



Presented at the FIG Working Week 2023,  
28 May - 1 June 2023 in Orlando, Florida, USA

# FIG WORKING WEEK 2023

28 May - 1 June 2023 Orlando Florida USA

Protecting  
Our World,  
Conquering  
New Frontiers

## Geometra 2030

Challenges and Insights in Spatial Planning for the Italian Surveyors

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Luca DAL BUONO,  
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## European Directives

Targets	CO2 emission reduction %
<b>2020</b>	<b>20</b>
<b>2030</b>	<b>32,5</b>
<b>2050</b>	<b>55</b>



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Piano Nazionale  
di Ripresa e Resilienza

#NEXTGENERATIONITALIA



PROGETTO

GEOMETRA  
**2030**

SDGs

PNRR

Geometra  
2030

The **National Recovery and Resilience Plan** (*Piano Nazionale di Ripresa e Resilienza*, PNRR) is part of the **Next Generation EU (NGEU)**, which has a duration of six years, from 2021 to 2026. Half of the allotted budget is in form of grants, while the remaining half are in low interest loans.

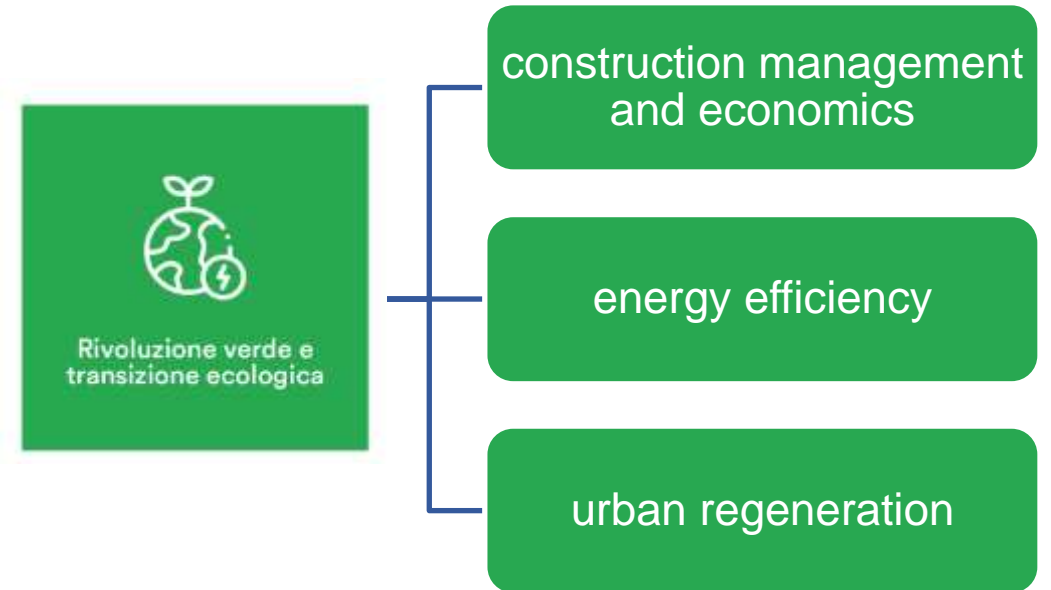
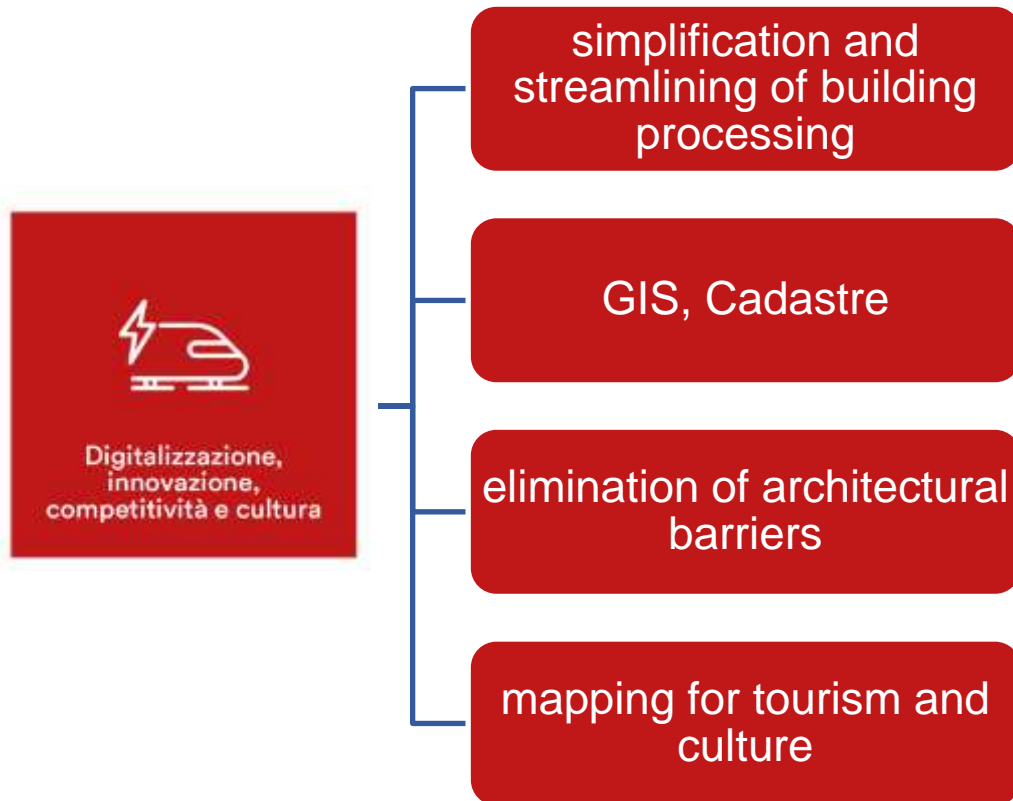
The Plan is developed around **three strategic axes** shared at a European level: **digitisation and innovation, ecological transition, and social inclusion**. It is an intervention that aims at repairing the economic and social damage caused by the pandemic crisis, contributing to addressing the structural weaknesses of the Italian economy, and leading the country along a path of ecological and environmental transition. The PNRR aims also to substantially contribute in reducing territorial, generational and gender gaps.



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## SUPERBONUS 110%

### Primary Actions

- Installation of thermal cladding
- Energy efficient HVAC (new and replacement)
- Seismic safety improvements and retrofitting

### Secondary Actions

- Solar panels, heaters (up to a value of €48,000 per property)
- Energy efficiency upgrades i.e. windows and doors replacements
- Installations of electric car charging stations
- Removal of architectural barriers/ Accessibility designs

### Tax benefits

- Tax credit transfer
- Invoice discount

### Beneficiaries

Property owners (single home, condominium unit, bare, sitting tenant); Tenant; Condominiums;

### Types of properties included

- Residential properties (single houses, condominium units except A1, A8, A9);
- Condominiums;
- Mixed-use buildings with limitations

## SUPERBONUS 110%

**May 2020** –  
formal introduction  
of Superbonus  
110% Decreto  
Rilancio

**December 2020**

– first deadline  
extension; redefinition  
of some interventions  
included in Superbonus  
(Legge di Bilancio  
2021)

**November 12,  
2021** – Decreto  
AntiFrode

**August 2020**

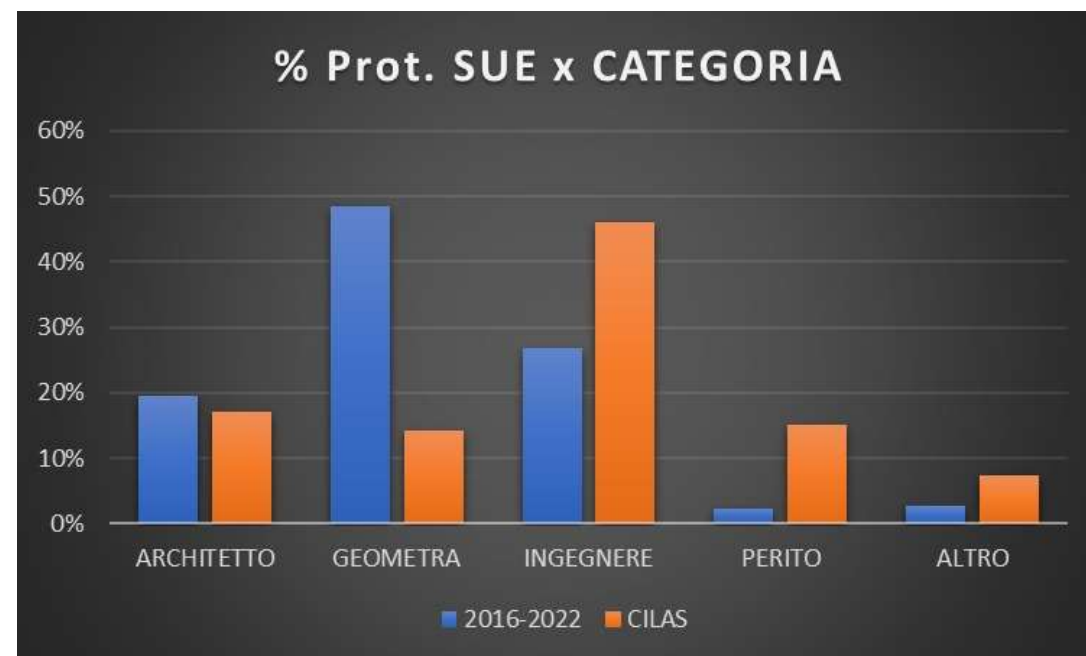
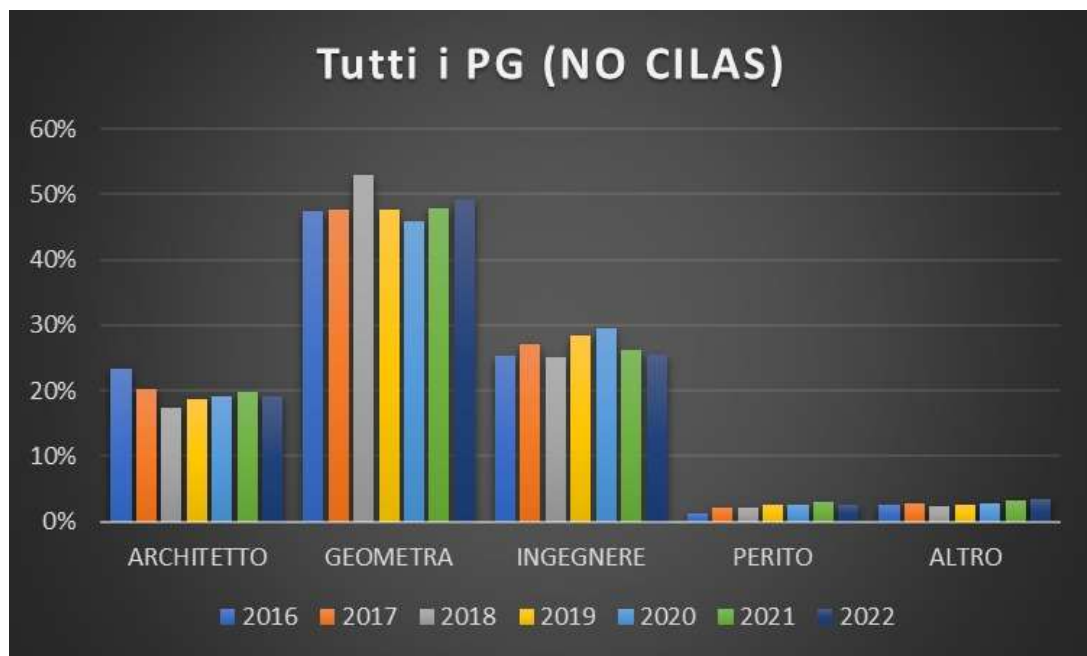
– Decreto  
Asseverazioni and  
Decreto Requisiti  
Tecnici became the  
main reference  
policies to  
Superbonus

**August 2021**

– Superbonus  
requests using  
CILA-s from  
Decreto  
Semplificazioni

**December 2022**–  
additional details on next  
deadlines, further  
clarification on tax credits  
on professional fees  
(Legge di Bilancio 2022)

**SUPERBONUS 110%**





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**SUPERBONUS 110%**



survey and building  
measurements



project design



project management



cost estimations and  
budgeting



site safety  
management



cadastral updating



other related  
consultation

## SUPERBONUS 110%

### Pros

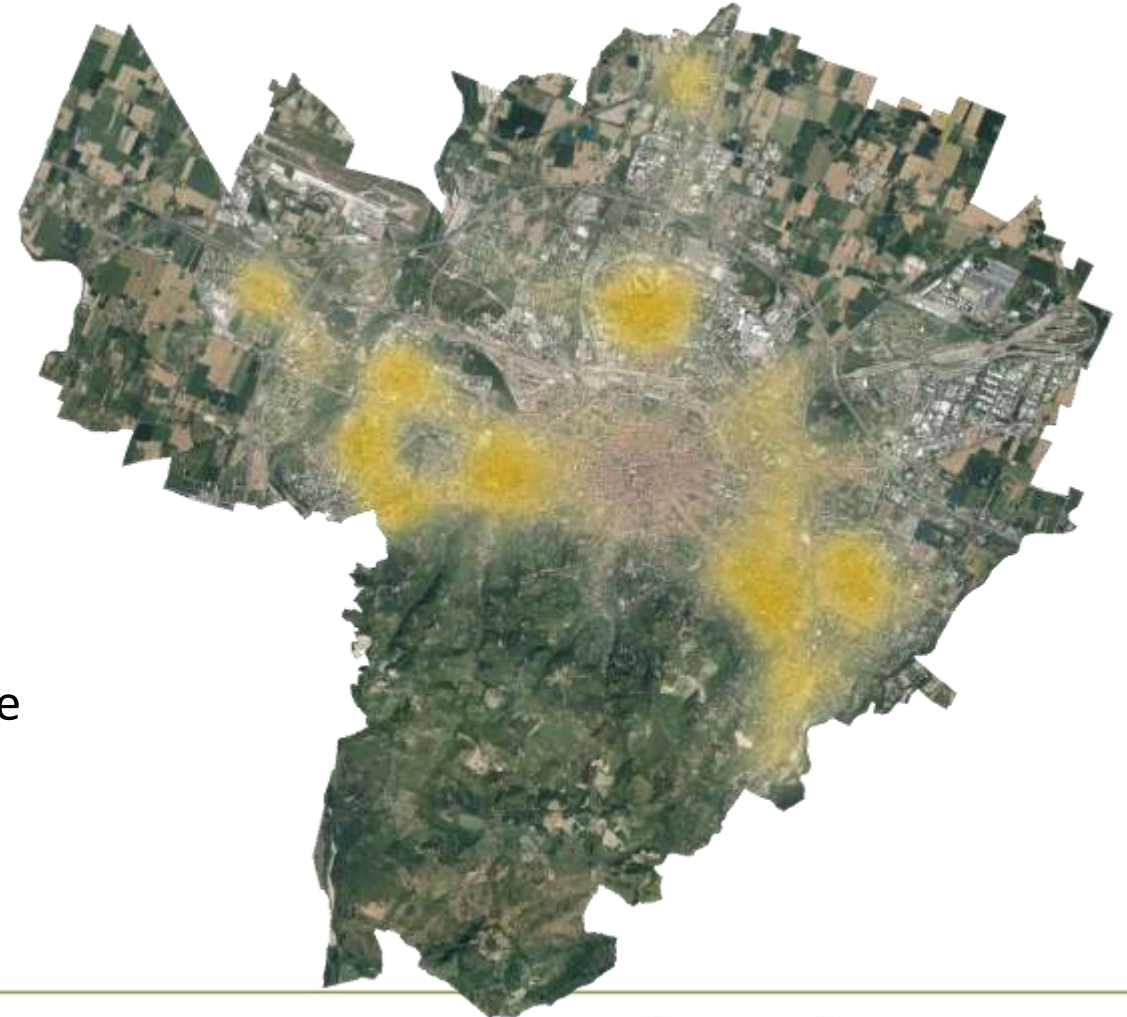
- Favors revitalization of existing real estate assets in Italy
- Maybe we are finally heading to better energy efficiency legislation
- Natural disaster mitigation
- Notable increase in number of surveyors needed to undertake the projects
- Increase of surveyor's annual income
- Boost the national economy during Covid

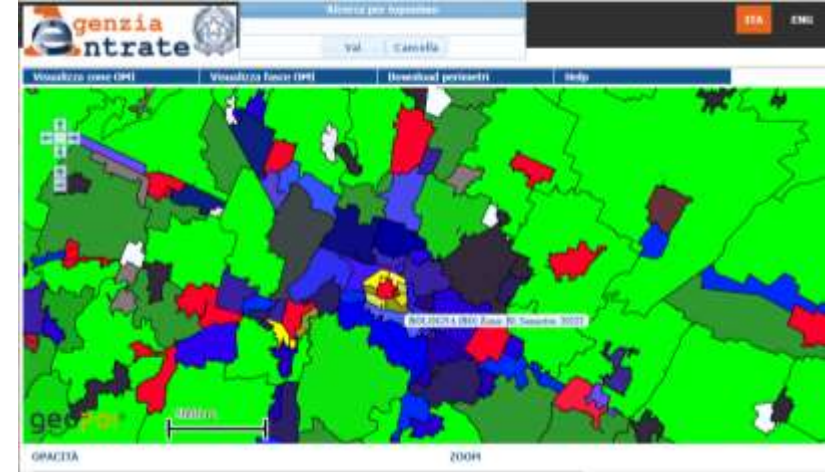
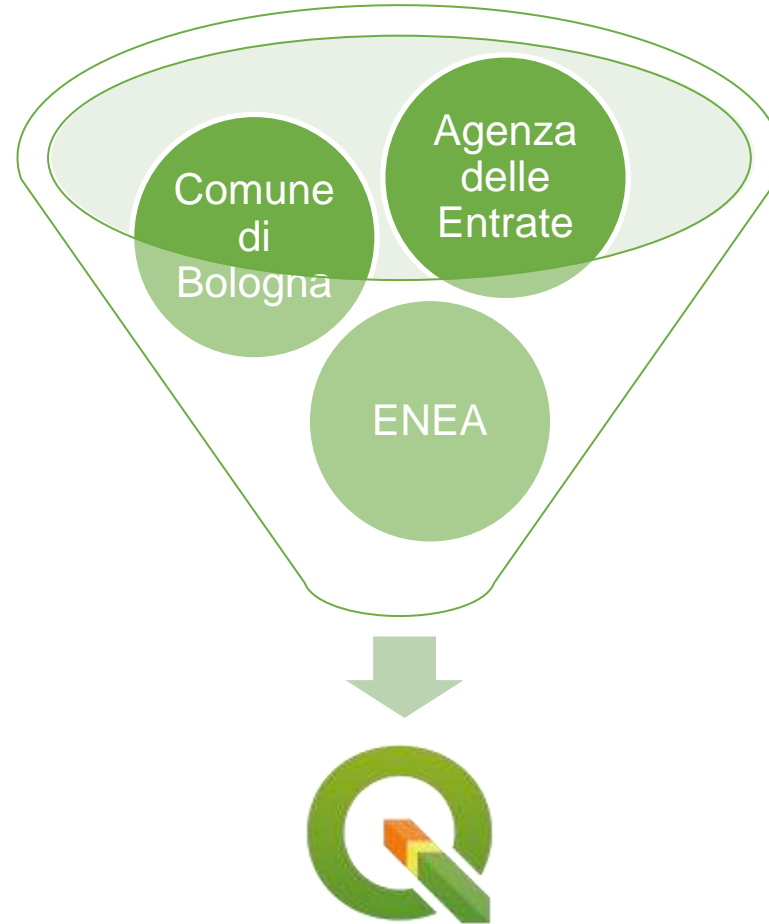
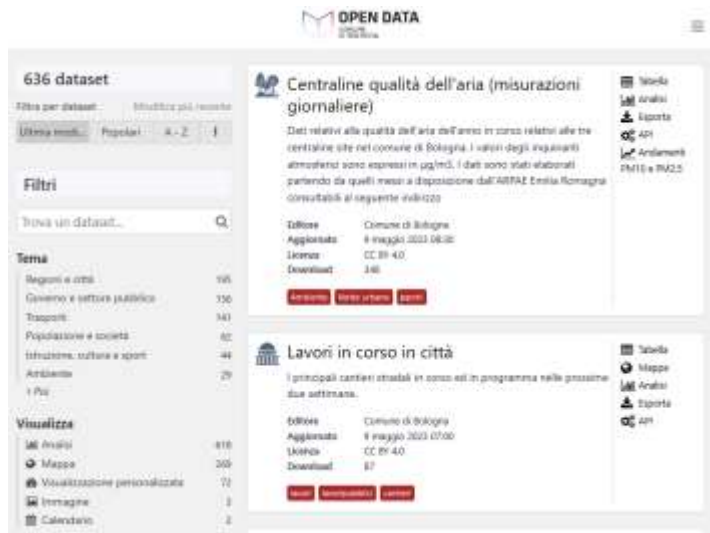
### Cons

- Ambitious and unclear and controversial
- Continuity is susceptible to the current political situation
- Susceptible to external factors (Covid pandemic, political unrest, etc) with uncontrollable effects on logistics and procurement, and finances

## Case Study: Superbonus and Bologna

- To analyze the effects of new policies through data mapping
- To monitor such an ambitious project in terms of preliminary and final numbers, spatial distribution, and time
- To maximize the potential of opendata published by the Italian government





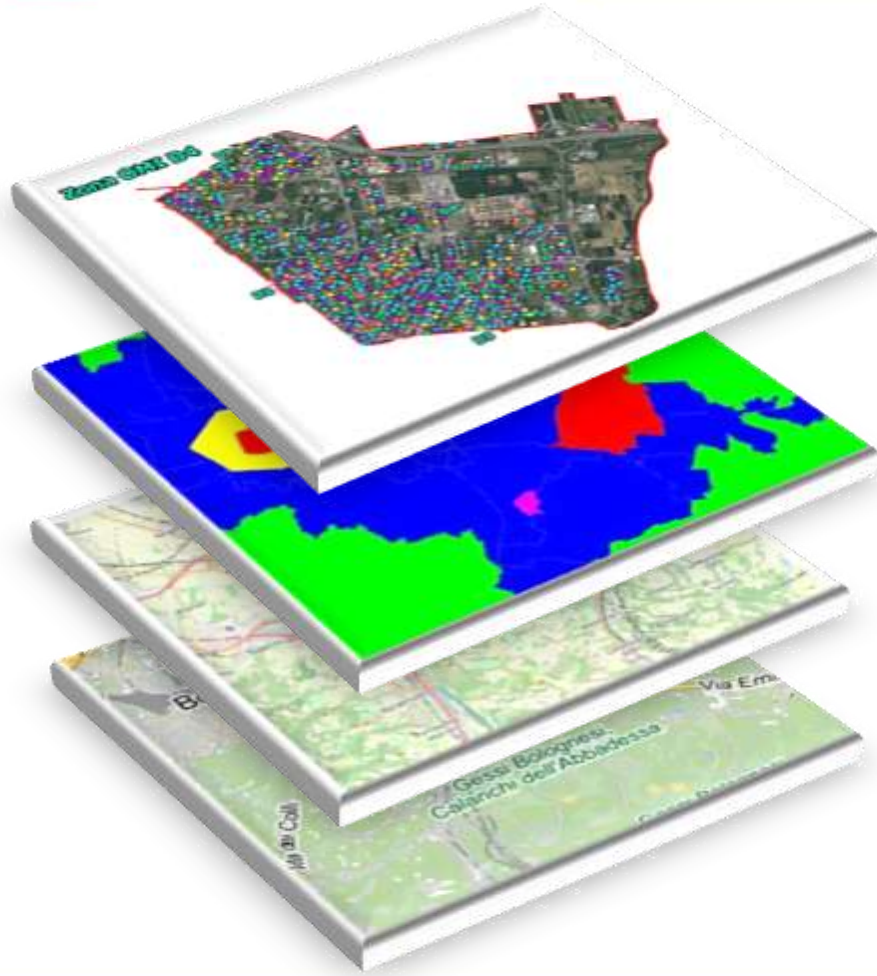
ENEA - MINISTERO DELLA TRANSIZIONE ECOLOGICA  
Super Ecobonus 110% 31 gennaio 2023

	Totale nazionale		
	N. lavori realizzati	% edifici	% invest.
<b>N. di agevolazioni</b>	307.588		
Totale investimenti ammessi a detrazione	18.312.839.046,06 €		
Totale investimenti per Super Ecobonus ammessi a detrazione	12.744.893.335,54 €	69,6%	
Investimento gravato a fine lavori	25.365.524.944,50 €		
Detrazione maturata per i lavori conclusi	24.018.165.569,62 €		
Oneri a carico dello Stato			
<b>Condizionati</b>	18.348	19,2%	48,4%
N. di agevolazioni condizionati	8.812.275.543,41 €		
Tot. Inv. Condizionati	5.832.258.793,71 €	65,7%	
<b>Edifici unifamiliari</b>	98.345	52,4%	55,9%
N. di agevolazioni in edifici unifamiliari	4.301.206.825,74 €		
Tot. Lavori in edifici unifamiliari realizzati	4.998.968.194,07 €	74,3%	
<b>U.I. funzionalmente indipendenti</b>	34.805	32,4%	18,7%
N. di agevolazioni in unità immobiliari indipendenti	3.957.828.242,76 €		
Tot. Lavori in unità immobiliari indipendenti realizzati	2.343.607.959,98 €	59,2%	
<b>Investimento medio</b>			
Condizionati	539.049,03 €		
Edifici unifamiliari	109.353,71 €		
U.I. funzionalmente indipendenti	66.226,66 €		

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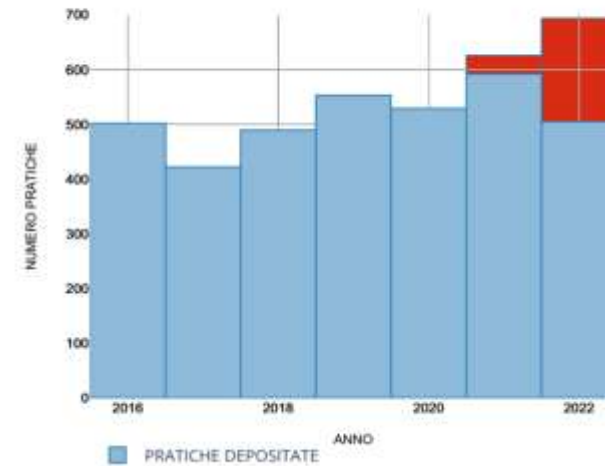
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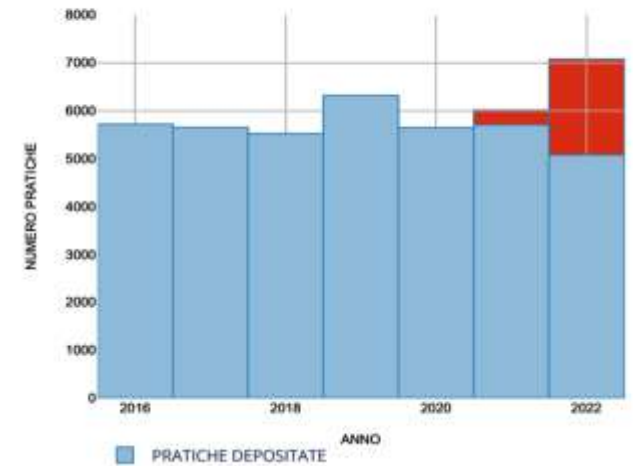


- around 60.000 building permits were registered from 40.000 real estates. Half of these filtered data are residential building.
- preliminary data elaboration shows how Superbonus is impacting Bologna's buildings landscape and its perception from its citizens.

ZONA OMI D4



CITTA'



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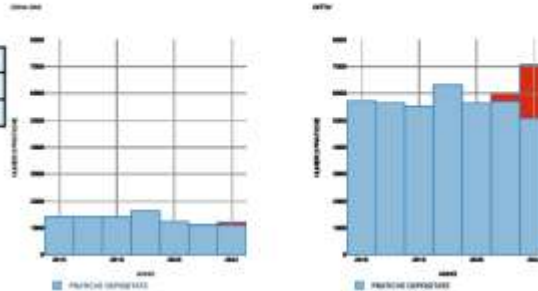


ZONA	Buildings	Residential B.	Flats	AVG16-20	Cila-s/Res [%]	Cila-s
CB	803	613	4758	164	1.79	11
CD	384	327	3283	90	3.36	11
B7	146	112	912	34	1.79	2
C4	342	248	1829	40	0.81	1
CS	709	532	4322	129	2.88	14
CF	133	127	886	24	2.36	4
CB	799	634	4467	133	1.89	11
C10	173	149	1073	46	1.34	2
B1	942	709	7582	279	2.4	13
C11	564	425	7718	259	7.06	32
C3	421	286	3764	121	4.85	15

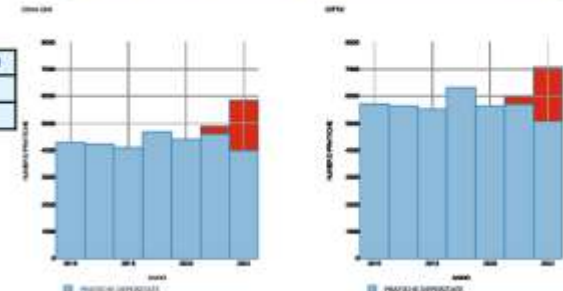


ZONA	Buildings	Residential B.	Flats	AVG16-20	Cila-s/Res [%]	Cila-s
D8	2288	1398	13236	273	10.73	145
D17	2552	1947	7053	266	7.96	138
B1	1296	753	1143	36	3.85	27
D21	1121	886	6774	187	8.24	72
D9	1705	924	7474	129	7.58	71
R2	1058	601	930	28	3.88	24
D23	203	155	2089	62	7.74	17
D3	1135	772	10332	216	14.51	110
D2	1004	801	8455	233	7.82	38
D4	2026	1882	23152	495	9.72	188
T6	114	8	227	16.11	50	4
D18	1012	646	5727	156	15.17	95
B2	411	188	257	9	5.85	8
D20	3024	1987	18639	404	9.81	199
E1	1960	916	1621	87	5.79	55
D5	2185	1428	19743	388	8.89	126
D24	1232	874	8874	275	8.73	86
E5	3132	1770	12405	247	8.88	150
D25	1413	895	10628	294	7.6	66
D7	638	418	4511	130	8.67	37
D16	1530	1136	6287	239	6.43	76
D22	1981	1156	8405	161	9	101

Zone	Buildings	Residential B.	Res/Bui	Flats	Apt/Res	Cila-s	% 110
CENTRO STORICO	5436	4172	77%	41214	10	117	2,8
BOLOGNA	35277	22453	64%	185194	8	1880	8,37



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*City Center*

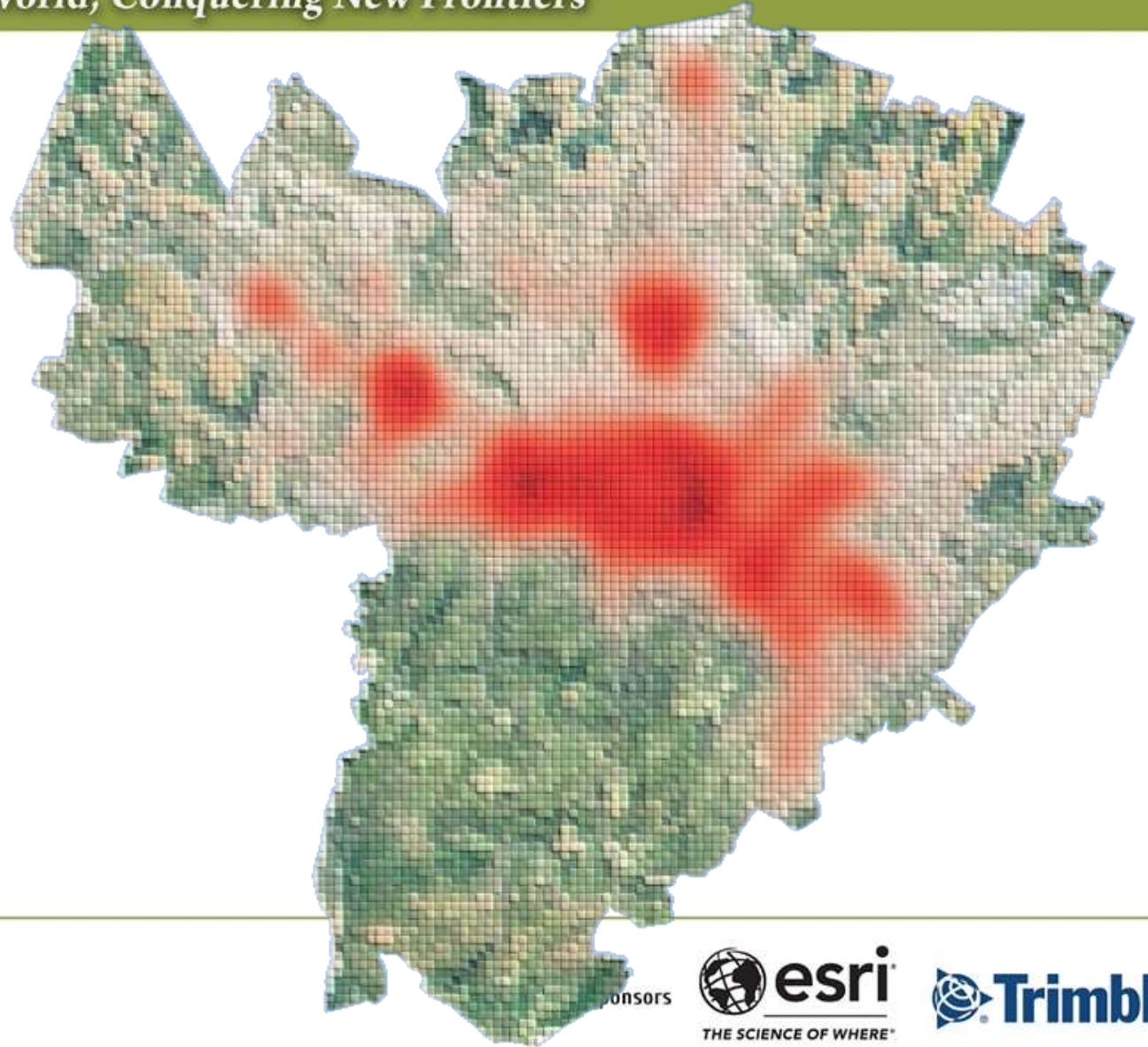
*Peripheral zones and Outskirts*

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- Data shows that most of the CILA-s are located outside the historic center of Bologna, and only 10% of which are done within the Historic City Center.
- An indirect relationship between the number of CILA-s submitted against other types of building intervention procedure (Permesso di Costruire (Construction Permit), SCIA).
- The effects of the city regulations on the built environment are best seen when the analyses of parameters include time and location (i.e. Modifications on Bologna Building Regulation Plan in October 2019 – Superbonus “presumed” paperworks deadline on November 2022).

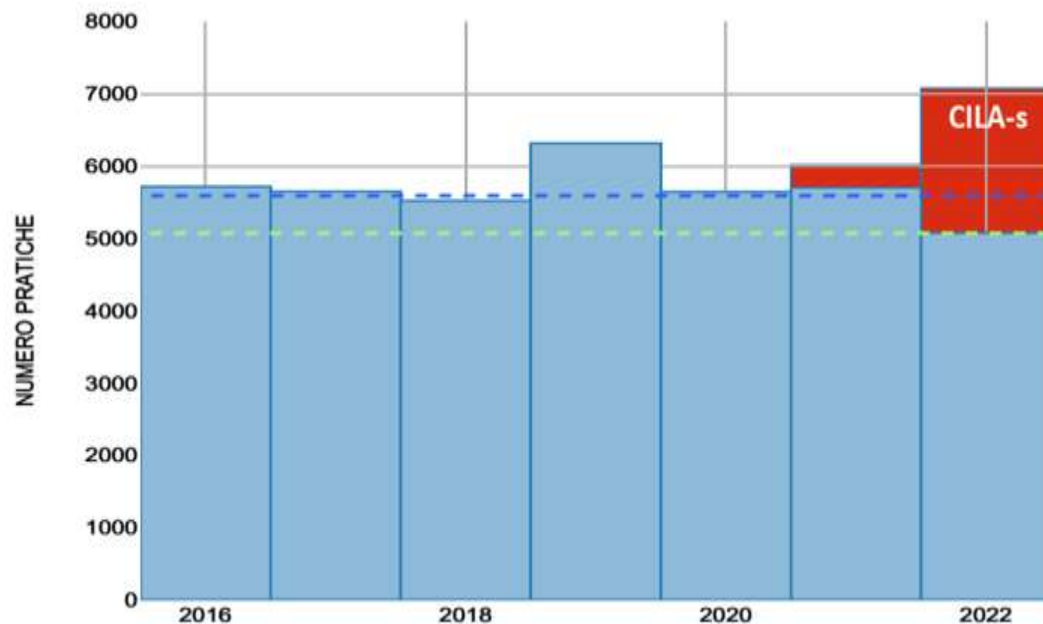


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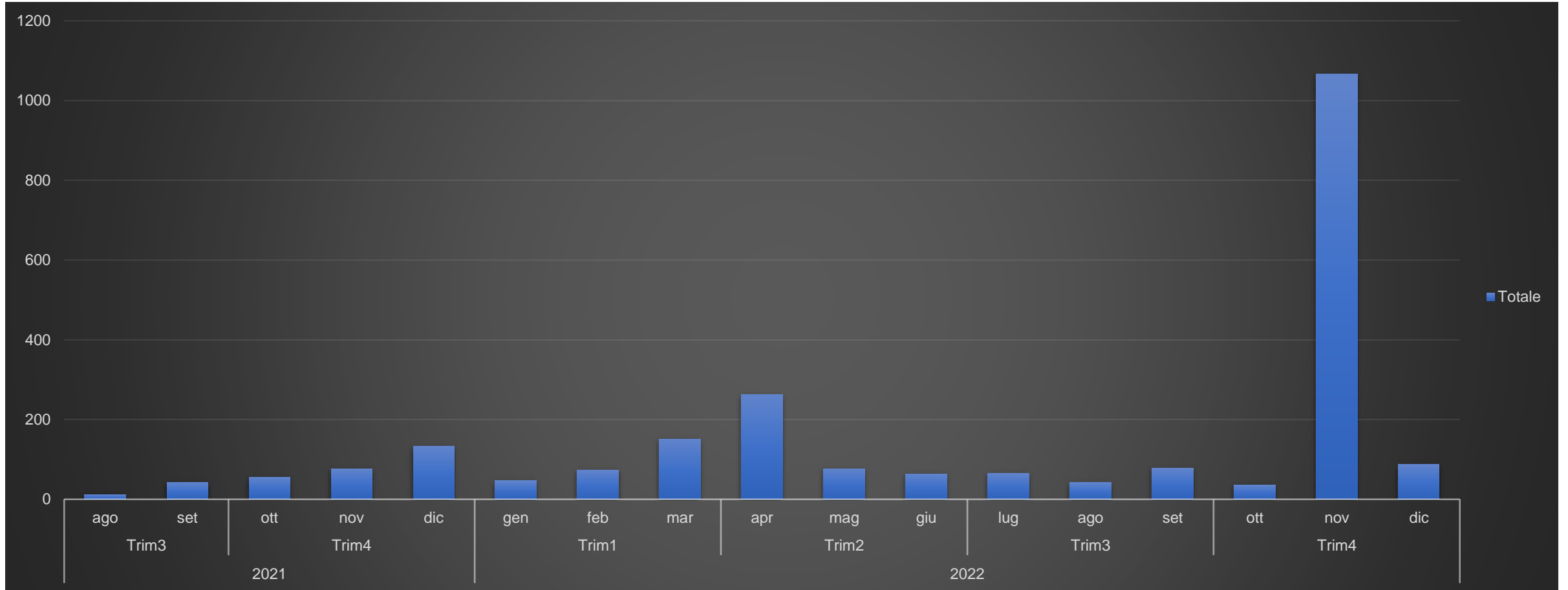




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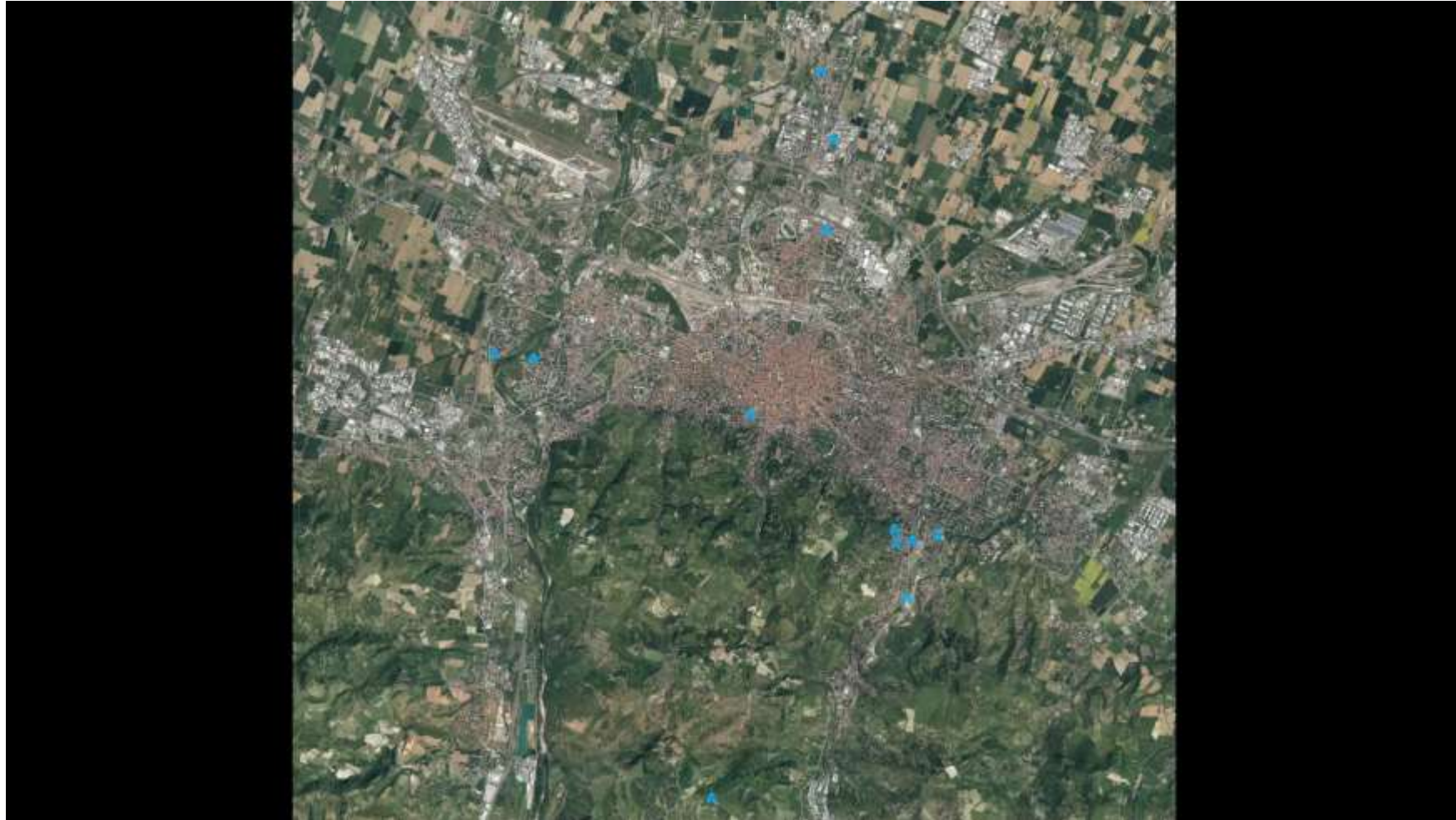




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