



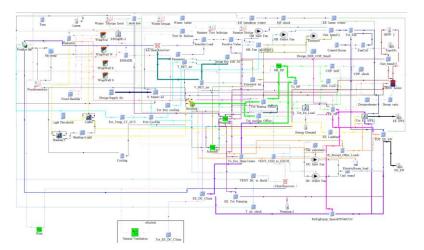
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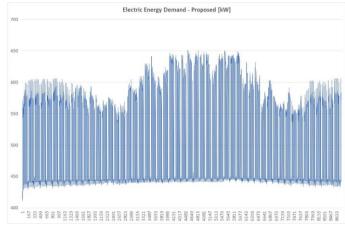
# Dynamic Simulations for Energy Analysis: Our Experience

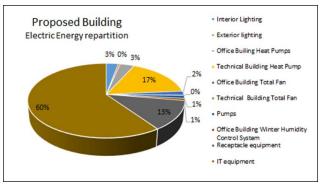


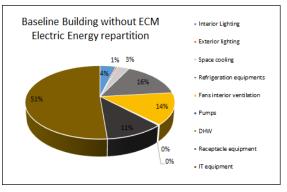
 Energy modelling for a Data Center and Office Building in Bologna for LEED Certification (LEED protocol v4 BD+C: NC) by means of the software package

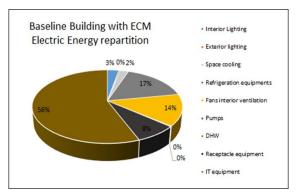
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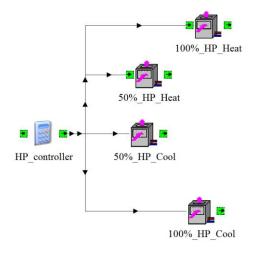


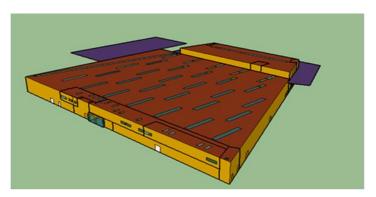


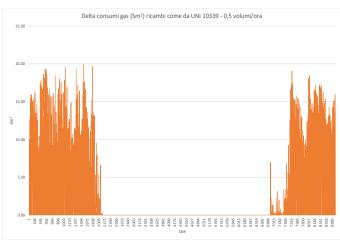


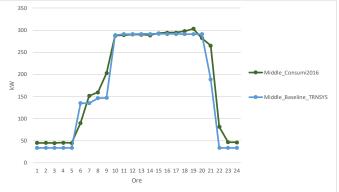
• Energy modelling for a large retail store by means of the software package







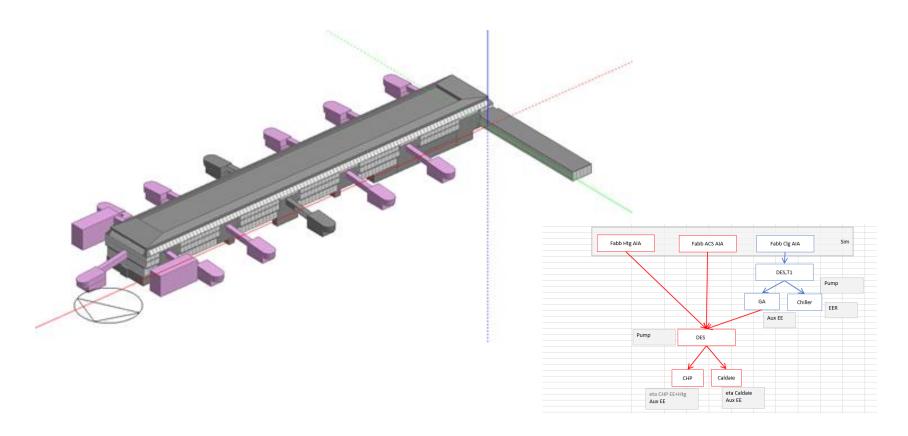






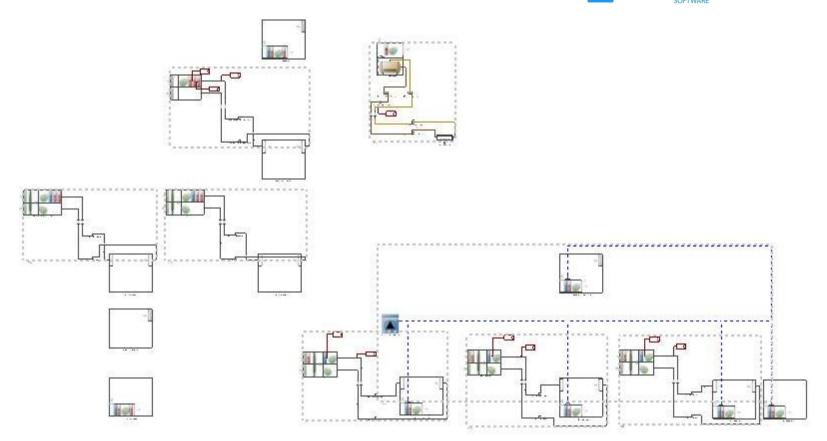
• Energy modelling for an Airport Terminal LEED certification (LEED protocol NC Italy 2009) by means of the software package 

DesignBuilder
SOFTWARE



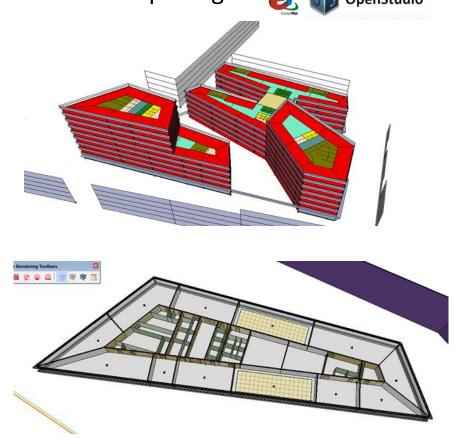


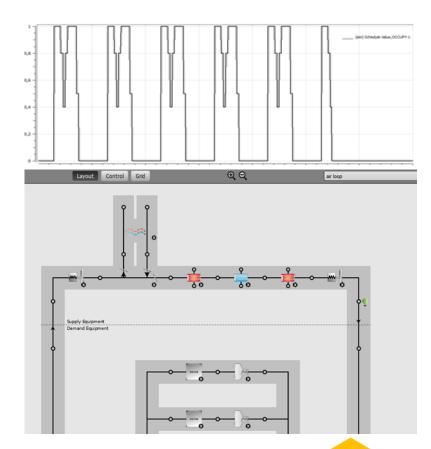
• Energy modelling for a large retail store LEED Certification (LEED protocol Core&Shell 2009) by means of the software package \_\_\_\_ DesignBuilder





• Energy modelling as a tool for energy review of building complex in Milan, plant tuning optimization, cost analysis of energy saving opportunities by means of the software package openStudio







#### **LEED Credits**



#### Water efficiency:

Cooling Tower Water Use



#### **Energy and Atmosphere Credits:**

- Minimum Energy Performance
- Optimized Energy Performance
- Renewable Energy Production



#### **Indoor Environmental Quality:**

- Thermal Comfort
- Daylight
- Quality Views

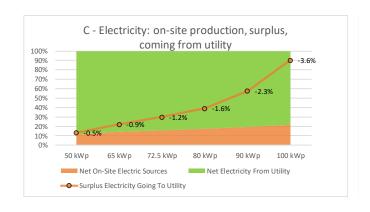




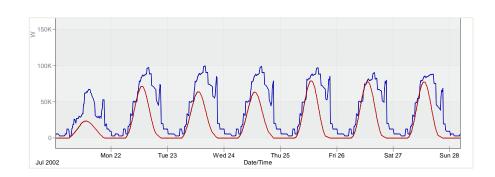
## **Energy modeling as a decision making tool**

Dynamic simulations are a powerful design tool in an **integrated design process** because it enables a **more informed** and **cost-effective** selection of efficiency strategies.

Energy modeling should start as soon as possible and it should be updated throughout the design process. In this way energy modeling becomes a decision making tool, giving feedback as part of larger analysis of building systems and components.



100 kWp



Example: optimization PV plant size in order to maximize the self consumed energy coming from PV on-site production





# Fur further details and information

# Contact us!