The aim of this paper is to understand through the building energy analysis how the different condition of weather, materials and location can affect the building performances and the interior spaces' comfort. The research has been developed in three different sites: Piacenza and Milano to compare similar outputs, and Mombasa-Moi (Kenya) to emphasize the differences due to weather datas. Futhermore, for each city there are two analysis with different wall packs: one standard wall with insulation, and another one without it. The outputs show that even a small change in the stratigraphy can modify the energy analysis.

BRITISH IMPERIAL SYSTEM

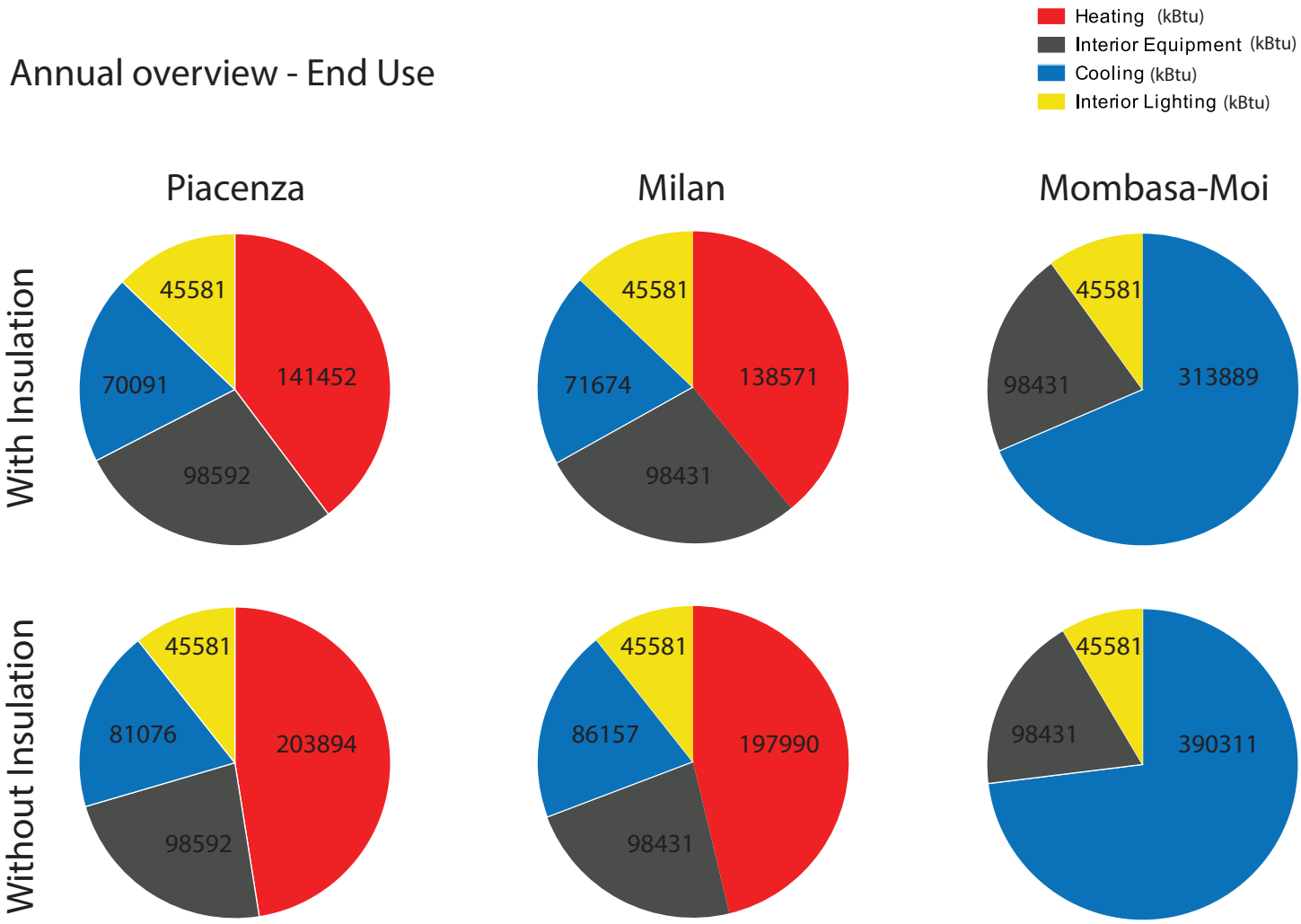
FOOT	1 ft
SQUARE FOOT	1 ft^2
CUBIC FOOT	1 ft^3
BRITISH THERMAL UNIT	1 Btu
FAHRENHEIT	1 F

INTERNATIONAL SYSTEM

METER	0,3048 m
SQUARE METER	0,92903 m^2
CUBIC METER	0,283168 m^3
JOULE	1055,06 J
KELVIN	(5/9)*(F degree)+255,37

Information	PIACENZA		MILAN		MOMBASA-MOI (KENYA)	
Elevation (ft)	440		692		180	
Latitude	44,92		45,62		-4	
Longitude	9,73		8,73		39,62	
Wall Pack	With Insulation	Without Insulation	With Insulation	Without Insulation	With Insulation	Without Insulation
Net site energy (kBtu)	355848	429276	354256	428157	457919	534322
Total building area (ft^2)	4483	4483	4483	4483	4483	4483
Energy Use Intensity (kBtu/ft^2)	79,37	95,75	79,02	95,5	102,14	119,18

Annual overview - End Use



Annual overview - Energy Use