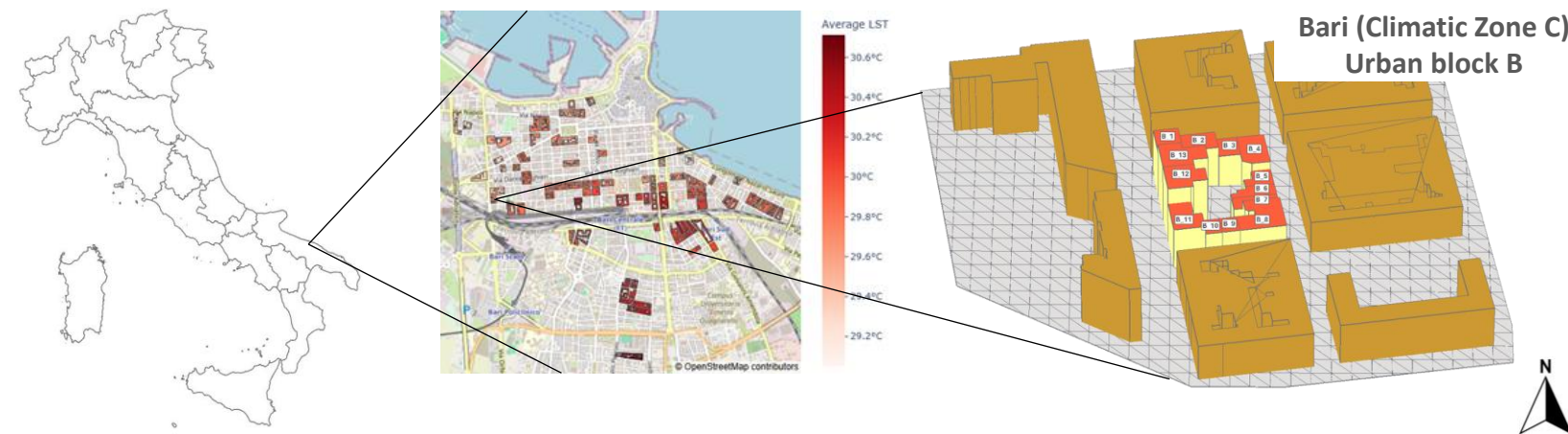


URBAN DATA



Main Urban Metrics for Block B			Unit
No. of assessed buildings in the block	13	-	
Surface Coverage	0.372	-	
Average Building Height	22.7	m	
Compactness Ratio median	0.267	m ⁻¹	
Green Ratio	0.000	-	



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BUILDING DATA

Building data for Urban block B

Bldg. code	Constr. period	A _{fl} [m ²]	A _{env} [m ²]	V [m ³]	WWR [-]	A _{env} ·V ⁻¹ [m ⁻¹]	U _{op} * [W·m ⁻² ·K ⁻¹]	U _{wi} * [W·m ⁻² ·K ⁻¹]
B_1	1946-60	209	1576	6272	17 %	0.251	2.07	4.90
B_2		220	1456	5489		0.265	2.02	
B_3		148	772	2969		0.260	1.93	
B_4		287	1529	5733		0.267	1.94	
B_5		141	700	2113		0.331	1.91	
B_6		154	667	2311		0.289	1.84	
B_7	196	714	2933	0.243	1.75	17 %	4.90	
B_8	438	2363	8760	0.270	1.27			
B_9	92	541	1842	0.294	1.28			
B_10	88	521	1764	0.295	1.28			
B_11	272	1869	6807	0.275	1.29			
B_12	296	2378	10360	0.230	1.31			
B_13	323	2595	11322	0.229	1.31			

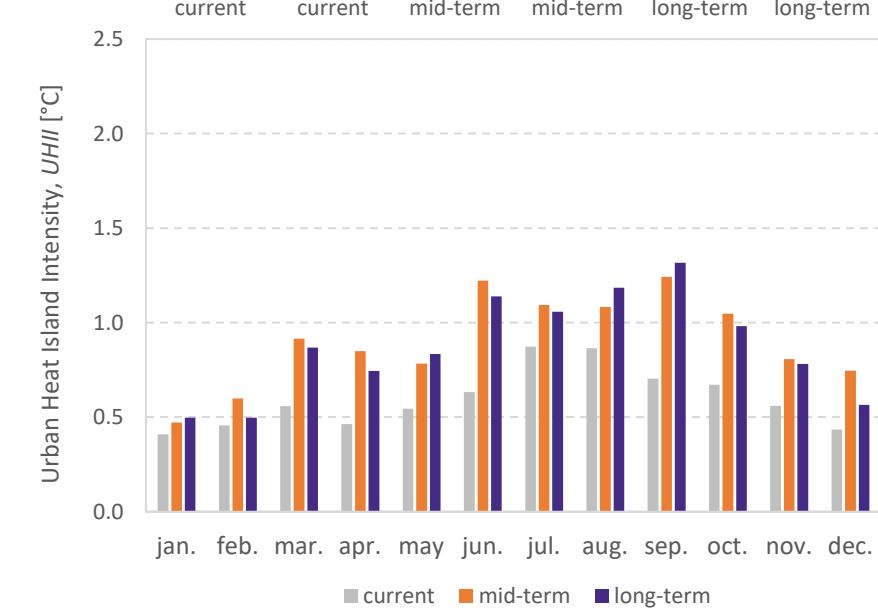
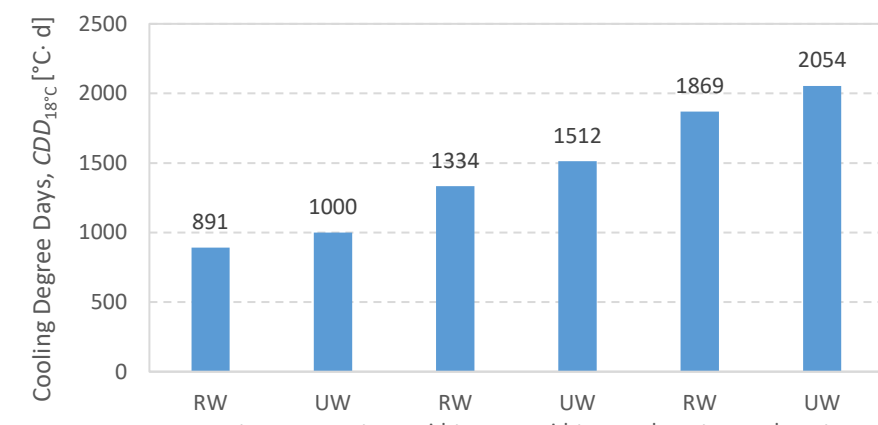
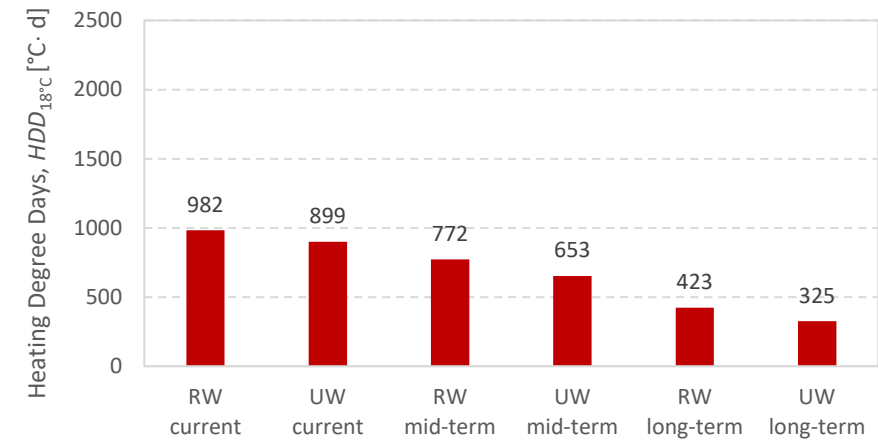
*Values were derived from URBEM database (<https://www.urbem.polimi.it/databasedifici/>)

APPLIED STRATEGIES

Scenario	Scale	Coverage	Time horizon																														
				<table border="1"> <thead> <tr> <th colspan="3">Urban scale</th> <th colspan="3">Building scale</th> </tr> <tr> <th>Code</th> <th>Description</th> <th>Parameter</th> <th>Code</th> <th>Description</th> <th>Parameter</th> </tr> </thead> <tbody> <tr> <td>CRS1</td> <td>Street tree cover</td> <td>Coverage percentage = 20 %</td> <td>CRS3</td> <td>Cool roofs</td> <td>Shortwave Reflectance = 0.75</td> </tr> <tr> <td rowspan="2">CRS2</td> <td rowspan="2">Reflective pavements</td> <td rowspan="2">Shortwave Reflectance = 0.70</td> <td>CRS4</td> <td>Cool façades</td> <td>Shortwave Reflectance = 0.75</td> </tr> <tr> <td>CRS5</td> <td>Glazing technologies</td> <td>Glazing U-value = 2.20 W·m⁻²·K⁻¹ Glazing g-value = 0.35</td> </tr> <tr> <td>CRS6</td> <td>Natural ventilation</td> <td>A 50 % window opening fraction, enabled when: $\theta_{air,ij} > \theta_{t,sett} + 1$ and $\theta_{air,ij} > \theta_{air,ext} + 1$.</td> <td>CRS7</td> <td>Thermal insulation</td> <td>$U_{wi} = 0.34 \text{ W·m}^{-2}\cdot\text{K}^{-1}$ $U_{fl,up} = 0.33 \text{ W·m}^{-2}\cdot\text{K}^{-1}$ $U_{fl,lw} = 0.38 \text{ W·m}^{-2}\cdot\text{K}^{-1}$</td> </tr> </tbody> </table>	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 = 2.20 W·m ⁻² ·K ⁻¹ Glazing g-value = 0.35	CRS6	Natural ventilation
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Scen.1	Urban	+20% green areas (CRS1) → 100% of ground surfaces (CRS2)	Current + Mid + Long																														
Scen.2	Urban + Building	CRS3–CRS7 applied to 43% worst-performing buildings (EPBD)	Current + Mid																														
Scen.3	Urban + Building	CRS3–CRS7 applied to 100% of buildings	Mid + Long																														

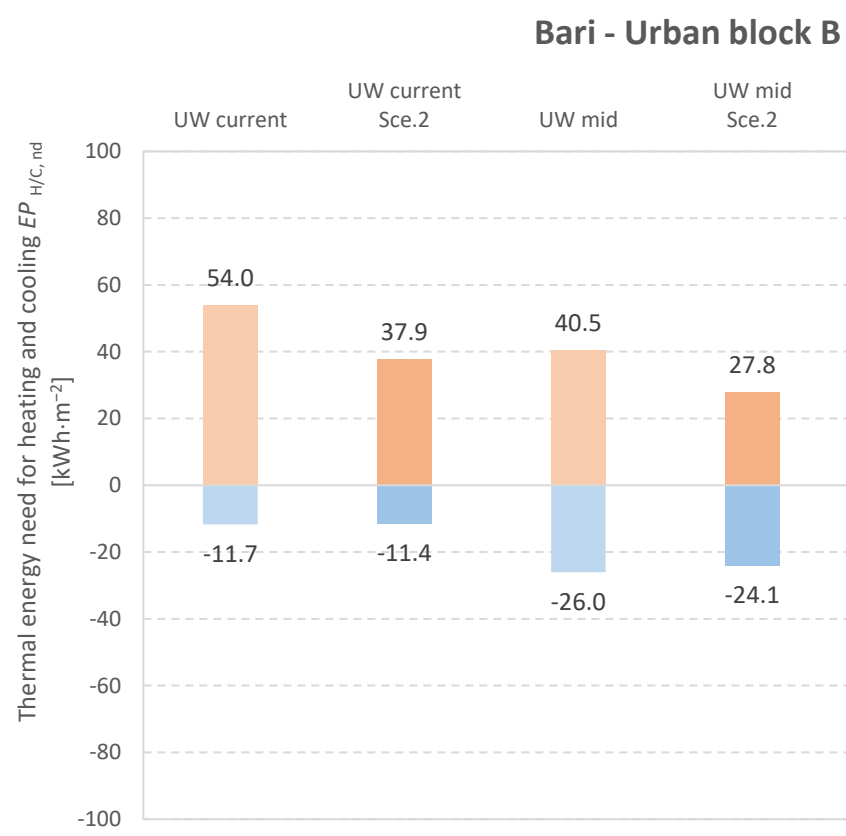
CLIMATIC DATA

Bari - Urban block B

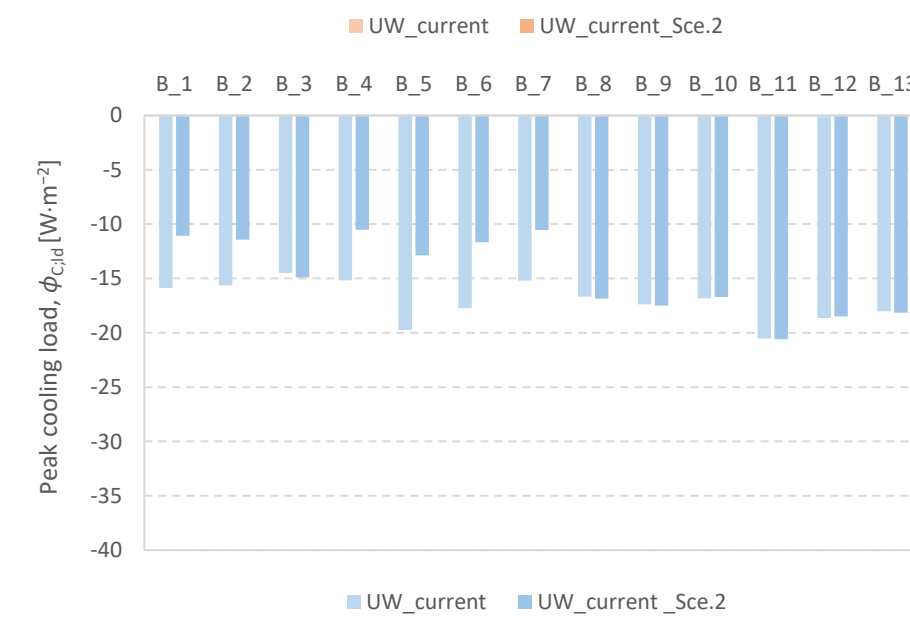
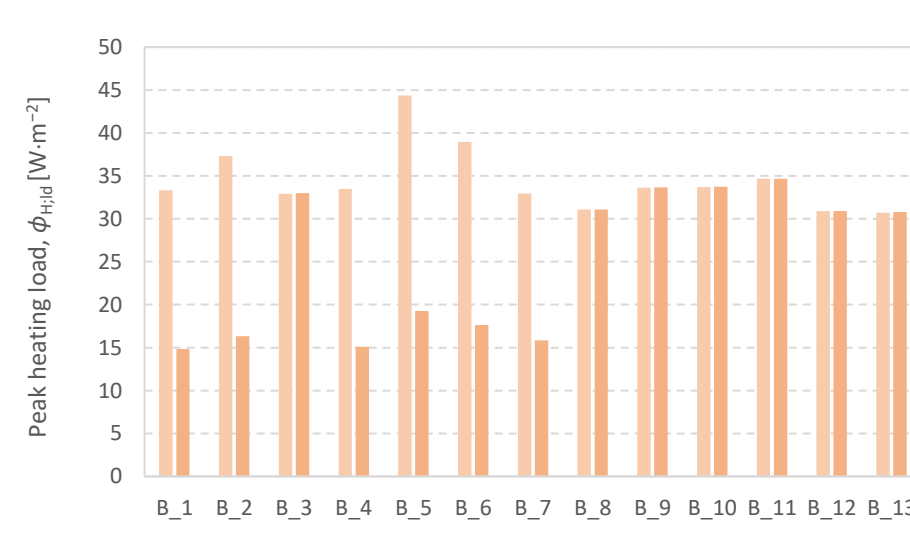


Legend:
 - RW: Rural Weather data
 - UW: Urban Weather data
 - Current: 2001-2020
 - Mid-term: 2041-2060
 - Long-term: 2081-2100

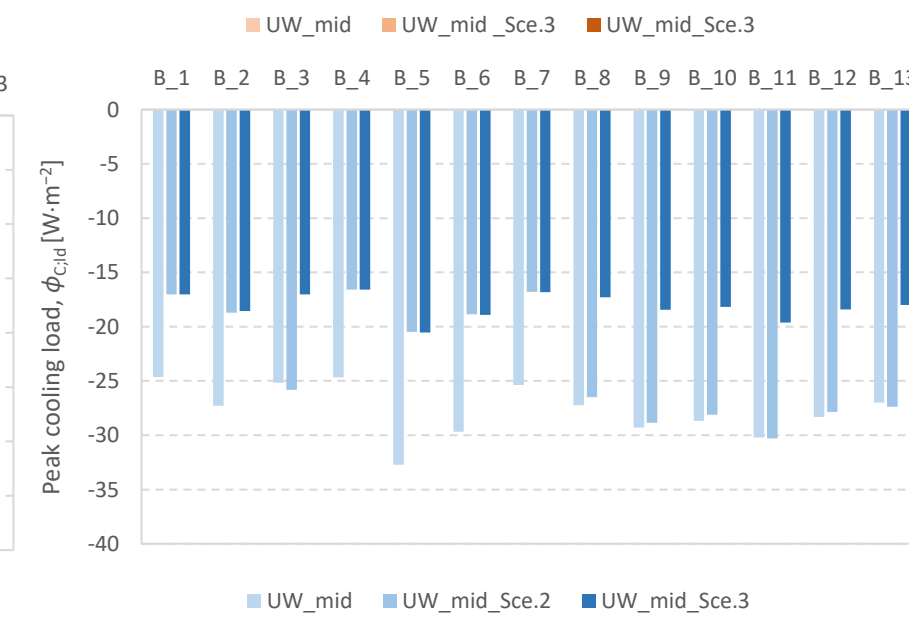
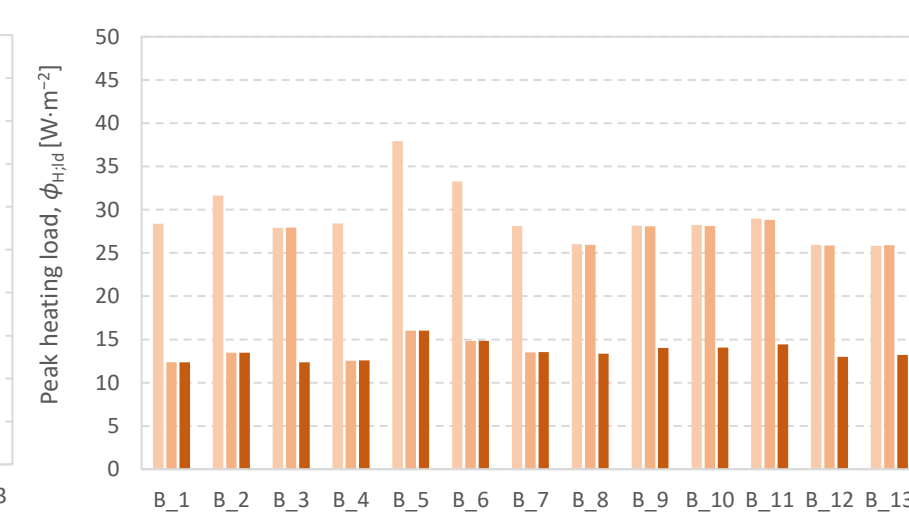
KPIs



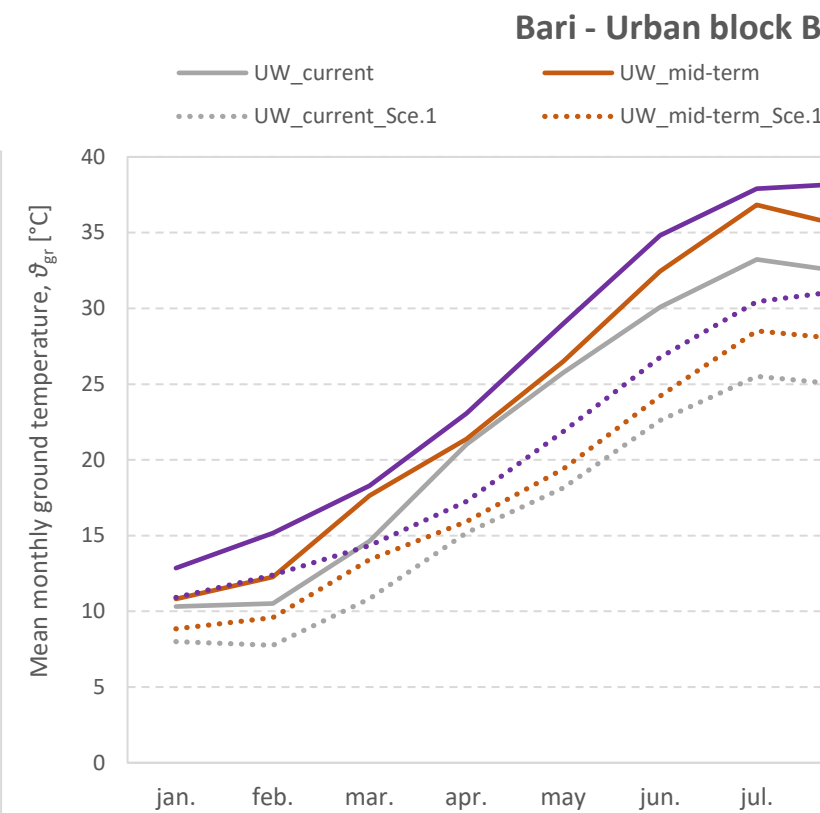
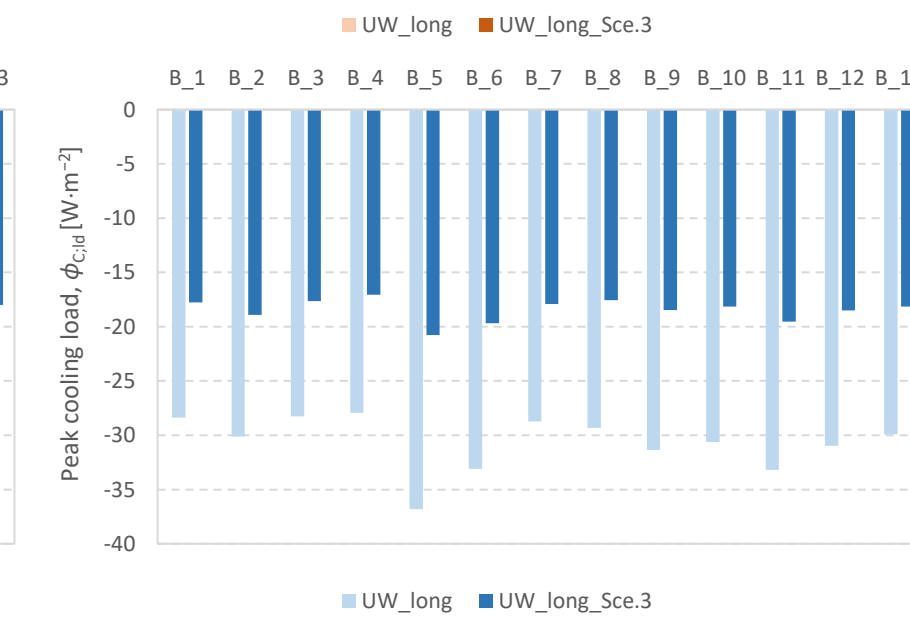
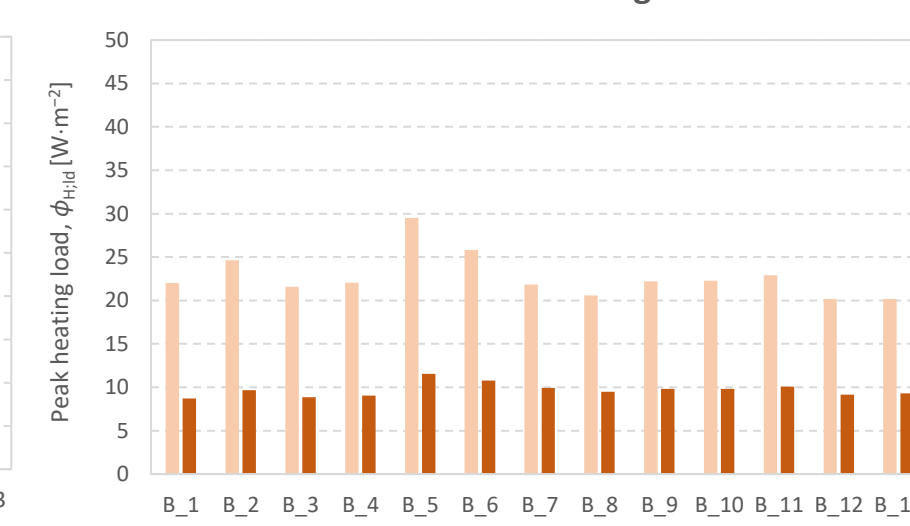
Bari - Urban block B - Current



Bari - Urban block B - Mid-term



Bari - Urban block B - Long-term



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