to a dialogue between the municipality and the local administration, it was possible to make half of its surface, with the relative building, public, thanks to a trade-in process. With the arrival of NRRP funds, then, it was decided to realize here only the primary school and then to involve the former Maroncelli - which in the meanwhile got back to the Municipality - to realize the middle school. Eventually, the latter passed from being an alternative to becoming one of the two new structures. That is why these interventions are part of the same urban plan.

To what concerns the works on Lambretta Park, instead, two main interventions are required. On the one hand, the remediation of that part of the land that is still polluted and, on the other hand, its requalification. This park is a crucial element that

links the Rubattino neighborhood with the areas of the big urban function beyond the highway and it has several potentialities that must be exploited. First, due to the presence of Lambro River, it is conceived as an occasion to deal with some river-related issues, in terms of its management – through some mitigation strategies – and its environmental value. To this concern, the experiences of projects like ReLambro and EPL – as explained in the focus on Lambro-Rizzoli interventions – provide fundamental tools and knowledge that should be applied. Secondly, the park represents a relevant environmental connector, able to improve land and air quality, biodiversity protection, and climate mitigation. Besides, it has an important social value as an urban facility that should be accessible to everyone, especially to the most fragile populations. The relevance of this kind of intervention has become even more important with the forecast for all the new structures linked with the Teatro alla Scala, whose project will be presented in the next section.

IV. The Magnifica Fabbrica

The competition

With the definition of the Big Urban Function in the PGT of Milan, the Municipality saw in Teatro alla Scala Foundation - which was looking for some new spaces to match its current needs - the perfect actor to activate the regeneration of the area. The idea, indeed, is to requalify the former industrial spaces to realize the new headquarter for the theater, collecting all the seats that are today scattered across the city and providing wider room for all the functions it requires, both technical and open to the public. For this reason, an international architectural competition was launched, requiring not only a project for the new building but also a plan for the continuation of Lambretta park. From the pre-design document of the competition, some requests are pointed out, apart from the indication of all the activities that should take place in the new structure. The building should host the laboratories and the storage of the Teatro alla Scala, but also some spaces open to the public where to organize creative and cultural activities in order to encourage a closer relationship between the city and this cultural world, becoming an attractive point of reference. For this reason, specific attention is required on the way in which the building dialogues with the city, communicating a dynamic and open atmosphere to the population. To what concerns

the park, then, it was asked to maintain the Cristal Palace, valorizing its value of memory of the industrial past, making it part of the green area. Besides, the call required solutions to enhance the environmental aspects and potentialities of the area and make it attractive and lively for the community.

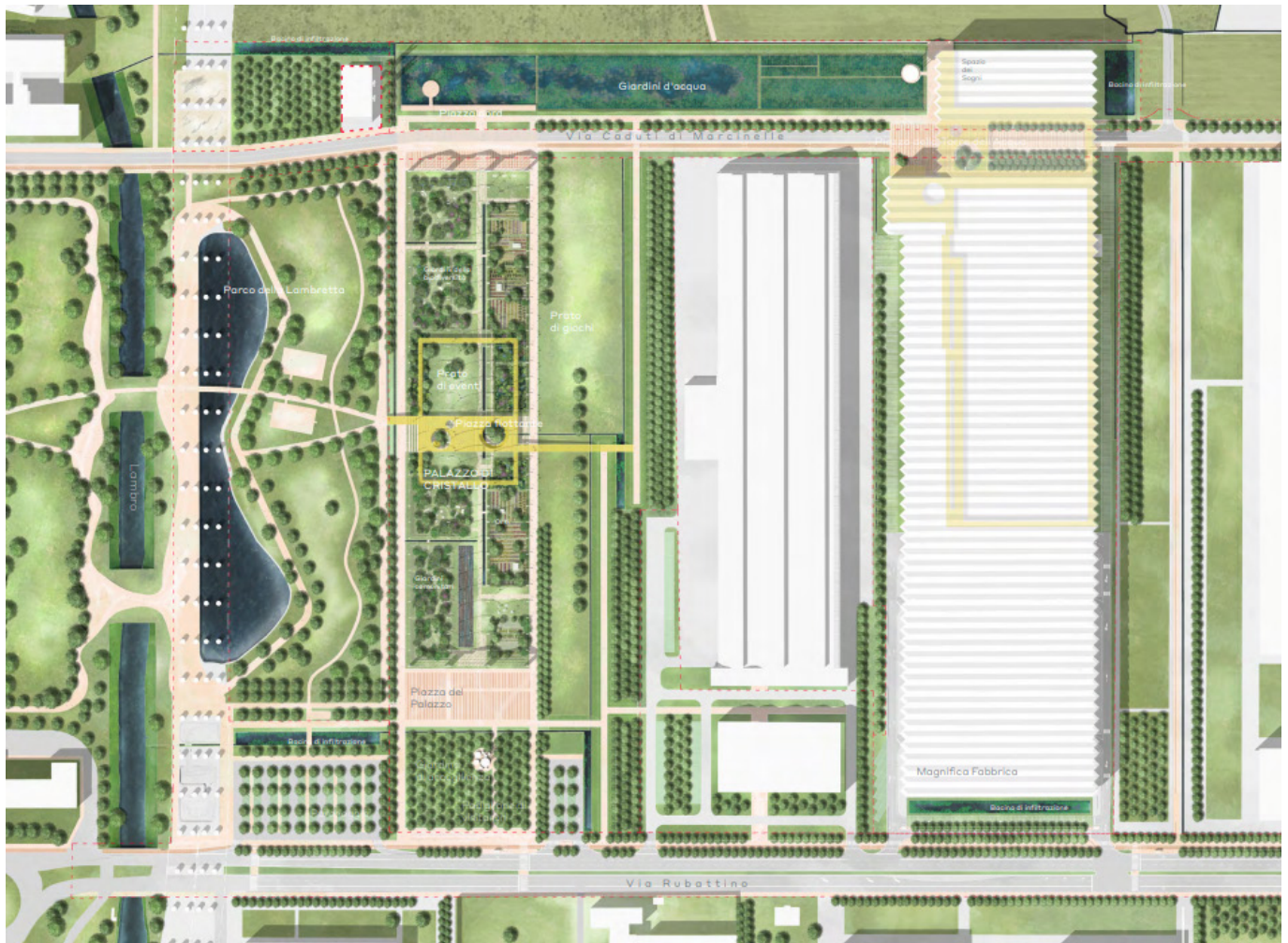
The winner project

The project chosen as the winner of the international competition is that of the group led by Massimo Giuliani and is characterized by a recurrent narrative concerning the dimension of openness and accessibility of the building that will be realized. Starting from the park, it is conceived as a diver of the overall regeneration: the Cristal Palace standing in it will be transformed into a sort of green factory of biodiversity, keeping the original structure and realizing inside of it a garden made of flexible sectors with a great variety of vegetation and potential uses. In the middle of it, the so-called Floating Square is an elevated structure that offers a view over the garden and can host various events and expositions. From here, the elevated walkway links the Floating Square of the Cristal Palace to the Ring of the Magnifica Fabbrica. The main building hosting the functions required by Teatro Alla Scala is crossed in all its length by an elevated promenade that answers to the request of opening

to the public the backstage functions. In order not to interfere with the technical activities taking place in the building, the promenade is conceived in a totally independent way from everything

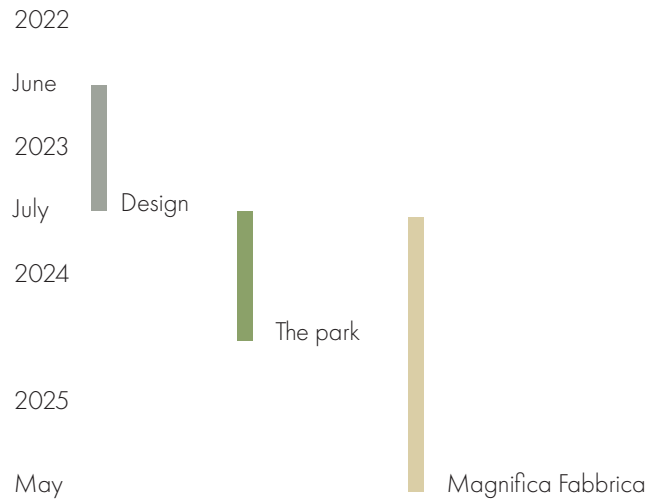
else, remaining elevated and offering the public the possibility to give a look from above at what is going in the laboratories. Besides, this kind of layout can be an exhibition route for illustrating

94. The Masterplan for the Magnifica Fabbrica



the history of the theater. The Ring starts in what has been defined as the Space of Dreams, where the cultural foundation is going to organize events involving schools, associations, enterprises, and institutions. In front of this autonomous building, the Square of the Water Tower maintains the industrial tower as a landmark and is conceived as a meeting and reference point, providing access to the main building. To what concerns the technical systems, the building will be zero energy through a photovoltaic system on the roof and a geothermal one. The building is expected to be inaugurated by May 2025.

95. The schedule for the project



96. An aerial view from the west over the Cristal Palace and the Magnifica Fabbrica



97. View of the inside of the Cristal Palace



98. View of the Square of the Water Tower



99. View of the Ring in the Magnifica Fabbrica



100. View of the Ring in the Magnifica Fabbrica



101. View from the outside of the Space of Dreams



V. Final remarks

The urban integrated plan for Lambrate Rubattino links three interventions that are all part of the same strategy: completing a long-lasting process that is struggling to see an end. These interventions were all part of the three-year public works plan of the Municipality of Milan, and they represented the clear priorities for this neighborhood, as confirmed by the local administration. Indeed, going through the history of the Rubattino neighborhood, it emerges that the unfinished nature of the area affects the living population of the lack of basic services like education ones and the presence of polluted and degraded areas that may represent a risk to the community. This is then a case in which the arrival of the European funds has substituted some local resources that were already been allocated to these projects, allowing the Municipality to use them for other needs.

This intervention provides some interesting insight related to the multi-level governance of the processes involved. The resources, indeed, were assigned to the Metropolitan City of Milan that asked all the Municipalities to candidate some projects – worth at least 50 million euros – among which to decide. The implementing body, then, in the case of Lambrate-Rubattino was the Municipality of Milan. Besides, such a plan required a dialogue between

the Municipality and the local administration of Municipio 3 that underlined the urgency and the necessity of these works. Its contribution occurred also in a second phase when discussing the services the two schools need: a request made by the local administration, indeed, concerns for instance the possibility to use some of the spaces like the gym also outside of school time. This kind of practice is more and more diffused and allows to keep the building lived and used all day long.

Another entity that was partially involved in this project is ERSAF, for the interventions along the Lambro River. Indeed, Lambretta Park was taken into consideration in the wider project of ReLambro and EPL and, according to the analyses made, it is one of the few strategic areas where to let the river overflow. So, from this point of view, Lambretta Park would have represented a unique opportunity to realize what Masotti, during an interview, defines as a pile-dwelling city, leaving room for the natural dynamics of the river. According to her, however, the current project does not exploit this opportunity and the potentialities a transformation in that sense could bring also in terms of the leading role Milan could have had towards these practices at a wider territorial level.

CHAPTER 5

CONCLUSIONS

5. HALFWAY THROUGH THE PLAN

Conclusions and future perspectives

The NextGenerationEU is undoubtedly a huge opportunity for the European Union and its member states, relying on a brand-new perspective. First, it is a program developed according to a cohesive communitarian view that interprets uniting efforts and resources as the way to overcome obstacles and difficulties. On the political level, the European Union took on a new role, shifting the focus from a strictly economic perspective towards a different way of making policies, defining a shared debt to allow the recovery of all the member states, starting from the weakest ones. At the same time, providing European guidelines for national planning represents a valuable occasion to involve member states in addressing urgent issues often underestimated, such as green transition and digitalization.

In this framework, Italy developed an unprecedented national plan by making the relevant decision to ask the European Union for all the available funds, not only in the forms of grants but also of loans, being the prime beneficiary of the program. This stance by the government at the time represented an unexpected change of direction and demonstrated solid confidence in the country's chance of emerging from the crisis. Probably, other governments would not have taken such a risk, but the nature of the

government itself and its lead by Draghi as Prime Minister enjoyed complete confidence in their actions. The defined plan resulted in investments and reforms the country was expecting for a long time, even if many of the latter are cost-free. The National Recovery and Resilience Plan's season, due to its entity, involved actors from all the fields and opened a great debate all over the country, even if the dialogue with the government and the central administration has always been quite limited.

In dealing with the NRRP, several criticalities emerge concerning various aspects. Its structure and the context in which it lands raise some reflections. In Italy, national plans tend to be weak and poorly considered, largely below international standards. Indeed, past experiences proved, for instance, the lack of a strategic view and the focus on big projects rather than on XX, as demonstrated by the case of the National Transport and Logistic Plan (*Piano nazionale dei trasporti e della logistica*, PGTL). In such a context, characterized by political instability, the country faced several difficulties in developing a national plan providing a vision for the country's future. The European Union guided the definition of the three strategic axes, but their translation into results presents some critical

aspects. To what concerns the green transition, for instance, Italy assigned the minimum of funds, without understanding the relevance of the issue, despite the glaring manifestation of the climate crisis that periodically wrecks the country. In 2023 only, floods, storms, and fires have shown their strength and the severity of the consequences they can bring. Moreover, the high objective of social inclusion is weakly addressed in a country where territorial disparities are structural, rooted, and not only between the north and south of Italy but also among centers and peripheral areas. It may be one of the most difficult challenges the country faces, and a six-year plan can hardly address it, especially with the structure the NRRP envisions. Imposing the provision of 40% is not enough, and how it has been conceived demonstrates a lack of understanding of the nature of territorial disparities and the structural roots of inequalities. Besides, target policies for women and young people - the other two priorities for social inclusion - appear to be missing or poorly effective.

Another aspect concerns the NRRP's multisectoral nature as a plan that works according to disjointed lines of action to reach only generic goals. This structure opens the way for a discussion about the lack of a strategic orientation of the plan itself. One further hint of this is related to the fact that the

NRRP lacks a relationship with the territory. Indeed, in its time-limited development, the starting point has been the funds available and not an analysis collecting the necessities of the whole country. The sectoral approach adopted led to the definition of six different missions that are not part of a unitary strategy and can hardly be. Looking at the results of the analyses carried out, it emerges that opposite situations are coexisting: on the one hand, some missions like number 3 and 6 are too specific with few implementing bodies that, to respond to the country's demands, need a relation with the territory but are often unable to have it. On the other hand, some missions – like number 5 about cohesion - are too generic and undefined, collecting unrelated and various types of interventions. Besides, an overall lack of data transparency provides a further obstacle in defining a common strategy and synergies among interventions: no national platform collects and publishes the NRRP-related data. To this concern, private foundations like IFEL and Openpolis play a fundamental role.

In this long season, cities are crucial players managing many funds and responsibilities without always being prepared. The public administration's struggles are well-known and worsened in the last years by a progressive reduction of the employees and their competencies, especially in the small and medium-sized municipalities. However, the plan

does not seem to consider this situation, resorting to competitive calls for assigning a substantial part of the resources to territorialized. The risk is to worsen the already deep disparities fragmenting the country, preferring competitiveness over cohesion. By devolving these huge responsibilities in implementing the plan to the cities, each Municipality and Metropolitan city was left alone in organizing its structure and strategy to use funds: this could have been a positive thing for the largest and best equipped ones, but for the weakest municipalities it represented a difficult challenge. However, cities have generally demonstrated an unexpected capacity for adjustment, being able to respect targets and deadlines. In this framework, the plan often bypasses the regional level: differently from the past, these entities received quite limited power, being overcome by the super-power assigned to the city in a subversion of the traditional hierarchy. The role of cities in the implementation of the plan raises questions concerning the modes of planning in Italy: the lack of uniformity and coherence at the national level to what concerns local planning documents determined unevenness in the way of dealing with NRRP funds. Cities with plans dating back to the '80s and the '90s encountered difficulties integrating the new interventions in their planning framework. On the contrary, cities with recent and up-to-date

strategic plans were generally able to better and more easily find coherence in their process of urban development. Such a context shows, once again, the need to update the national planning, displaying its current limits. Besides, an even further complication and obstacle for local entities occurred with the NRRP's remodeling in July 2023. Indeed, many of the defunded projects are managed by municipalities and metropolitan cities and are ready to start. Without having any guarantees concerning the financing of interventions already approved and on the point of being realized, mayors are worried about proceeding not knowing if funds will eventually arrive.

Another crucial issue worth considering is the schedule to respect, imposing times of work realization way tighter than the Italian average. Considering that the first two/three years of the plan mainly concerned reaching milestones and defining the allocation of resources, in just three/four years, all the interventions should be completed. Time is undoubtedly a huge challenge that, apart from putting the whole plan's success at risk, may have hampered the definition of a strategy at the local level and reduced the time for the design phase at the expense of quality and further opportunities. In addition, the issue of time can also be impactful in terms of the participatory process: to reduce

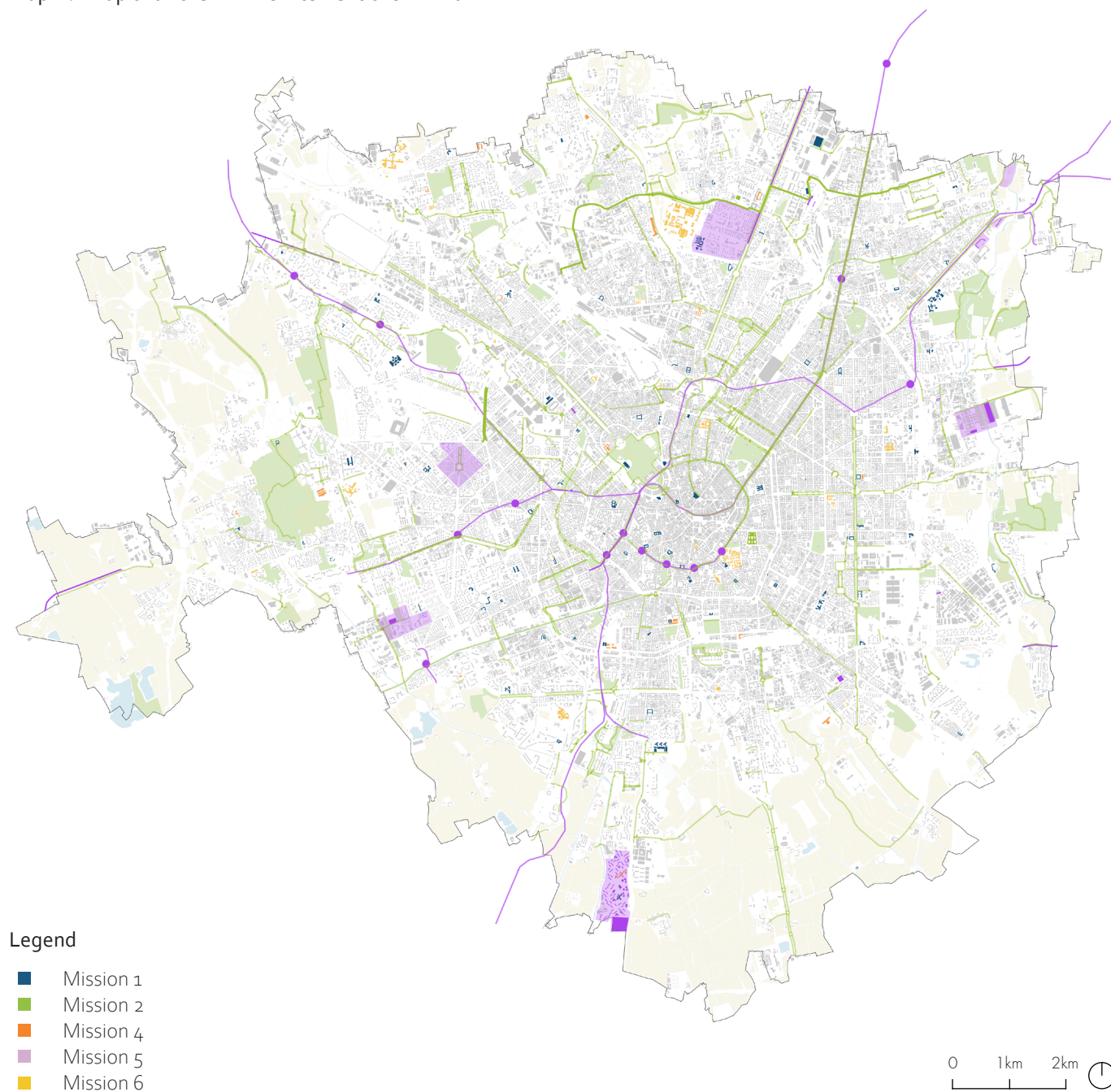
the total time of the intervention, it is preferred to cut citizen involvement activities, an essential moment for projects with a high impact on the city. The tight schedule, however, brings some positive consequences. On the one hand, a country famous for its delays must take action, speeding up the procedures and overcoming pointless bureaucratic obstacles. On the other hand, it assures the realization of interventions to satisfy pressing needs that otherwise would have taken years to be completed. However, a risk to consider concerns the future management of all the new services and infrastructure NRRP envisions. What emerges from the plan is that no defined management strategy has been set up to ensure the functioning of the new structures. This question was raised concerning, for instance, nurseries and community health houses, requiring trained and remunerated personnel to become services for the community. Will these facilities be able to function, or will they become a white elephant?

Final remarks on the Milanese case

Deepening the case of Milan provided several perspectives on various aspects concerning the NRRP and its implementation at the local level. It does not represent the only asset for the city development, characterized by an extensive presence of private investments and national and

international initiatives: for instance, the future Winter Olympics Games in 2026 or the several manifestations taking place every month. In the last decades, Milan has experienced an increasing process of polarization that is making the city less accessible and affordable for a growing part of the population. In this kind of context, it is surprisingly positive to notice that the NRRP-related interventions are mainly public and in peripheral areas. Looking at the complete picture with all the interventions, the south-east part of the city has few transformations concerning the rest of Milan. However, these latter neighborhoods are and have been at the center of many other plans of projects. An important aspect that emerges is that the Municipality of Milan, like the other Italian cities, cannot rely on a defined scheme of all the resources that will be landing on its territory, apart from those he manages. This uncompleted picture refers to lack of data transparency related to NRRP interventions, especially for the private actors. This situation hampers the possibility of defining a strategic view for the whole city and concurs with the fragmentation that characterizes the NRRP projects forecast for Milan. The NRRP found Milan in a period of political stability with a re-elected mayor and a vision for the future development contained in the recently approved land-use plan (Piano di Governo del Territorio

Map 20. Map of all the NRRP's interventions in Milan



Milano 2023). This situation made the Municipality choose the projects to finance among the already defined ones, without resorting to the definition of a new strategy. Similarly, the governance structure arranged relies on an existing task force with similar competencies to those required by the NRRP. One critical aspect is that some forecast projects are not coherent with the missions they are part of: sometimes, the city chooses to locate the interventions where funds are available. Moreover, for Mission 5 some questions are still open because, up to summer 2023, some PINQuA measures have not been defined yet, referring to general areas. The opposite situation, instead, is that of the integrated urban plans. The NRRP, in general, appears for Milan as a tool to carry out various activities, as demonstrated by deepening some of the projects. As in the case of Lambro-Via Rizzoli, it is a way to finance maintenance interventions on some public-owned buildings and regenerate a green area along the river. In this case, the chance to insert the latter one into the wider framework of RELambro was the result of an interesting process. Besides, European funds made an expensive project like the new European Library for Information and Culture possible, filling a void in an area of transformation. Finally, the case of Lambrate–Rubattino fits perfectly in the guidelines provided by Milan’s land-use plan, as it involves a big urban function,

provides essential services to a neighborhood, and completes a long-standing deindustrialization plan at the border of the city.

Summing up, how representative can Milan be concerning how cities are dealing with the NRRP’s challenges? The results collected from these analyses provide an image of Milan only, because each municipality worked differently. However, the case study raises some general questions in common with other realities, pointing out strategies and difficulties in this period. Milan was one of the most affected cities by the COVID-19 pandemic and its consequences, like many other dynamic and attractive poles, but it managed to start a recovery process. In the last decades, Milan profoundly changed with an unregulated development, exploiting the possibilities as soon as they show up. This way of growing, widely discussed and contested, helped Milan address the opportunities offered by the European Funds. Having developed flexibility and dynamism in its development and when facing unexpected events, the management of the plan at the local level demonstrated the ability of the administration to understand the right opportunities to invest in. Having to resort to already defined projects does not necessarily refer to the lack of a vision for the city: like in the Milanese case, the financed projects were developed in the past to respond to the city’s pressing needs, and

the idea to invest on them seemed a valuable and effective strategy.

Anyway, it would be interesting, in the future, to have the opportunity to deepen how other cities managed the funds and the responsibilities they were entitled to and make comparisons. Moreover, it would be interesting to return to these reflections in the coming years with the future developments of the NRRP, seeking answers to some questions that today undoubtedly remain open and subject only to possible speculation. Is Italy a country of national plans? With the NRRP, has Italy acquired a sufficient level of resilience to deal with any new national or global crisis? How are cities coming out of this? Have additional disparities emerged?

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44 The NILs – Nucleo di Identità Locale – are referred to an administrative subdivision of the city in 88 units which tend to correspond to neighborhoods.

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46 Serial vegetation spots (macchie seriali) are made by tall trees and shrubs, creating feeding niches and shelters for animals.

47 At first, an area owned by INPS (National Social Security Institute) in the same degraded conditions couldn’t be regenerated.

48 PreCOP 26 was a preparatory meeting for the Conference of the Parties to the United Nations Framework Convention on Climate Change held in Milan from September 30th to October 2nd, 2021.

49 It is not permitted to vegetate at less than 4 meters from the riverbank.

50 Cascina Biblioteca is a social farmhouse managed by a cooperative that works in the agrifood sector and offers support to the territory through several activities.

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