



# Focchi SpA and the Energy concept

## The performing envelope as component of an integrated design

Energy saving and sustainability are now key elements of a modern project. Focchi Group designs and manufactures engineered building envelopes with high energy efficiency: a cladding is really efficient when it is installed on a equally high-performing building.

## Focchi as Energy Engineer

In the belief that a modern design philosophy must necessarily pass through a design approach which is integrated with all the other building components, Focchi has developed internal capabilities as well as strategic partnerships to provide a dedicated service to the preliminary identification of the ENERGY CONCEPT.

### The Energy Engineer

The construction of a Class A building is a very expensive investment and even more is the construction of a "nearly zero energy" building. Class A certification only considers the primary energy consumption for heating and hot water production, whilst the new directive for "nearly zero energy" buildings requires that all the power consumptions are considered.

It seems therefore logical to think that a "nearly zero energy" building costs more than a Class A one, but this is only true if you follow a design process where:  
*the architect conceives and designs the building and after other professionals try to get better energy performance through additional elements (e.g. insulation of thermal bridges, other insulating elements, high-performance glasses). In particular, the plant engineer sizes the systems for traditional loads, taking the risk of not always evaluate the best benefits of an integrated design with other parts of the building.*

Actually a zero emission building doesn't cost more than a Class A building, provided that the design is truly integrated:  
*Architect and Energy Engineer communicate from the phase of the first conception of the building, by integrating their respective competences. It is essential to precisely size the plants and define the maximum load required, by means of dynamic simulations and, afterwards, using advanced control and adjustment systems.*

The figure of the **Energy Engineer** does not overlap with the plants engineer, but it focuses on the physics of the building and its overall energy behavior (in dynamic conditions) on the basis of the activities carried out in the building itself. It is able to accurately and reliably assess the energy implications of various assumptions in the concept. It supports and assists the architect during the design phase and during the dialogue with other primary players: investor, plant engineer, contractor, and façades manufacturer.

Focchi Group, will be proud to make available to its partners its experience, **organizing meetings devoted to discussions on this theme.**