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## List of Abbreviations

BIPV	Building-Integrated Photovoltaic
CO <sub>2</sub>	Carbon Dioxide
PCM	Phase Change Material
PV	Photovoltaic
PV-PCM	Photovoltaic with PCM
PV-R	Photovoltaic for Reference
R-square	This statistic measures how successful the fit is in explaining the

## List of Symbols

$A$	Area, m <sup>2</sup>
$c_p$	Specific Heat Capacity per mass, kJ/kg-K
$c_{pv}$	Specific Heat Capacity per volume, MJ/m <sup>3</sup> -K
$g$	Liquid volume Fraction
$h$	Specific Enthalpy, kJ/kg
$h$	Heat Transfer Coefficient, W/m <sup>2</sup> -K
$I$	Current, A
$I_T$	Solar Radiation, W/m <sup>2</sup>
$k$	Thermal Conductivity, W/m-K
$L$	Thickness, m
$l$	Specific Latent Heat, kJ/kg
$N$	Number of Nodes
$P_e$	Electrical Power, W
$\dot{Q}$	Heat Rate, W
$T$	Temperature, °C or K
$T_\infty$	Ambient Temperature, °C or K
$t$	Time, s
$V$	Voltage, V
$\varepsilon$	Emissivity
$\rho$	Density, kg/m <sup>3</sup>
$\Delta$	Increment
$\tau\alpha$	Optical Efficiency of PV
$\sigma$	Stefan–Boltzmann Constant

### Subscript

$l$	Liquid
$i$	Node Position
$m$	Melting
$ref$	Reference
$s$	Solid
$0$	Initial

## Glossary

R-square	This statistic measures how successful the fit is in explaining the variation of the data.
RMSE	Root Mean Squared Error: This statistic is also known as the fit standard error and the standard error of the regression.
ZAE Bayern	The Bavarian Center for Applied Energy Research (ZAE Bayern) is a registered, non-profit association.