

# Provincia di Venezia - I.T.I.S. „C. Zuccante“



The Provincia di Venezia is a provincial planning authority for Venice and the surrounding areas. The Provincia di Venezia also manages almost one hundred educational buildings, as well as a number of fire stations, barracks and many administrative buildings. In the last year the Provincia di Venezia has launched a general program to improve efficiency in energy end uses (gas, electricity and water) in the buildings it manages. Savings have already been achieved by improving and extending centralized control and monitoring of heating energy consumptions.

In order to establish a guiding example for future renovations a pilot project has been developed for the administrative block of a secondary school, I.T.I.S. „C. Zuccante“ located in Mestre (VE). The Provincia di Venezia and Rockwool Italia S.p.A. achieved respectively GreenBuilding Partner and Endorser status in October 2006. The energy audit, which includes thermodynamic building simulation, has been completely financed by the Endorser.

## Building data



### Building type

- Offices (administrative block of a secondary-school)
- Renovation

### Size

- 2.748 m<sup>2</sup> (2.579 m<sup>2</sup> heated ; 169 m<sup>2</sup> unheated)
- 3 Storeys

### Energy savings

Expected savings are 161 MWh/year of primary energy for heating, which means about 50 % of reduction after renovation.

### Measures performed

- Improved thermal resistance of walls, roof and ground floor by means of additional external continuous insulating layer
- Substitution of old windows (metallic frame and single glass pane) with new frames with thermal break and double low-emissive glazing (filled with argon)
- Roof covering with light and infra-red-reflective painting
- Installation of ventilators in the roof for night ventilation in summer

