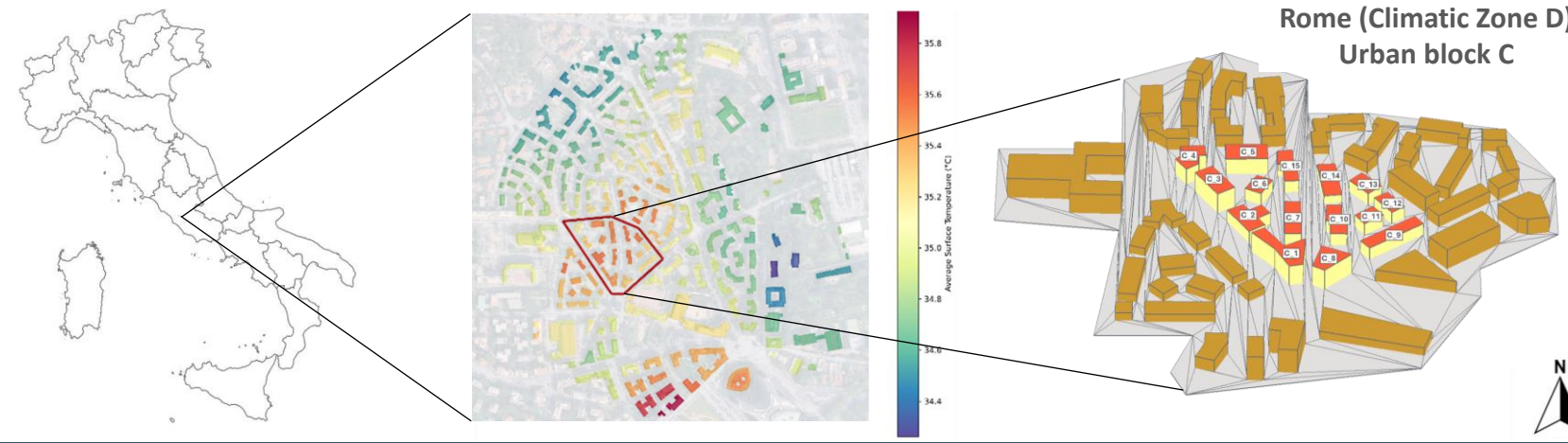


URBAN DATA



Rome (Climatic Zone D)  
Urban block C

Main Urban Metrics for Block C			Unit
No. of assessed buildings in the block	15	-	
Surface Coverage	0.273	-	
Average Building Height	10.4	m	
Compactness Ratio median	0.496	m <sup>-1</sup>	
Green Ratio	0.000	-	



Finanziato dall'Unione europea NextGenerationEU



Ministero dell'Università e della Ricerca



Italdadomani



Policenico di Torino



UNIVERSITÀ DEGLI STUDI DI TRIESTE

BUILDING DATA

Building data for Urban block C

Bldg. code	Constr. period	A <sub>n</sub> [m <sup>2</sup> ]	A <sub>env</sub> [m <sup>2</sup> ]	V [m <sup>3</sup> ]	WWR [-]	A <sub>env</sub> ·V <sup>-1</sup> [m <sup>-1</sup> ]	U <sub>op</sub> <sup>*</sup> [W·m <sup>-2</sup> ·K <sup>-1</sup> ]	U <sub>wi</sub> <sup>*</sup> [W·m <sup>-2</sup> ·K <sup>-1</sup> ]
C_1	1946-60	1844	2695	6914	12 %	0.390	1.491	4.90
C_2		1099	1541	3298		0.467	1.487	
C_3		1589	1773	4766		0.372	1.490	
C_4		1128	1451	3385		0.429	1.490	
C_5		1151	1748	4606		0.380	1.278	
C_6	1961-70	330	798	1486	16 %	0.537	1.271	3.65
C_7		635	1382	2859		0.483	1.283	
C_8		1158	1646	4344		0.379	1.254	
C_9		1098	1634	3294		0.496	1.280	
C_10		553	1291	2487		0.519	1.275	
C_11	1971-80	443	739	1330	11 %	0.556	1.267	3.70
C_12		516	836	1549		0.540	1.199	
C_13		389	904	1751		0.516	1.203	
C_14		347	1201	2082		0.577	1.236	
C_15		855	1334	2566		0.520	1.203	

\*Values were derived from URBEM database (<https://www.urbem.polimi.it/databasedifici/>)

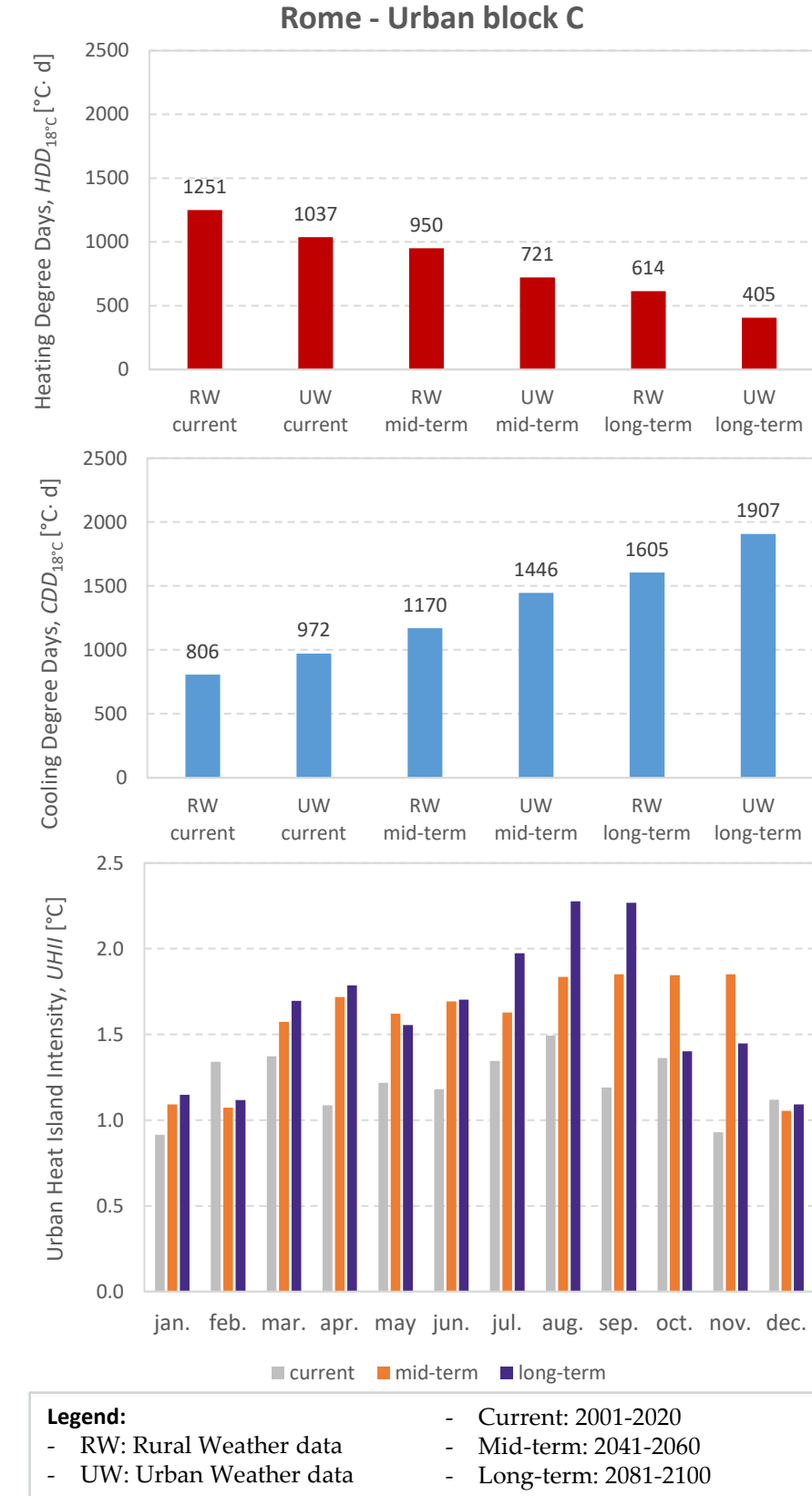
APPLIED STRATEGIES

Climate Resilient Strategies (CRS)	Urban scale			Building scale		
	Code	Description	Parameter	Code	Description	Parameter
CRS1	Street tree cover	Coverage percentage = 20 %	CRS3	Cool roofs	Shortwave Reflectance = 0.75	
				CRS4	Cool façades	Shortwave Reflectance = 0.75
CRS2	Reflective pavements	Shortwave Reflectance = 0.70	CRS5	Glazing technologies	Glazing U-value = 1.8 W·m <sup>-2</sup> ·K <sup>-1</sup> Glazing g-value = 0.35	
				CRS6	Natural ventilation	A 50 % window opening fraction, enabled when: $\vartheta_{air,ij} > \vartheta_{t,sett} + 1$ and $\vartheta_{air,ij} > \vartheta_{air,ext} + 1$ .
			CRS7	Thermal insulation	$U_{wi} = 0.29 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$ $U_{fl,up} = 0.26 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$ $U_{fl,dw} = 0.29 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$	

Scenario	Scale	Coverage	Time horizon
Sc.1	Urban	+20% green areas (CRS1) → 100% of ground surfaces (CRS2)	Current + Mid + Long
Sc.2	Urban + Building	CRS3–CRS7 applied to 43% worst-performing buildings (EPBD)	Current + Mid
Sc.3	Urban + Building	CRS3–CRS7 applied to 100% of buildings	Mid + Long

CLIMATIC DATA



**Legend:**  
 - RW: Rural Weather data  
 - UW: Urban Weather data  
 - Current: 2001-2020  
 - Mid-term: 2041-2060  
 - Long-term: 2081-2100

KPIs

