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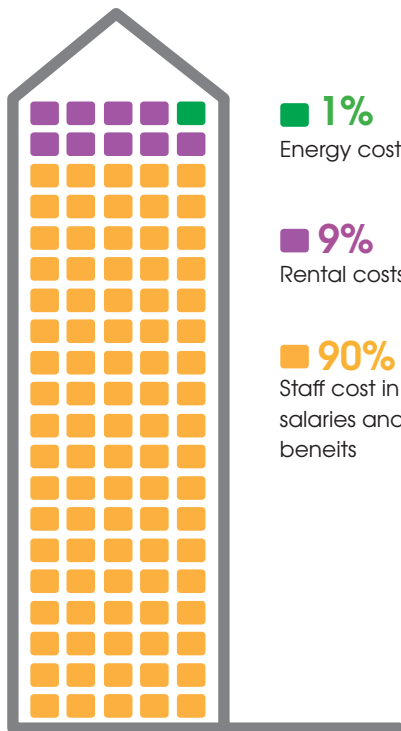
Sustainability strategy  
it's the

development;  
clever choice

## Addressing the thermal environment

Health and Wellbeing of employees in the workplace.

It is now well documented (UK Green Building Council Report, September 2017) that thermal comfort within the office environment is essential for a happy, productive team of staff, which can be enhanced by providing control and adaptability to the occupants, and by addressing the thermal environment beyond just air temperature.



**1%**  
Energy costs

**9%**  
Rental costs

**90%**  
Staff cost in salaries and benefits

The energy consumed in the building may only be approximately 1% of the operating costs of the business with staff costs representing up to 90% of the cost model.

A 1% productivity gain through ensuring the building is supporting health and wellbeing of the staff could provide the business with a very significant gain indeed.

### 10% Variation

A 10% variation applied equally to each cost has a far from equal impact

**+/- 0.1%** +/- 0.9% +/- 9.0  
Energy costs    Rental costs    Staff costs

UK Building Council Report September 2017

# IN THIS ISSUE

## THE THERMAL ENVIRONMENT

Thermal comfort is essential for a happy workforce.

VABI Elements Thermal modelling software can help with building performance.

VABI Elements software you can quickly create an accurate 3D model of your building and perform a Dynamic Simulation Modelling calculation.

Spotting opportunities for improvement such as when the building is overheated or overcooled.

Make informed decisions on building improvements, ensuring you do not over spend on capital aspects.

# NEWSLETTER

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## Thoughtful workplace design, supporting employee performance.

Not surprisingly, thoughtful workplace design can be a powerful tool for supporting employee performance. And a collateral benefit enhances employee health and wellbeing, it is all interrelated.

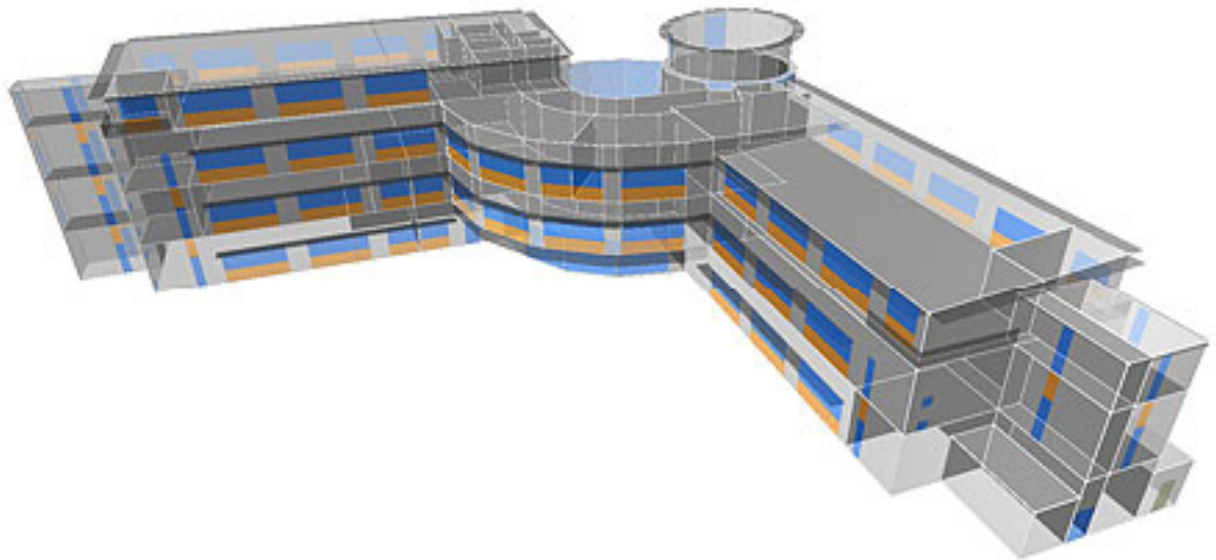
VABI Elements, our thermal modelling software can help with firstly understanding how well your building is performing or not. And secondly can help you make informed decisions on what aspects of the building should be improved and where any money should be spent on any improvements.

## Thermal modelling software

With VABI Elements software you can quickly create an accurate 3D model of your building and perform a Dynamic Simulation Modelling calculation to assess your buildings energy performance and the thermal comfort levels of the indoor environment.

This is the starting point for improving the building envelope and the pathway to enhance the working environment. With VABI you can assess the whole building, a zone, or a specific room.

Once you have the “base model” you can then model possible improvements and re-run the simulation to understand what benefits such improvements would make.



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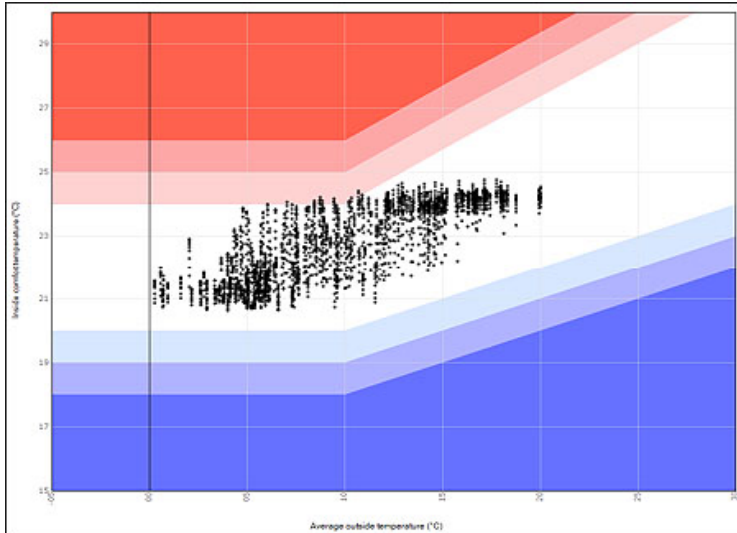
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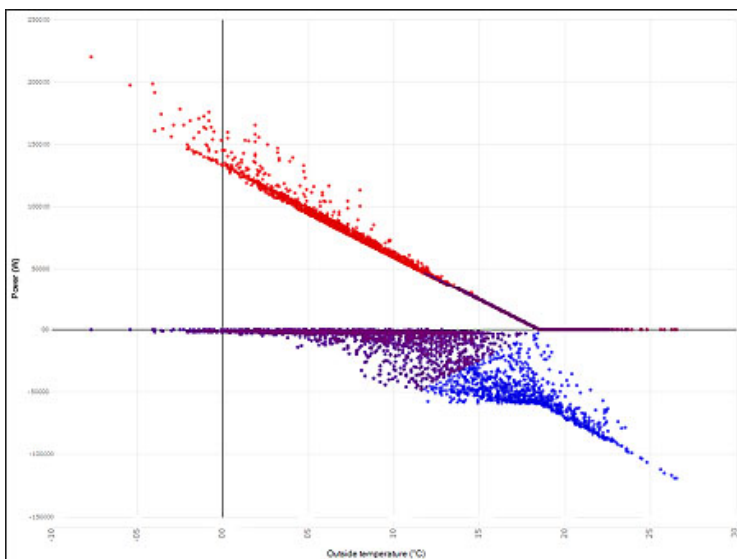
## 3D model outputs

The model helps you understand better how the building services support the building as well as spotting opportunities for improvement such as when the building is overheated or overcooled.



“Make informed decisions on building improvement”

The above shows heating and cooling banding’s helping you understand any issues.



The graph shows heating and cooling curves for a building with the purple dots showing times when energy is being consumed when it is not required. By assessing these purple time periods you can then understand how to set the systems differently and/or help any investment decision by checking plant sizing requirements, ensuring you do not over spend on capital aspects whilst reducing running costs thereafter.

All of which, enhances the health and wellbeing of staff which in turn leverages productivity levels.

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