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NOMENCLATURE

N	number of nodes of the urban energy network
D_i	energy demand of each node i [MWh]
G_i	energy generation of each node i [MWh]
d	distance of connection between two nodes of the urban energy network [m]
A	adjacency matrix of the urban energy network
A_{opt}	optimal adjacency matrix of the urban energy network
a_{ij}	elements of the adjacency matrix
S_i	energy surplus that characterizes node i
Z_{ij}	energy flow exchanged between node i and node j
UEN_{INDEX}	urban energy network index
$link_{S_{involved}}$	number of links that are effectively exploited for the energy distribution on the urban energy network
$link_{S_{vicinity}}$	number of links of the starting urban energy network and defined through the vicinity criterion