

# Green Narratives

The communication of sustainability in architecture projects



MEDIAZIONI ALGORITMICHE  
Final Synthesis Design Studio  
Sect. C3 — LM in Communication  
Design, A.A. 2021/2022

D E N -  
S I T Y  
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POLITECNICO  
MILANO 1863  
SCHOOL OF DESIGN

*Green narratives  
The communication of sustainability in  
architecture projects*

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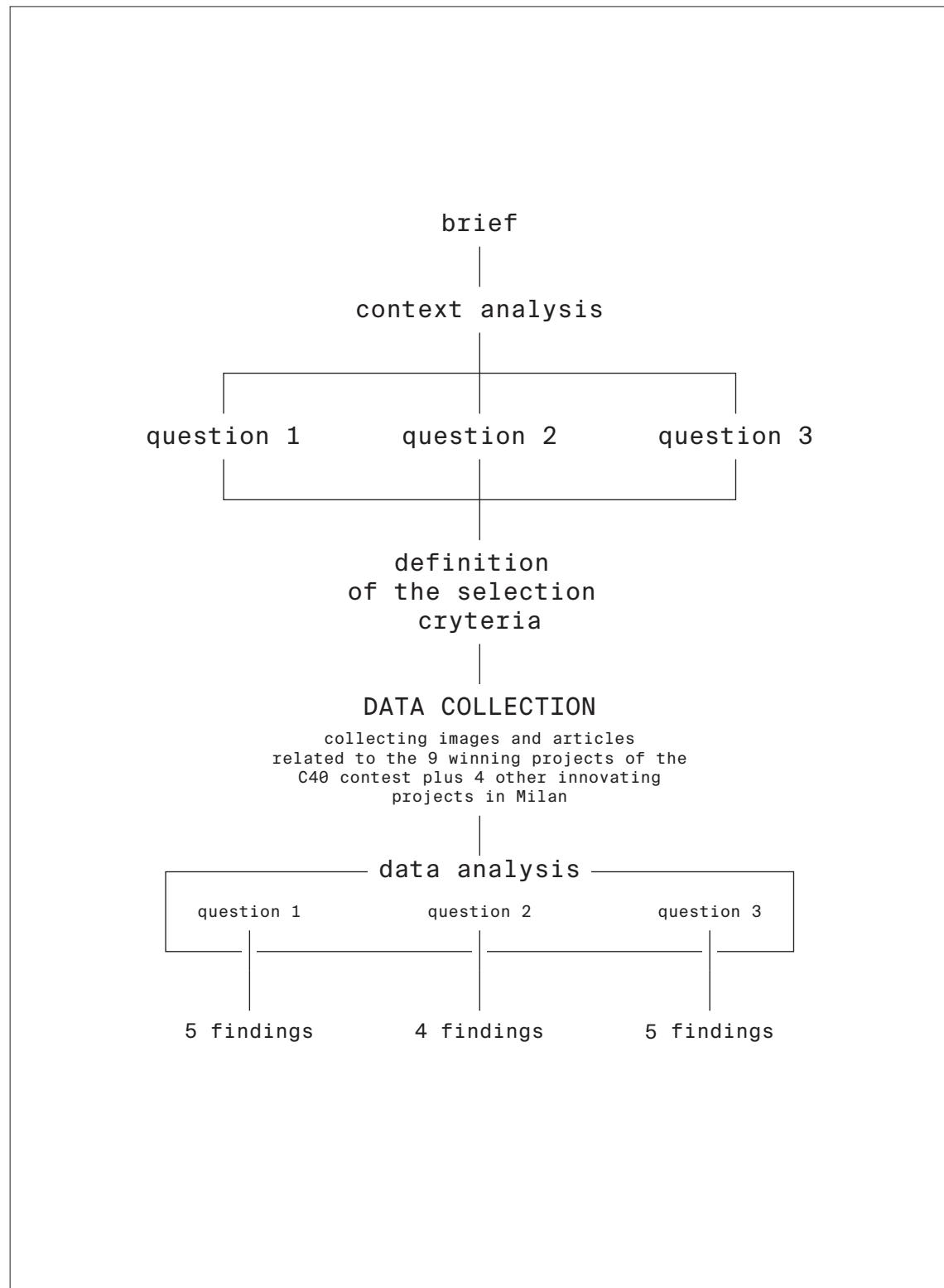


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FINAL SYNTHESIS DESIGN  
STUDIO Sect. C3  
LM in Communication Design  
A.A. 2021/2022

# PROTOCOLS DIAGRAM



# INTRODUCTION

## What are we talking about?

In recent years, as the world tries to find a solution to problems such as Climate Change, we have witnessed a surge in the use of concepts like sustainability, smart green or green jobs applied to different fields. The purpose of our research is to understand how these concepts, which we can sum up with the term "green narratives", are used in the field of Architecture, specifically in renderings with the purpose of communicating the projects. We decided to focus our attention on the city of Milan, analysing the winning projects of the C40 contest and then adding different projects, designed for a private context, as a comparison.

## CONTENTS

### How prominent is green and how it displayed in renders?

- Quantity of green
- Pre-post renders
- Adding Green
- Palette
- Blended Renders
- Views

### What are the accessory elements that support the green narrative?

- What kind of green
- Interacting with green
- Means of transportation

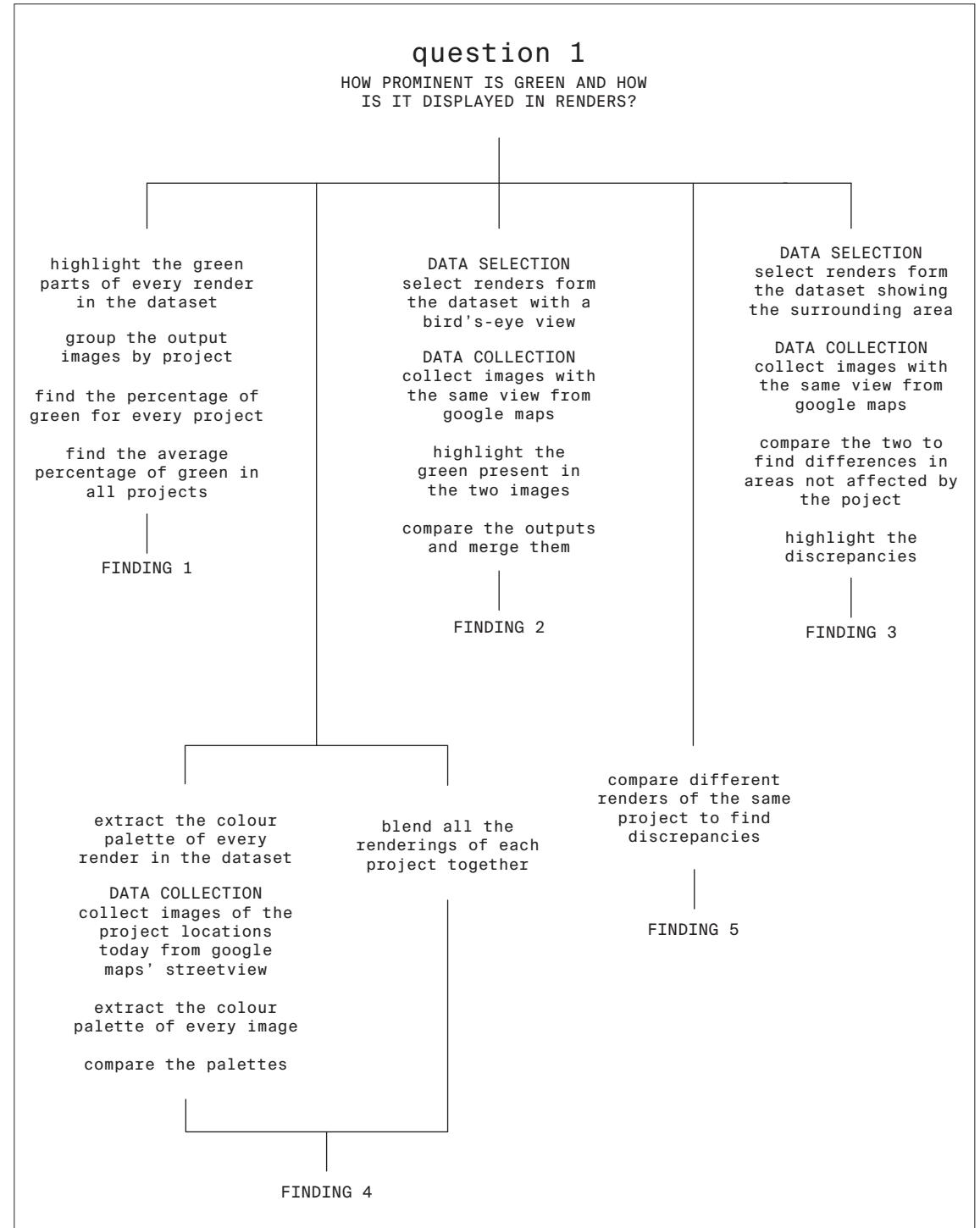
### How is green presented while communicating the projects?

- Number of websites
- Most used words
- Use of words in different groups of articles
- Terms for every project
- Presence of every term
- Distribution of the most frequent terms

# How prominent is green and how is it displayed in renders?

The first protocol will investigate the presence of greenery in renders and the methods used to display it. With the terms “green” and “greenery”, we not only include the green parts of a plant, but rather the vegetation as a whole.

1



Highlight of the greenery present in each render, calculation and comparison of the percentage for every project.



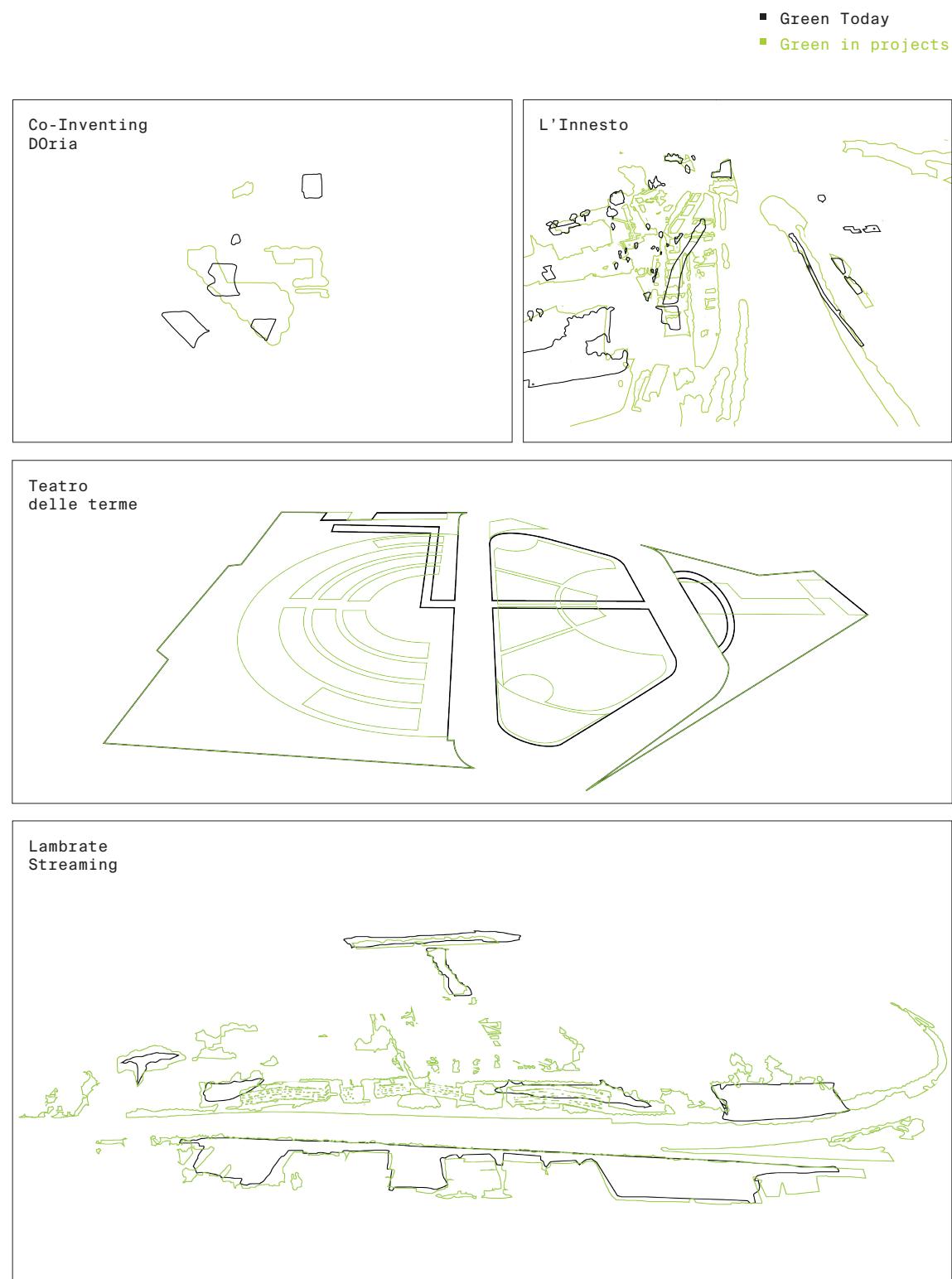
#### FINDING 1:

Though the goal of the renders is to showcase architecture projects, greenery still takes up a great part of the image. There aren't any notable differences between the projects selected by the C40 competition and those that are not.

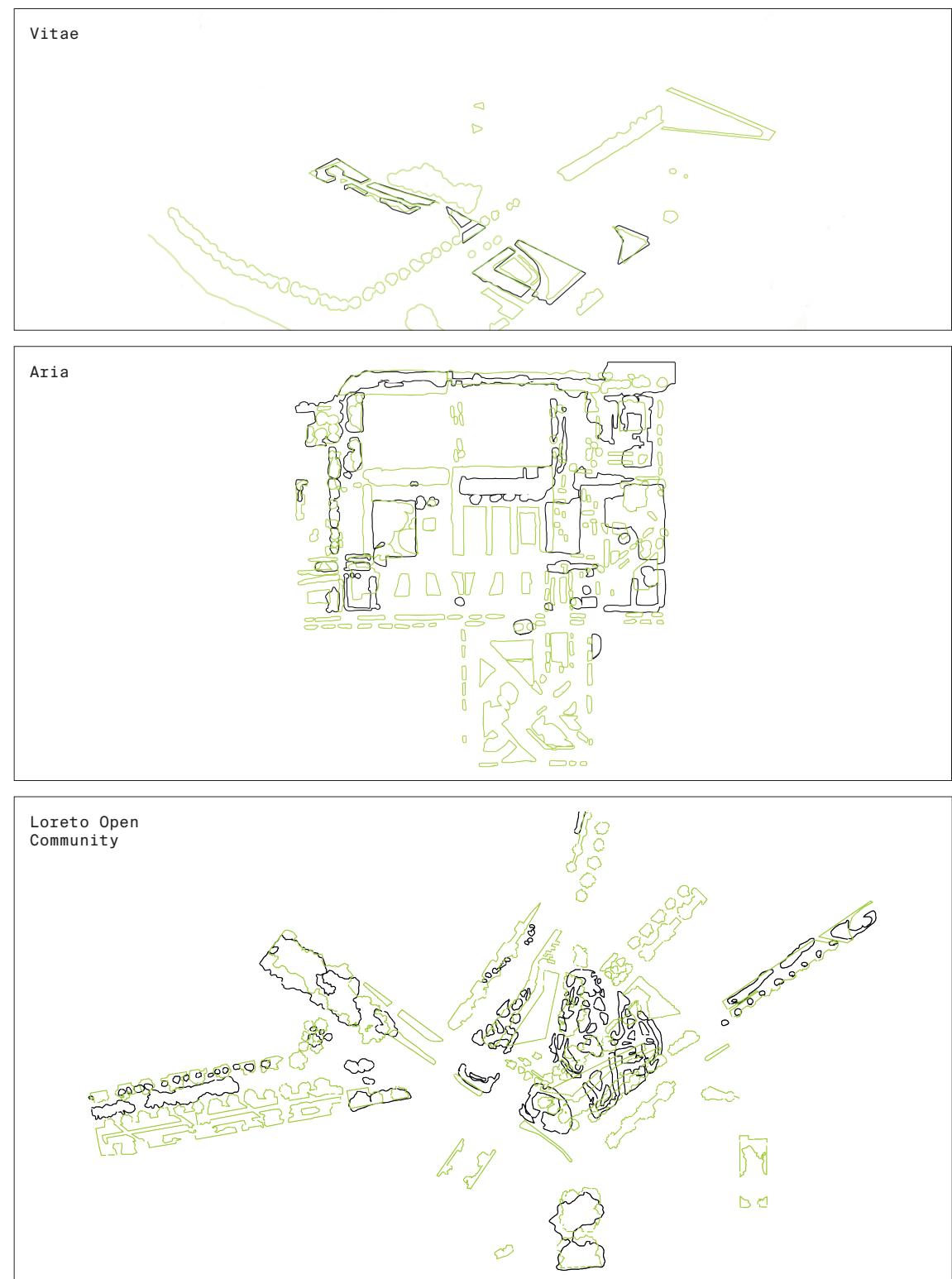
## Pre-Post renders

Comparison of the presence of greenery before and after the projects.

10



Vitae



### FINDING 2:

These projects will mainly affect areas where green is already present, converting it from the so-called "third landscape" to a more conscious green blended with the urban context.

## Adding Green

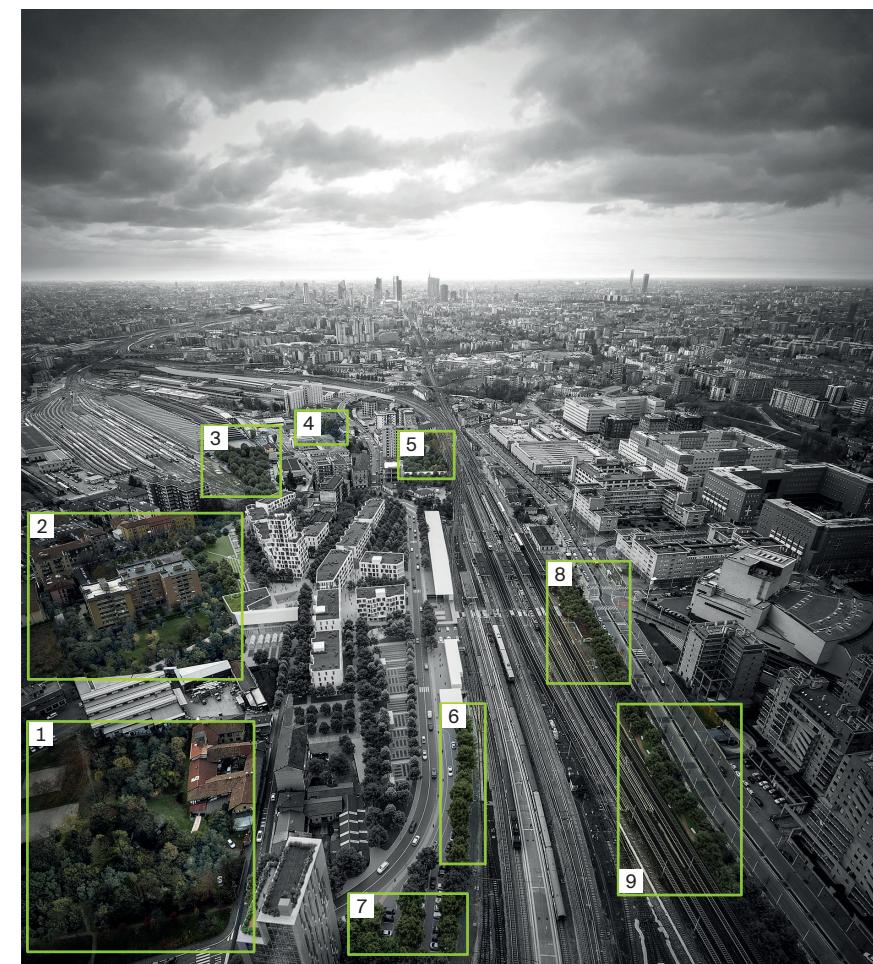
12

Analysis of the greenery depicted in the renders regarding the area surrounding the project, not the project itself, and comparing it to a satellite image of today.

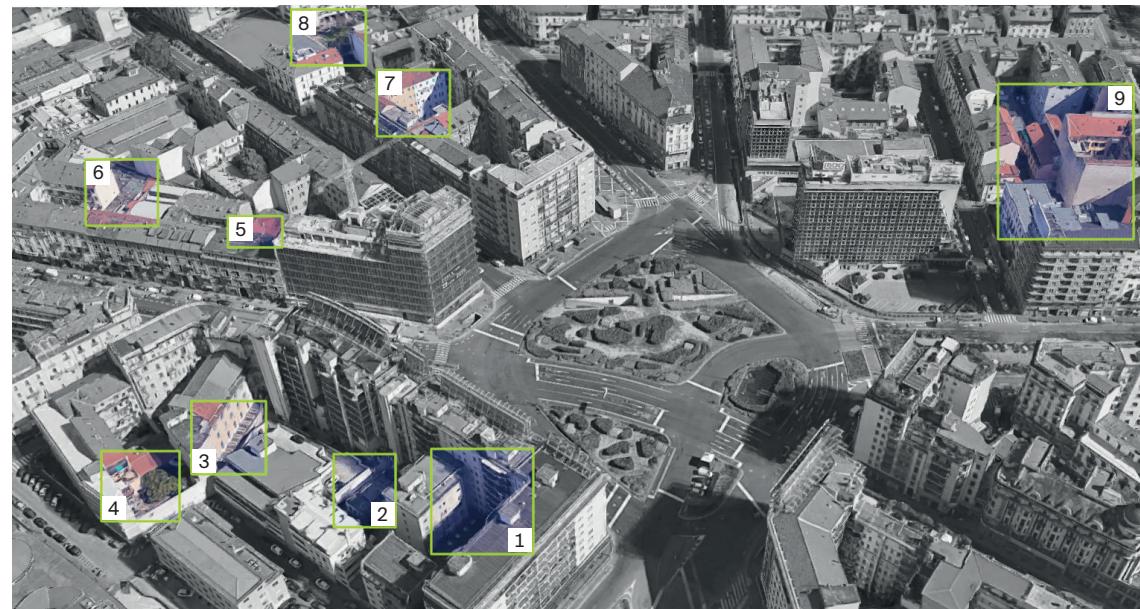
Loreto Open Community Render



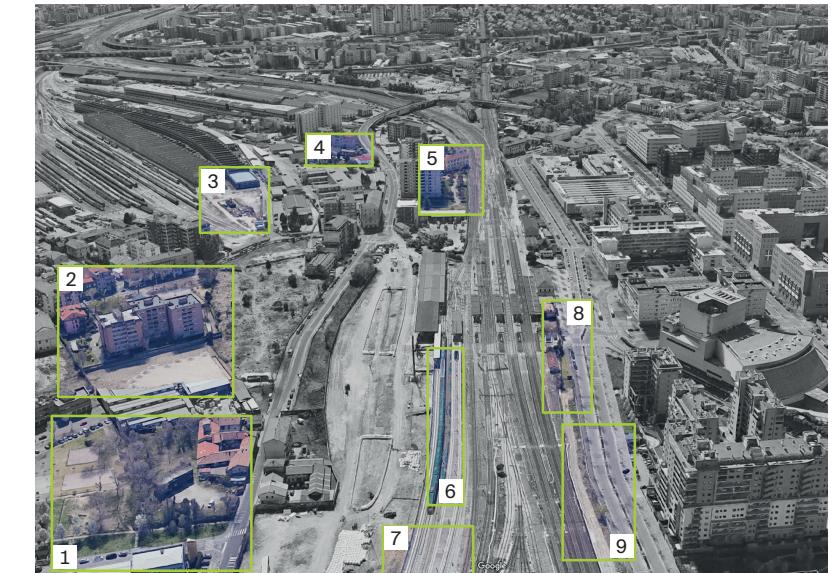
L'Innesto Render



Loreto Open Community Real



L'Innesto Real

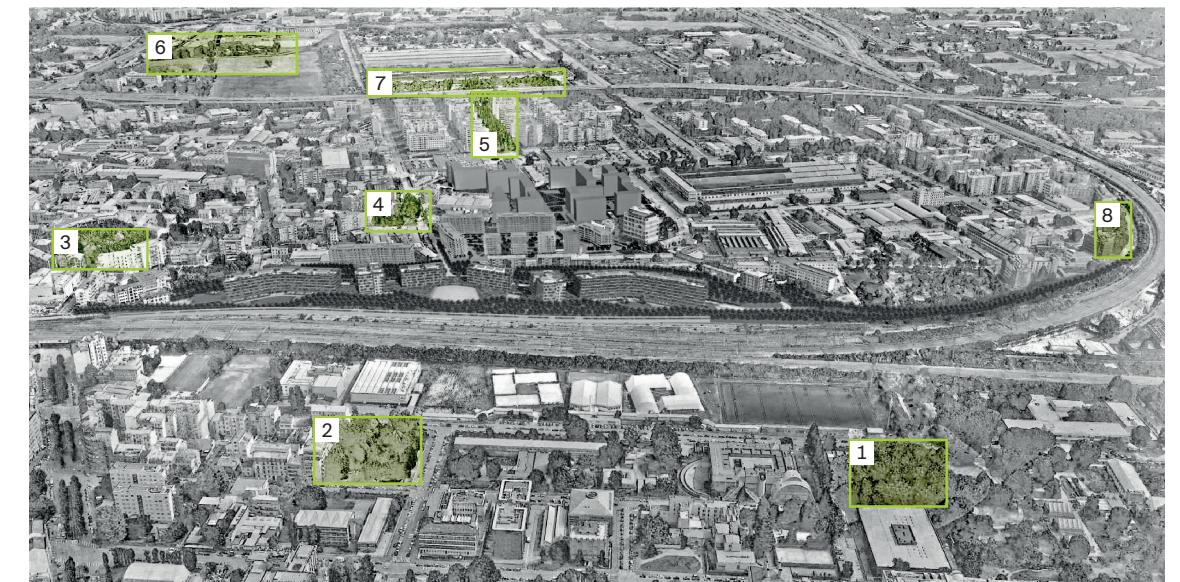


13

Scalo di Porta Romana Render



Lambrate Streaming Render



Scalo di Porta Romana Real



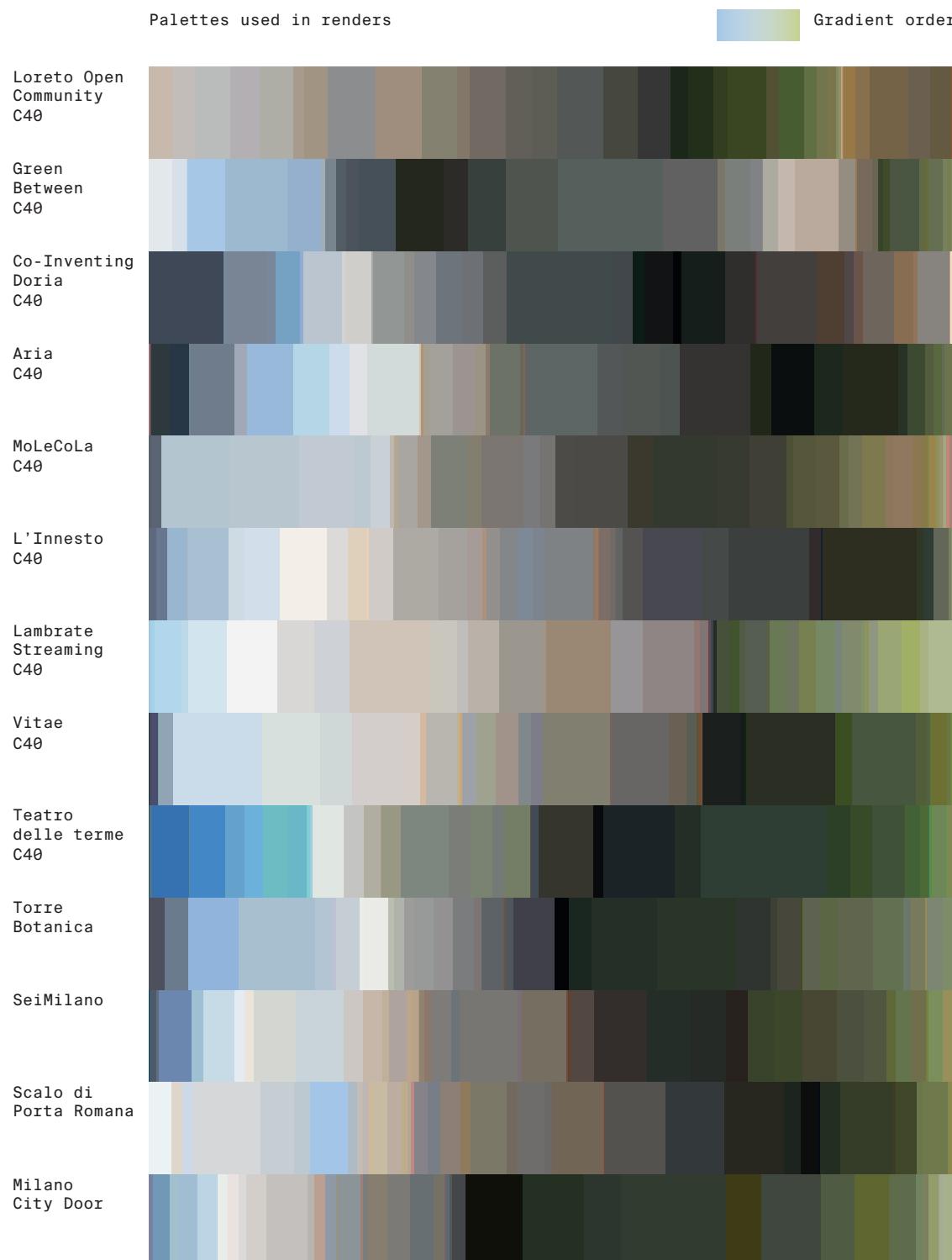
Lambrate Streaming Real



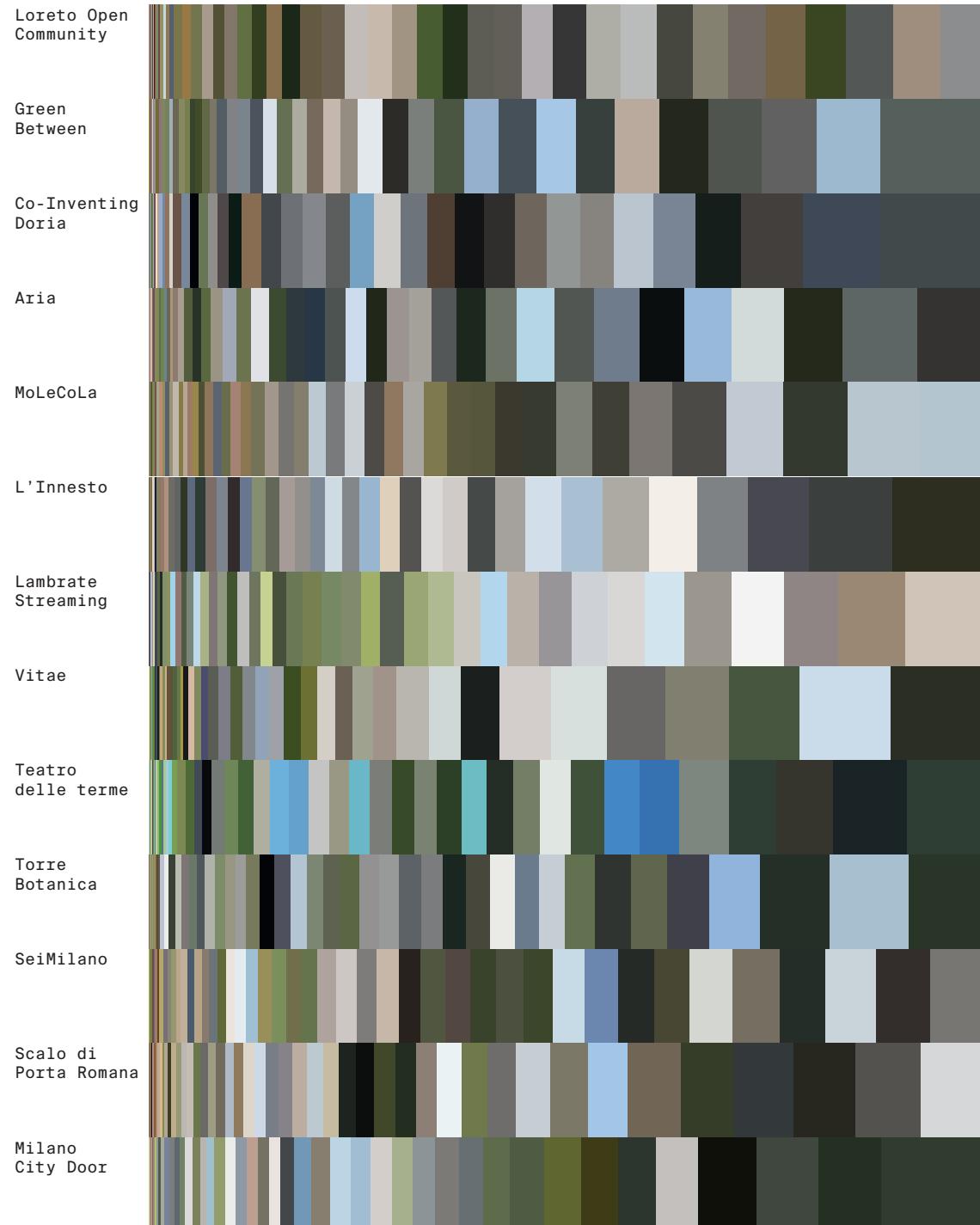
#### FINDING 3:

While showcasing the context in which the projects will be built, greenery is often added even in areas not affected by the project itself.

Comparison between the colours extracted from the renders and the colours extracted from images of the same locations as they are today.



Palettes used in renders



Palettes of Milan today

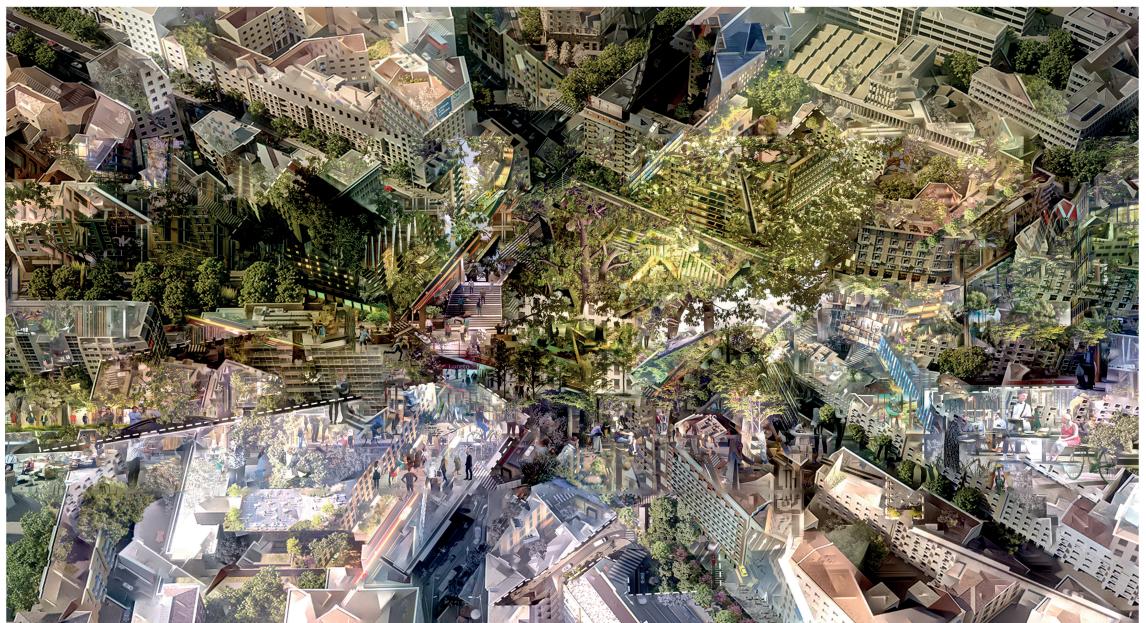


## Blended renders

All the different renders of the projects have been merged and blended into a single image using the auto-blend layers function in Photoshop.

20

## Loreto Open Community



Vitae



L'Innesto



Green Between

MoLeCoLa



Co-Inventing Doria



Teatro delle terme



Aria



## FINDING 4:

Both the blendings of the renders and their colour palettes show a great use of colours related to nature. When compared to the colours that are now present in Milan, it is clear they use a lot more green and less grey.

## Views

Analysis of the consistency between different viewports of the same projects.

Loreto Open Community  
Image 1a



Non exploitable green

Bushes

Lawn

Trees

1\_The trees area of image nr. 1a aren't displayed on the image nr. 2a

2\_In image nr. 2a a tree has been added to enhance the perception of greenery

Image 2a



22

Loreto Open Community  
Image 1b



Trees

1/2\_In image nr. 2b two trees have been added to enhance the perception of greenery

Image 2b



23



Trees

1/2\_In image nr. 2b two trees have been added to enhance the perception of greenery

Image 2a



Image nr. 1 shows the render used to publicly present the project, despite the image being unusually framed.  
Image nr. 2 represents a possible behind the scenes on how picture nr. 1 was taken.

Image 1b



Image 2b



FINDING 5:

The renders' point of view is chosen so that, through its perspective, it can include a greater amount of greenery. But sometimes there are discrepancies between different viewpoints.

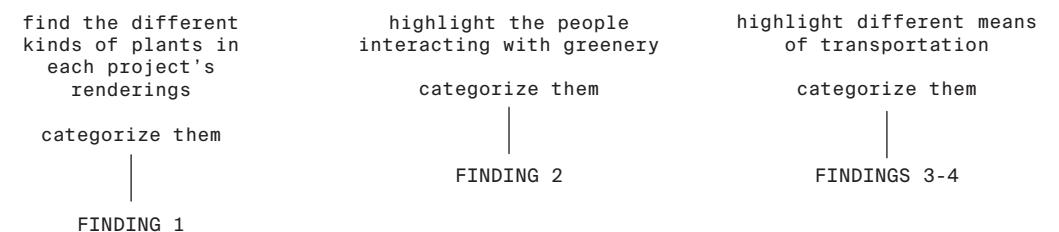
## What are the accessory elements that support the green narrative?

The second protocol shifts slightly from analysing the green itself, to exploring the other elements used in renders to communicate the green narrative.

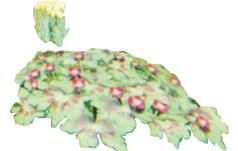
2

### question 2

What are the accessory elements that support the green narrative?



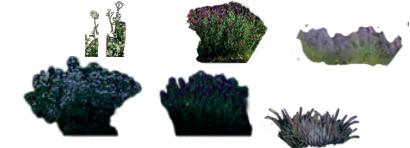
Analysis of the various kinds of greenery depicted in the renders, grouped and categorized in trees, bushes and weeds, and flowers.

|                       | Trees  | Bushes and weeds  | Flowers  |
|-----------------------|--|---|--|
| Milano<br>City Door   |    |      |       |
| Teatro<br>delle terme |    |      |   |
| Lambrate<br>Streaming |      |   |    |
| SeiMilano             |        |      |   |
| Torre<br>Botanica     |    |    |   |
| MoLeCoLa              |   |     |   |

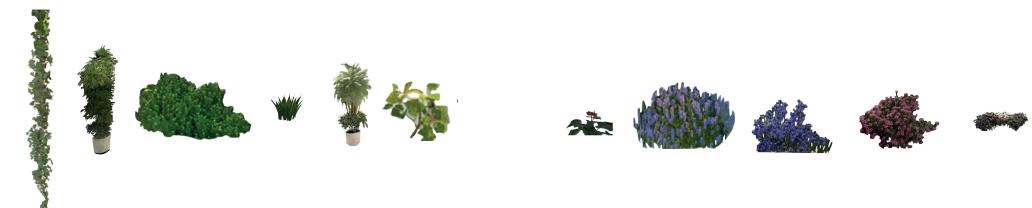
Green  
Between



Aria



Vitae



Scalo di  
Porta Romana



Loreto Open  
Community



L'Innesto



Co-Inventing  
Doria



FINDING 1:

While the renderings show a great amount of greenery, in most cases this does not correspond to a great variety of plants, but rather the same ones are repeated numerous times. This is true especially in the case of trees.



Milano City Door

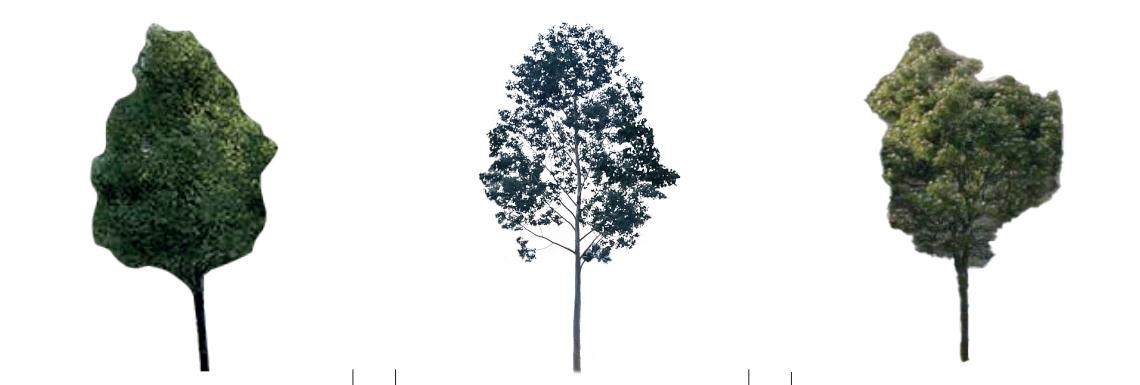
Teatro delle terme



Torre Botanica



Lambrate Streaming



MoLeCoLA

Green Between



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Milano City Door





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Milano City Door



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Green Between



Aria



Teatro delle terme

Lambrate Streaming



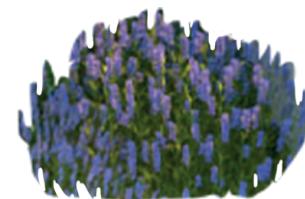
Sei Milano

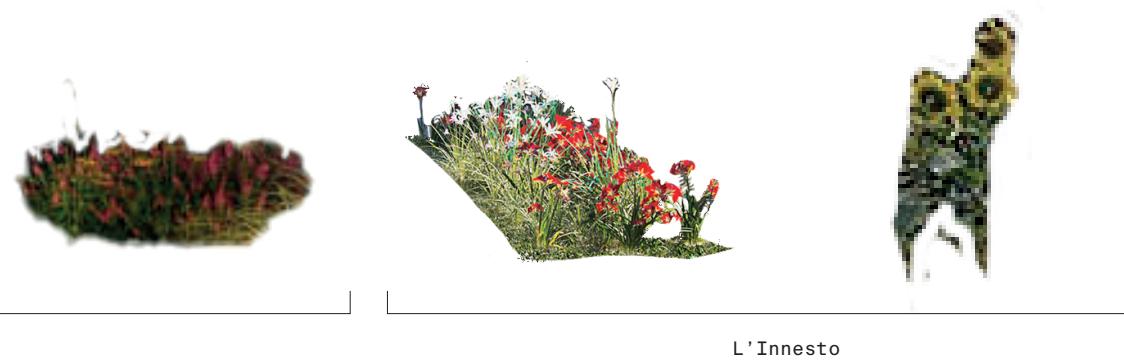


Vitae



Torre Botanica





Analysis of the actions that the people depicted in the render are performing in the green areas, grouped by two main categories: passive interactions (e.g. sitting in the grass or under a tree's shade) and active interactions (directly engaging with the greenery e.g. planting vegetation)

**FINDING 2:**

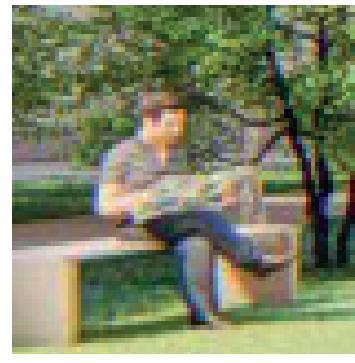
Passive interactions are the most common inside the renders, meaning people simply enjoy their green surroundings. Meanwhile active interactions are limited to community initiatives regarding nature, such as community gardens.



Loreto Open Community



Lambrate Streaming



Aria

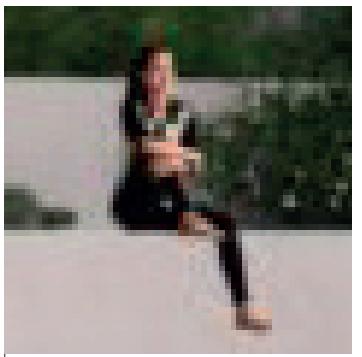


Vitae

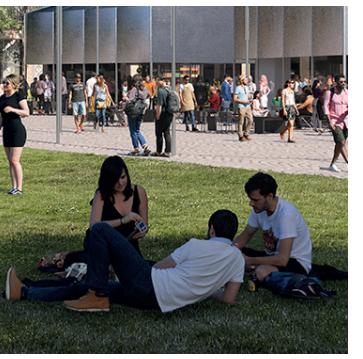


MoLeCoLa

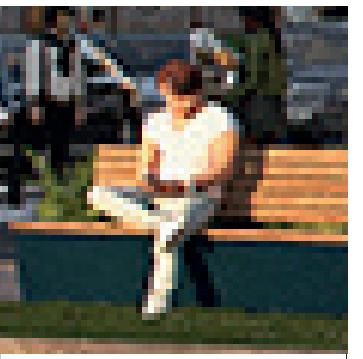
Torre Botanica



SeiMilano



SeiMilano



Scalo di Porta Romana



Milano City Door



Loreto Open Community

Aria

MoLeCoLa

Green Between

Analysis of the vehicles depicted in the renders, grouped and categorized in private cars, bicycles and scooters, and public transportation.

|                       | Cars  | Bicycles/Scooters   | Public transportation   |
|-----------------------|---|---|---|
| Milano<br>City Door   |   |   |   |
| Teatro<br>delle terme |   |   |   |
| Lambrate<br>Streaming |    |   |   |
| SeiMilano             |   |  |   |
| Torre<br>Botanica     |  |  |   |
| MoLeCoLa              |   |  |  |

Green  
Between



Aria



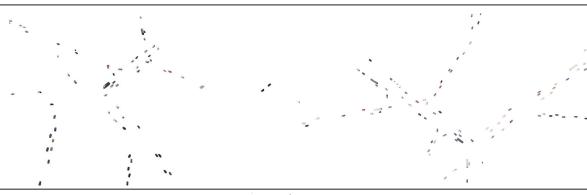
Vitae



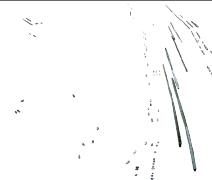
Scalo di  
Porta Romana



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Co-Inventing  
Doria



#### FINDINGS 3-4:

Motor vehicles are shown only in renderings with a larger point of view including the surrounding city, or in projects where street mobility is directly affected.

The scarce representation of means of transportation is limited to more eco-friendly vehicles such as bicycles, public transport, or electric cars.



Lambrate Streaming

Aria



Torre Botanica



Green Between

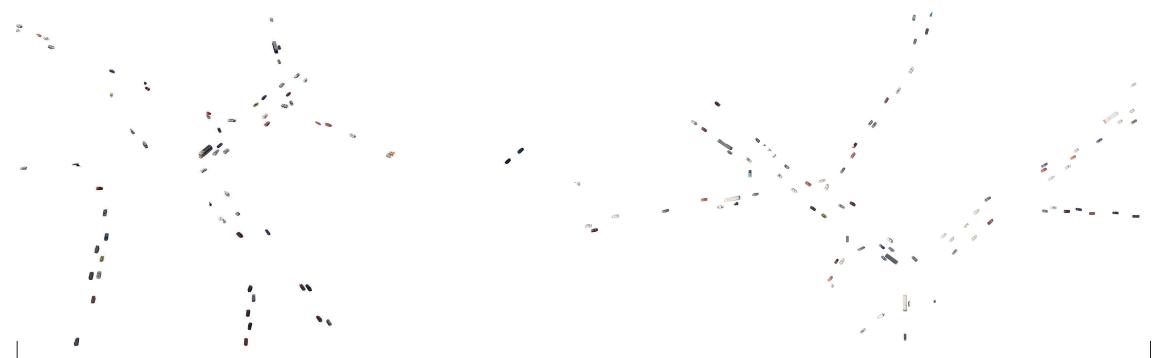


Vitae



L'Innesto

Scalo di Porta Romana



Loreto Open Community



MoLeCoLa



SeiMilano

Torre Botanica



Lambrate Streaming



MoLeCoLa



Green Between



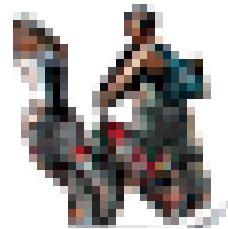
Aria



Co-Inventing Doria



Scalo di Porta Romana



Loreto Open Community

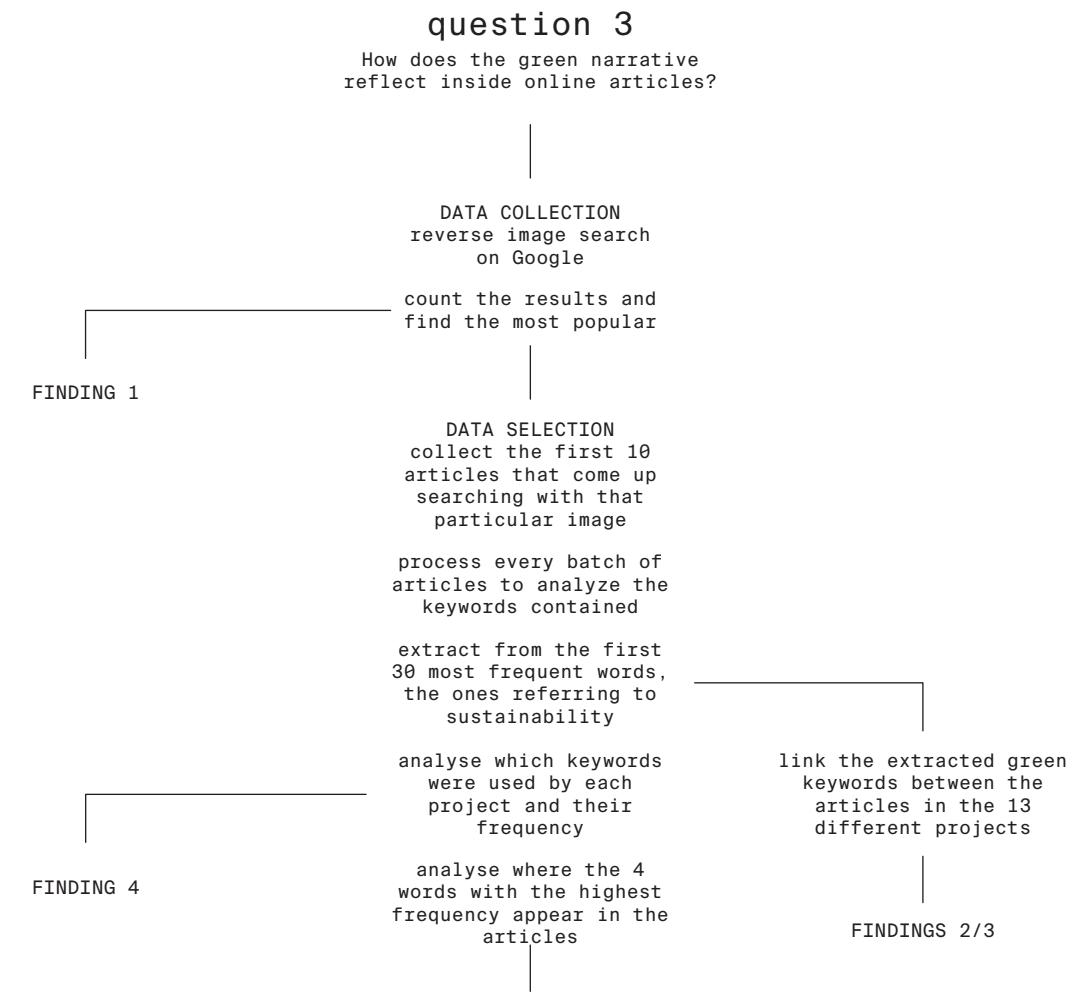


L'Innesto

# How is green presented while communicating the projects?

The third protocol will investigate what kind of words and how they have been used to describe the projects online to convince people and sell the project.

3



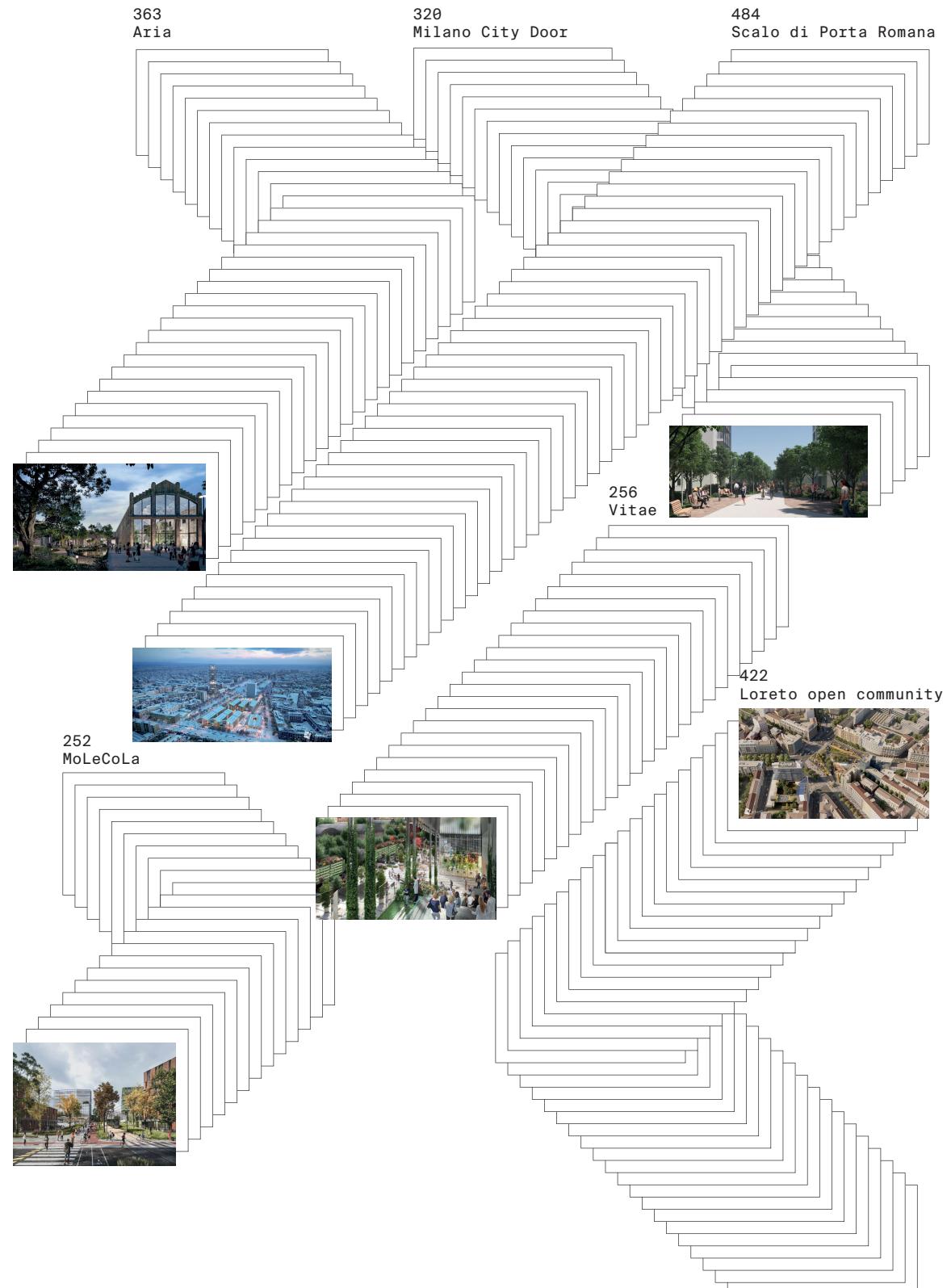
## Number of websites

Using google image search to determine the number of web pages on which each project render is present, reporting the most popular image.

60



363  
Aria



### FINDING 1:

There appears to be no correlation between the type of framing and the most used image of each project. Renderings representing an overall view of the project are often more popular. The only two anomalous situations are the Vitae project and the Milan City Door project.

## Most used words

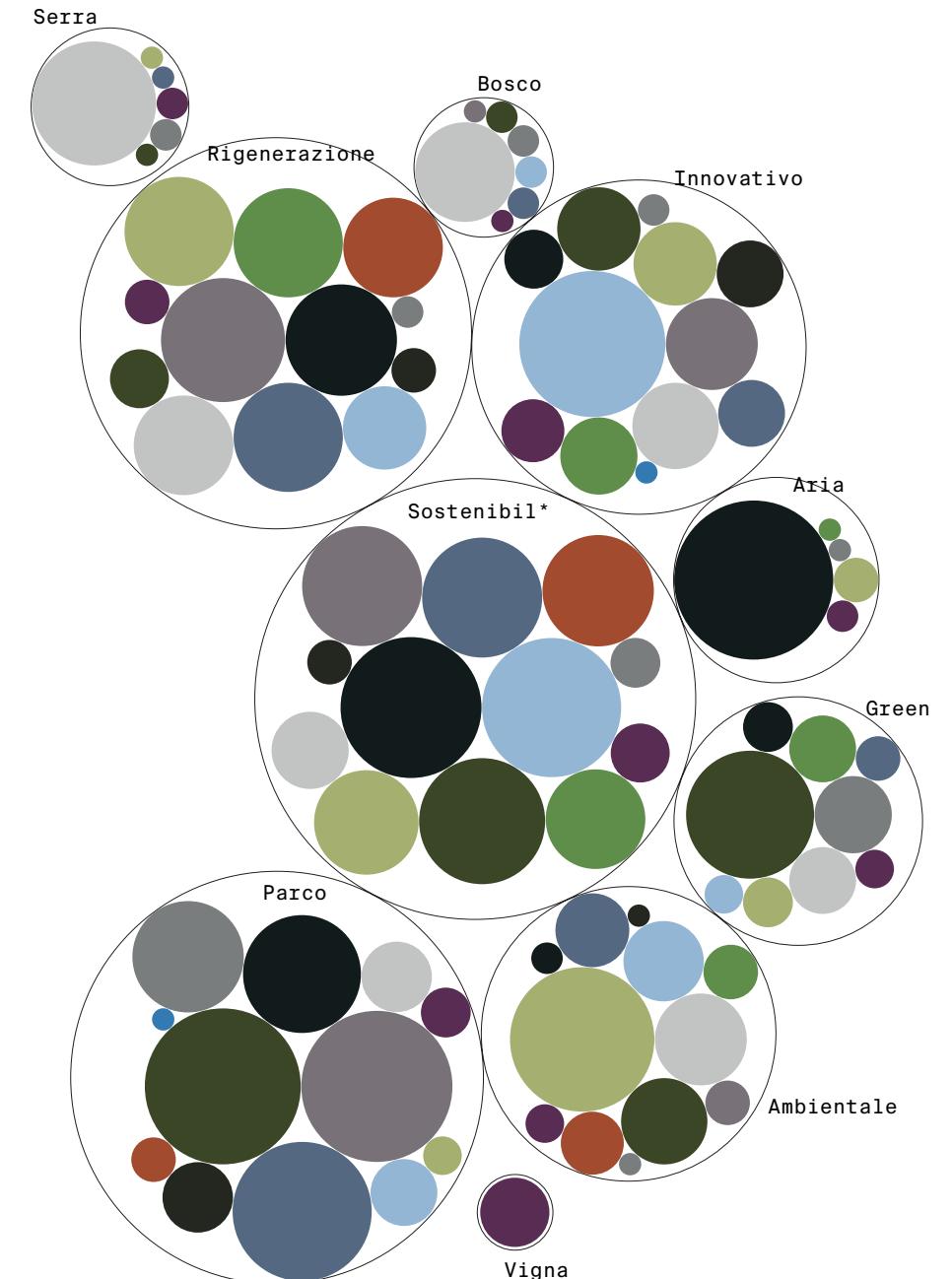
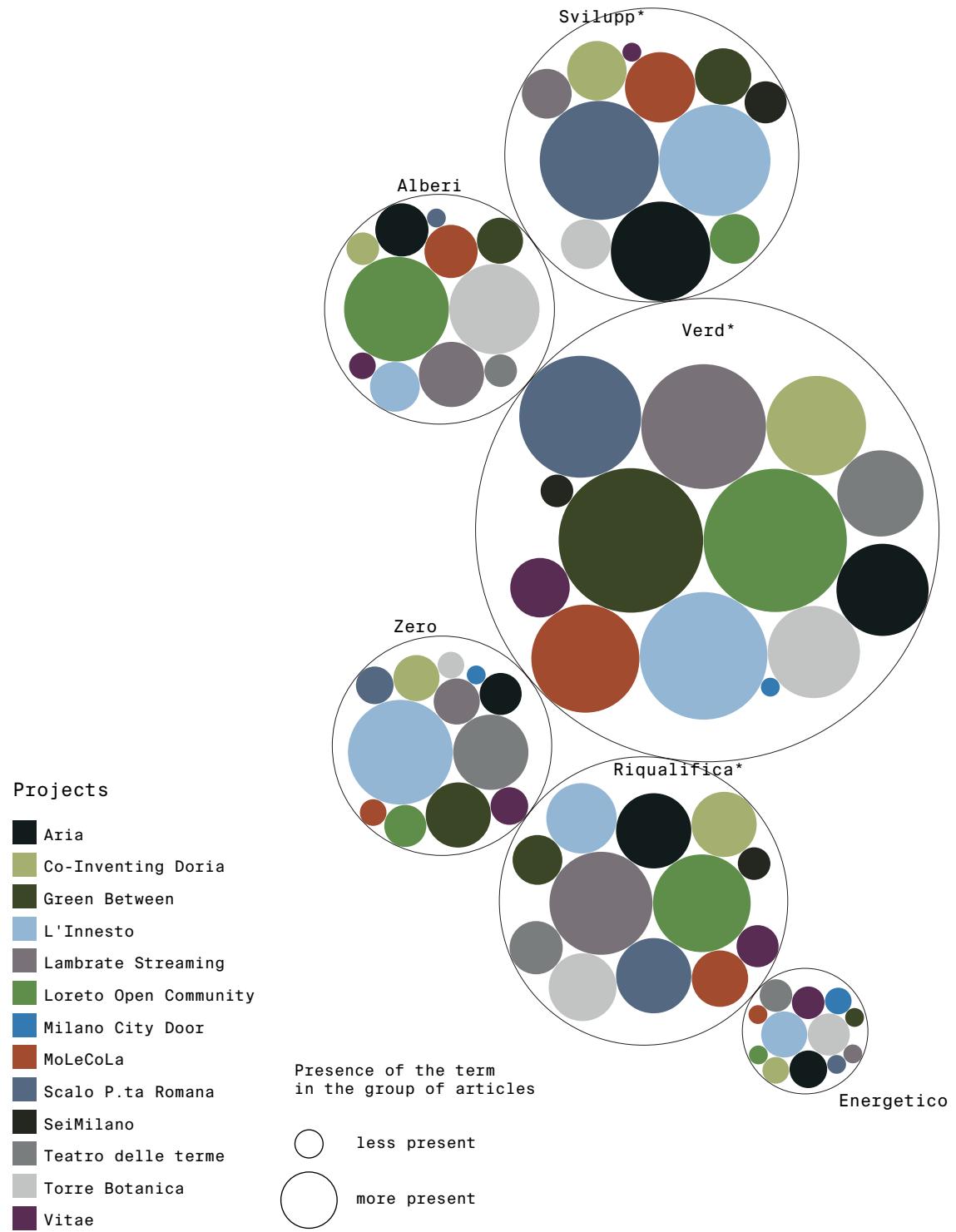
62

List of the 30 most common terms within the top ten Google results obtained by searching for the most popular image of each project. For each project, terms related to sustainability are highlighted.

63

| most used terms for each project | Milano City Door | Teatro delle terme | Lambrate Streaming | SeiMilano       | Torre Botanica | MoLeCoLa      |  | Green Between - Tessiture Urbane | Aria           | Vitae       | Scalo di Porta Romana | LOC - Loreto Open Community | L'INNESTO   | Co-Inventing Doria |
|----------------------------------|------------------|--------------------|--------------------|-----------------|----------------|---------------|--|----------------------------------|----------------|-------------|-----------------------|-----------------------------|-------------|--------------------|
| 1                                | Milano           | scuderie           | Lambrate           | quartiere       | progetto       | Bovisa        |  | verde                            | Milano         | Vitae       | Romana                | Loreto                      | progetto    | progetto           |
| 2                                | City             | progetto           | progetto           | SeiMilano       | Pirelli        | Milano        |  | Crescenzago                      | progetto       | progetto    | Milano                | via                         | Milano      | Milano             |
| 3                                | Door             | terme              | Milano             | nuovo           | 39             | progetto      |  | Milano                           | Macello        | spazi       | scalo                 | piazza                      | scalo       | progetti           |
| 4                                | comfort          | Milano             | servizi            | parco           | ponte          | MoLeCoLa      |  | parco                            | quartiere      | edificio    | progetto              | piazzale                    | sociale     | via                |
| 5                                | complesso        | De                 | città              | città           | Milano         | quartiere     |  | Lambro                           | città          | building    | Porta                 | Milano                      | quartiere   | ambientale         |
| 6                                | abitativo        | San                | scalo              | progetto        | Torre          | aree          |  | progetto                         | Aria           | Cities      | masterplan            | progetto                    | housing     | Doria              |
| 7                                | appartamenti     | Siro               | via                | Borio           | Boeri          | stazione      |  | città                            | circa          | Ratti       | città                 | città                       | Lombardia   | area               |
| 8                                | Assago           | termale            | parco              | Mangiarotti     | nuova          | lungo         |  | housing                          | spazi          | urban       | villaggio             | Padova                      | Greco       | Reinventing        |
| 9                                | casa             | Montel             | sistema            | studio          | città          | nodo          |  | green                            | IED            | città       | olimpico              | spazio                      | spazi       | Cities             |
| 10                               | dotati           | via                | verde              | partners        | Stefano        | Hines         |  | quartiere                        | Cities         | Milano      | quartiere             | loc                         | verde       | progettista        |
| 11                               | edifici          | città              | quartiere          | Prelios         | serra          | mobilità      |  | cities                           | nuovo          | area        | sviluppo              | traffico                    | innesto     | bando              |
| 12                               | energetico       | parco              | spazi              | SGR             | Diller         | nord          |  | reinventing                      | via            | Carlo       | COIMA                 | pubblico                    | zero        | nome               |
| 13                               | futuro           | grande             | Cities             | Värde           | COIMA          | nuovo         |  | bando                            | edifici        | Reinventing | parco                 | nuova                       | Breda       | verde              |
| 14                               | impianto         | verde              | mq                 | innovativo      | nuovo          | pubblico      |  | between                          | oltre          | new         | verde                 | verde                       | circa       | città              |
| 15                               | interni          | centro             | Reinventing        | residenti       | alberi         | via           |  | nuovo                            | Ex             | lavoro      | Covivio               | spazi                       | sistema     | esperto            |
| 16                               | metri            | vasche             | edilizia           | vivere          | Pirellino      | spazi         |  | via                              | mq             | progetti    | spazi                 | alberi                      | fondo       | quartiere          |
| 17                               | nuovo            | ex                 | pubblico           | architects      | urbana         | spazio        |  | piazza                           | design         | spazio      | Prada                 | viale                       | FS          | responsabile       |
| 18                               | NZEB             | euro               | San                | Cucinella       | Gioia          | nuovi         |  | servizi                          | prevede        | piazza      | vincitore             | grande                      | Cities      | S.r.l              |
| 19                               | ogni             | zero               | aree               | Mario           | via            | realizzazione |  | redo                             | Reinventing    | pubblico    | 2026                  | oltre                       | gestione    | aree               |
| 20                               | residenziale     | progetti           | scali              | spazi           | bosco          | Cities        |  | social                           | internazionale | smart       | sud                   | riqualificazione            | immobiliare | riganegazione      |
| 21                               | soluzione        | acque              | piazze             | urbana          | porta          | comune        |  | sociale                          | campus         | ufficio     | concorso              | Cetetus                     | sistemi     | viale              |
| 22                               | urbano           | bando              | progetti           | Desvigne        | rigenerazione  | percorsi      |  | comunità                         | due            | metri       | grande                | corso                       | team        | Loreto             |
| 23                               |                  | nuovo              | ferroviario        | edifici         | verde          | Reinventing   |  | superficie                       | culturale      | ricerca     | rigenerazione         | Porpora                     | Reinventing | edificio           |
| 24                               |                  | complesso          | riGenerazione      | internazionale  | edificio       | Politecnico   |  | grazie                           | attività       | urbana      | servizi               | urbana                      | aree        | Lambrate           |
| 25                               |                  | metri              | piano              | Michel          | spazio         | città         |  | metropolitana                    | ariee          | vigna       | nuovo                 | mq                          | fondazione  | sito               |
| 26                               |                  | piano              | pubblici           | Milano          | bibliotca      | due           |  | qualità                          | parco          | C40         | Carlo                 | Nhood                       | Italia      | internazionale     |
| 27                               |                  | acqua              | masterplan         | mq              | comune         | mobility      |  | residenti                        | pubblico       | competition | outcomist             | bando                       | urbana      | pubblico           |
| 28                               |                  | Cities             | internazionale     | multifunzionale | residenziale   | Park          |  | spazi                            | grazie         | grazie      | studio                | Buenos                      | anni        | siti               |
| 29                               |                  | green              | urbana             | paesaggista     | spazi          | verdi         |  | C40                              | nuova          | luoghi      | holding               | nuovo                       | area        | urbana             |
| 30                               |                  | Marzorati          | nuovi              | progettato      | verticale      | edifici       |  | emissioni                        | rigenerazione  | Milan       | stato                 | rigenerazione               | ex          | S.p.a              |
| 31                               |                  |                    | sociale            | rigenerazione   |                | rigenerazione |  | nuova                            |                | piano       |                       |                             | gruppo      | spazi              |
| 32                               |                  |                    | sostenibile        | sostenibilità   |                | sistema       |  |                                  |                | scuderie    |                       |                             | lavoro      |                    |
| 33                               |                  |                    | studi              | sviluppo        |                |               |  |                                  |                | Serio       |                       |                             | porta       |                    |
| 34                               |                  |                    |                    |                 |                |               |  |                                  |                | verde       |                       |                             |             |                    |

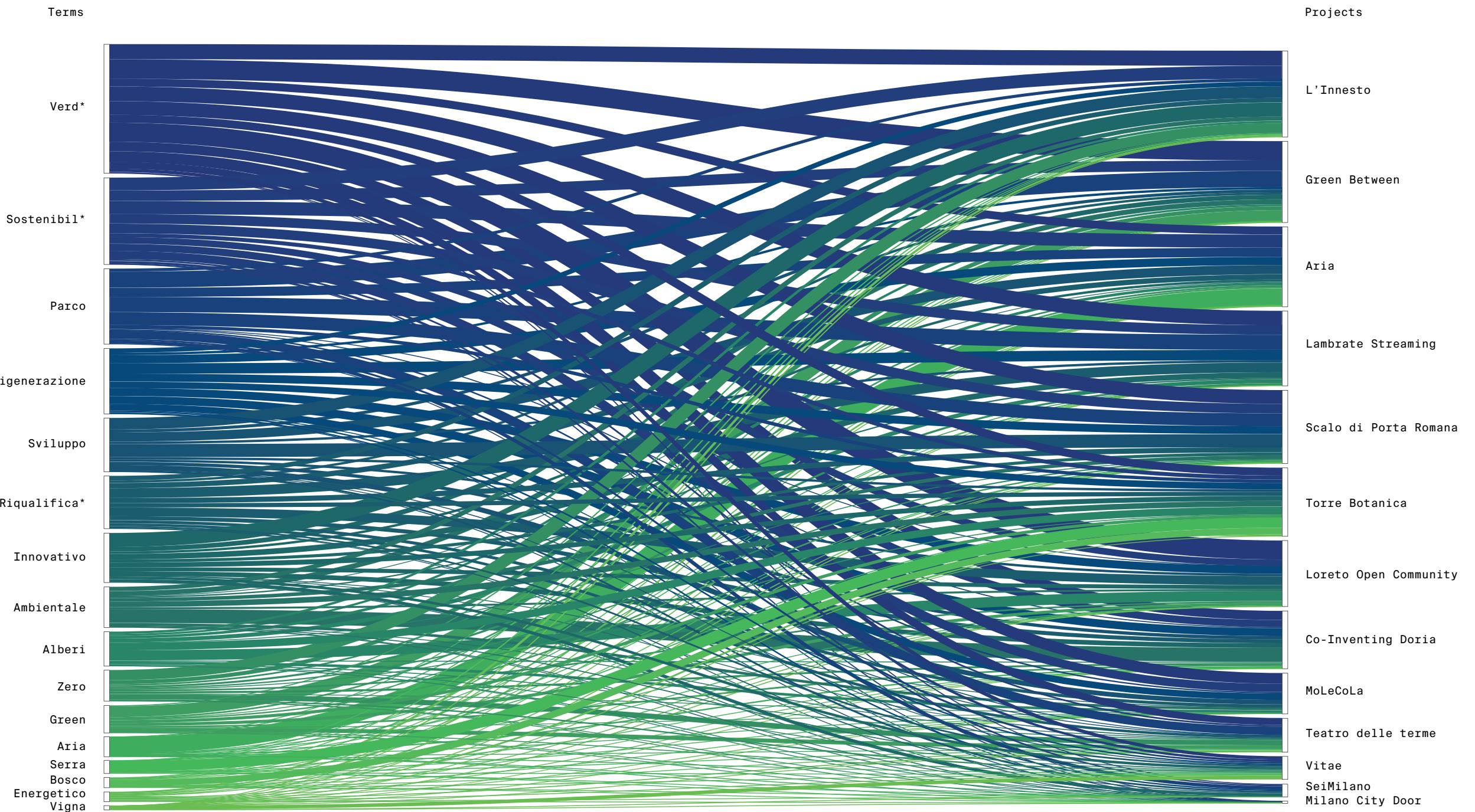
Graph representing the use of terms related to sustainability by groups of articles discussing various projects.



#### FINDING 2:

It can be seen that the same terms are used to describe several projects, suggesting that there is a transversal vision of the concept of sustainability.

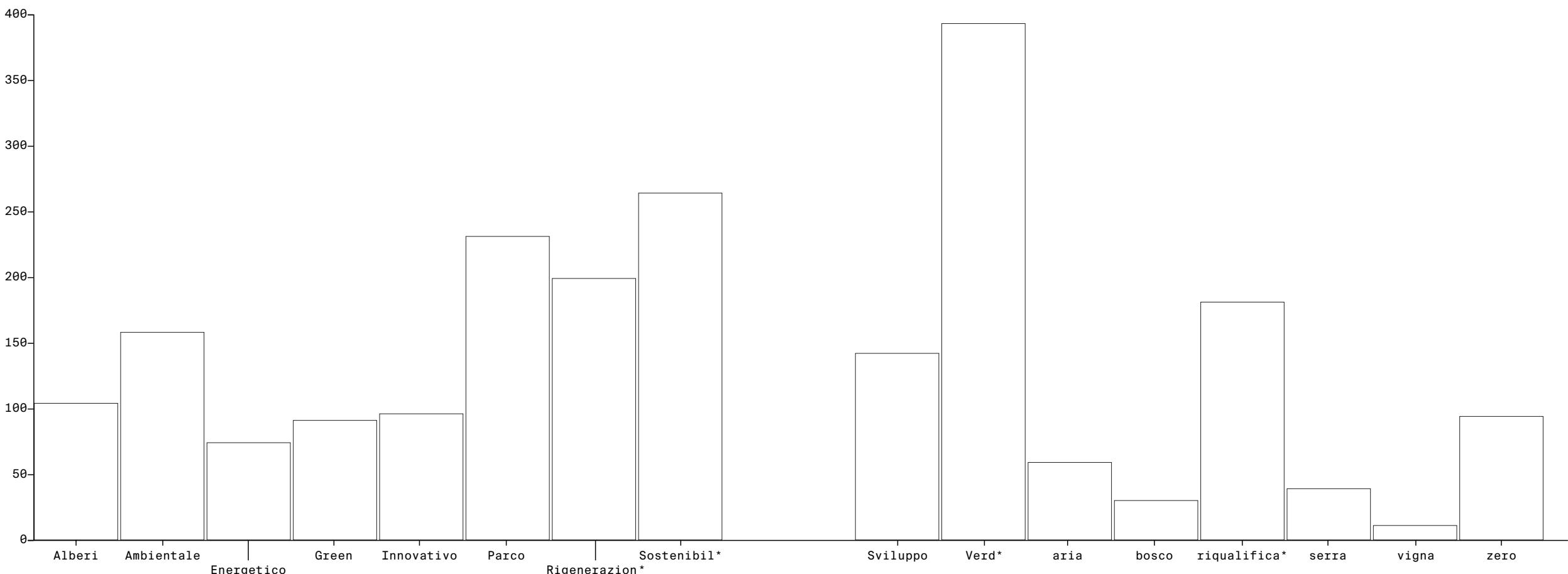
Alluvial diagram representing the proportion of previously selected terms within the articles for each project.



#### FINDING 3:

It can be seen that the gradient represented by the terms on the left is repeated in each subdivision into projects on the right. This means that in each of the groups of project articles, there are enough terms to allow the gradual change of colour to be perceived. This represents the fact that in different groups of articles, the same variety of terms related to sustainability are being used.

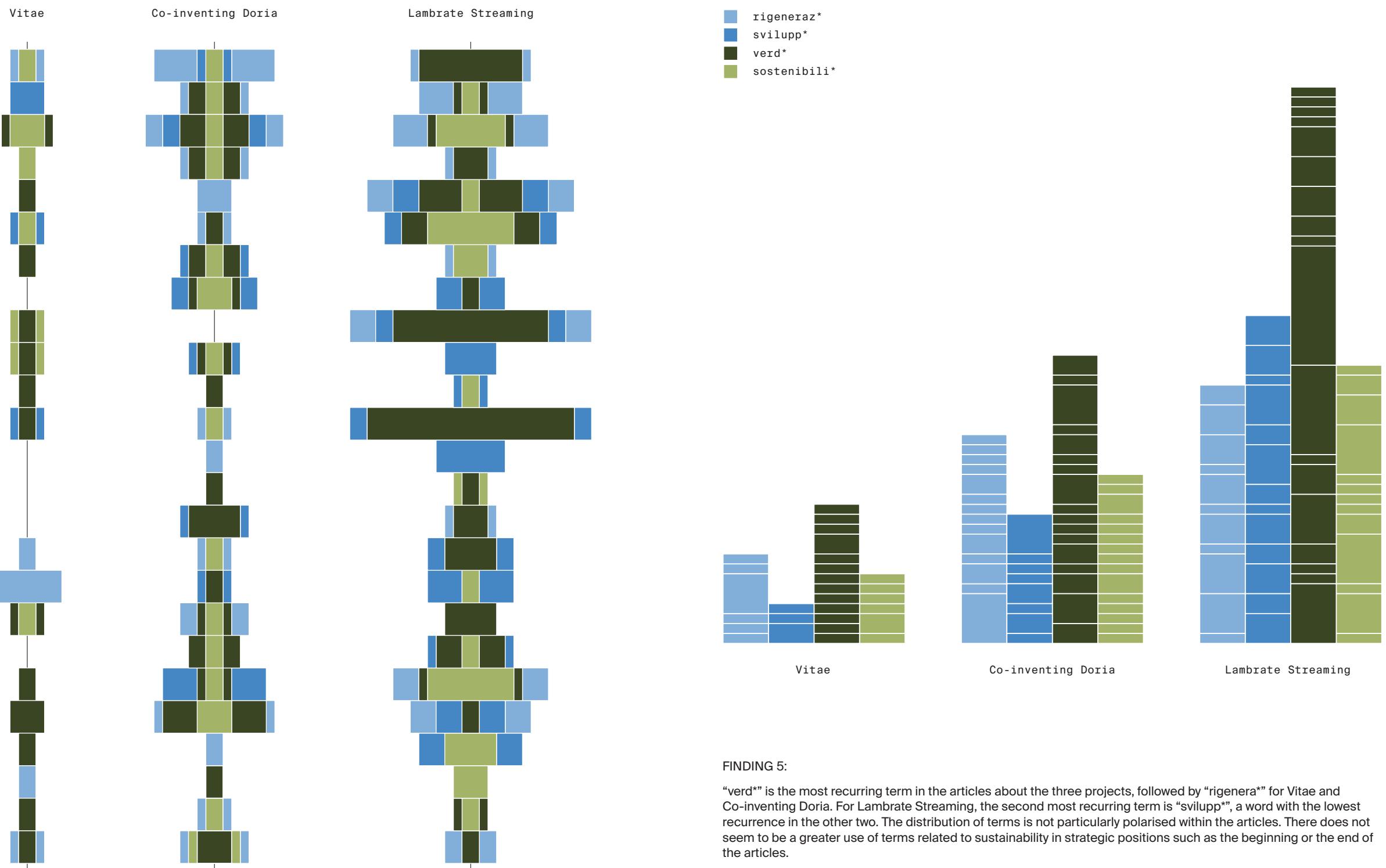
Histogram representing the number of times each term occurs in the total number of articles.



#### FINDING 4:

The terms used most often are “rigenera\*” (regeneration), “svilupp\*” (development), “verd\*” (green) and “sostenibil\*” (sustainability). These give an idea of where the attention of those who talk about sustainable issues falls in relation to urban renewal projects in a city like Milan, which is constantly trying to renew itself, moving away from the name of a grey and environmentally uncaring metropolis.

Comparison of the distribution of the four most frequent words related to sustainability within the projects whose articles present the maximum (Lambrate Streaming), minimum (Vitae) and average (Co-inventing Doria) number of these terms.



## Conclusions

To sum up our analysis, we have discovered numerous ways in which the green narrative is used to communicate architecture projects. In some cases this narrative is enhanced to the point of breaking reality (e.g. adding trees in the foreground where it is impossible, like in the Sei Milano project), suggesting a correlation between "greener" and "better".

Regarding the visual aspect of the research, we did not find any significant difference between the projects selected by the C40 contest and those which were not. However, when searching for the articles for the third protocol, for two out of four projects that were not part of C40 we were able to find only short paragraphs from real estate websites, suggesting a lack of interest from other kinds of news outlets.

Nonetheless, a common narrative can be found since the first 11 words, of the 30 most frequent ones referring to sustainability, are used by at least 10 of the examined projects out of 13. The reason why other words are not present across most projects is because they are very site-specific, often referring to a particular structure or building.



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