

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

CLIMATIC DATA

Turin - Urban block B

Main Urban Metrics for Block B

Metric	Value	Unit
No. of assessed buildings in the block	8	-
Surface Coverage	0.388	-
Average Building Height	20.5	m
Compactness Ratio median	0.251	m ⁻¹
Green Ratio	0.00	-

Building data for Urban block B

Bldg. code	Constr. period	A_{fl} [m ²]	A_{env} [m ²]	V [m ³]	WWR [-]	$A_{env} \cdot V^{-1}$ [m ⁻¹]	U_{op}^* [W·m ⁻² ·K ⁻¹]	U_{wi}^* [W·m ⁻² ·K ⁻¹]
B_1	1901-20	2909	2103	10179	16 %	0.207	1.50	3.10
B_2		4018	3558	14197				
B_3		4698	3969	15816				
B_4		4701	3922	16298				
B_5		5738	5050	19988				
B_6	1921-45	1804	2370	6351	14 %	0.373	1.45	3.09
B_7		4434	4036	15963				
B_8		4569	3968	15838				

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

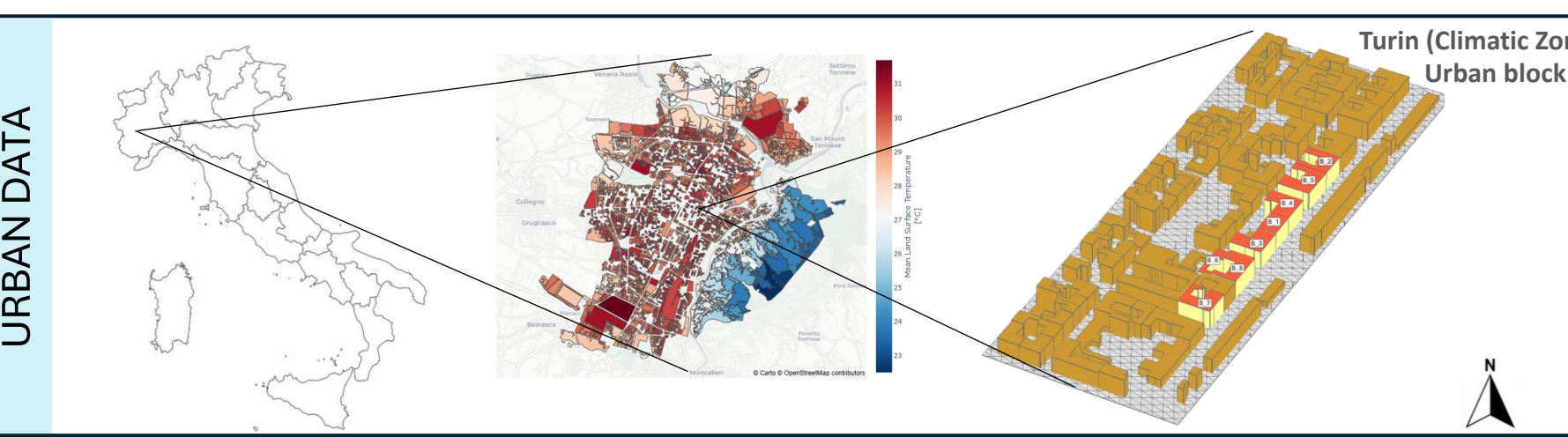
BUILDING DATA

APPLIED STRATEGIES

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

Urban scale			Building scale		
Code	Description	Parameter	Code	Description	Parameter
CRS1	Street tree cover	Coverage percentage = 20 %	CRS3	Cool roofs	Shortwave Reflectance = 0.75
CRS2	Reflective pavements	Shortwave Reflectance = 0.70	CRS4	Cool façades	Shortwave Reflectance = 0.75
			CRS5	Glazing technologies	Glazing U -value = 1.40 W·m ⁻² ·K ⁻¹ Glazing g -value = 0.35
			CRS6	Natural ventilation	A 50 % window opening fraction, enabled when: $\theta_{air,ij} > \theta_{t,sett} + 1$ and $\theta_{air,ij} > \theta_{air,ij} + 1$.
			CRS7	Thermal insulation	$U_{wi} = 0.26$ W·m ⁻² ·K ⁻¹ $U_{fl,up} = 0.22$ W·m ⁻² ·K ⁻¹ $U_{fl,jw} = 0.26$ W·m ⁻² ·K ⁻¹

URBAN DATA



KPIs