

**Figure 2.7** Distributed power generation by means of photovoltaics. The roof-integrated photovoltaic system has a peak power of 5 kW

Another area that should be highlighted separately is façade- and roof-integrated grid-coupled photovoltaics. If done in an aesthetically promising way, PV claddings may substitute prestigious building elements. These applications may become the first mass market for homogeneous-looking thin-film PV modules. Even if the area-related investment costs of a PV building element is higher than the cost of conventional high-end elements, the electricity generated and the benefit of architectural double uses (Figure 2.8) may compensate for this difference within a reasonable time.



**Figure 2.8** Photovoltaic integration into the glazing of a shed roof. In this case, photovoltaic cells serve also as optical shading elements for the space below, preventing overheating under summer conditions