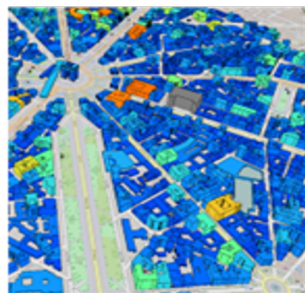
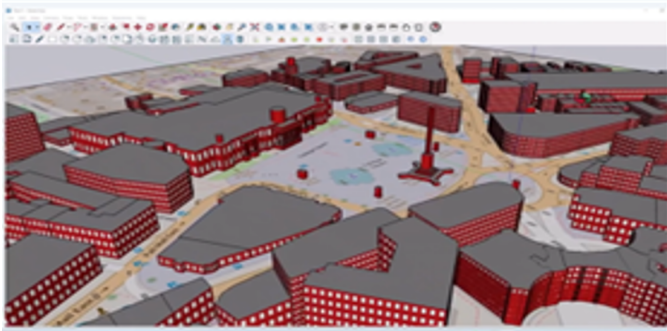


IES iCD

(Intelligent Community Design)



SOURCE

<https://www.iesve.com/products/icd>

DEVELOPER

IES

TYPE OF RESOURCES

Energy simulation tool (buildings)

AVAILABLE FOR FREE/LICENSE

Not free

USER FRIENDLINESS

Need for practice

TUTORIALS AVAILABLE

<https://www.iesve.com/support/icd>

SHORT DESCRIPTION

It is a 3D urban planning tool that allows for the development of the baseline scenario and the application of requalification scenarios at the urban level through dynamic energy simulation.

PHASE OF THE H&C PLAN

- **Baseline assessment:** H&C demand and consumption
- **Intervention and decarbonisation scenarios:** simulating building retrofits, renewable energy sources.
- **Evaluation and comparison of different scenarios—roadmap:** energy, emissions and economic comparison.

REQUIRED INPUT

- Outdoor Thermal Comfort (climate heat islands) [°C]
- Buildings energy consumptions (heating, cooling, DHW, electricity, lighting) [MWh/yr]
- Annual and monthly site energy consumption (heating, cooling, DHW, electricity, lighting) [MWh]
- Primary energy demand per scenario comparison [GWh]
- CO₂ emissions per scenario comparison [kgCO₂]

REQUIRED INPUT

- Selected area
- GIS file of buildings height
- GIS file of destination use of building

MAIN ADVANTAGES

- Ready-made report available
- Possible to import data (building geometry, use) from OpenStreetMap
- Possible to use the internal database based on ASHRAE 90.1-2016 Standard

MAIN DISADVANTAGES

Like all Urban Building Energy Models (UBEMs), accuracy can be affected by simplifications necessary for large-scale analysis

