

ECOLOGICAL NOTES

THE FOUR ELEMENTS

WOOD

European wood can resist rough weather if it is rot-proof (Douglas fir, chestnut, larch, acacia) or if it is retified, that is to say transformed by pyrolysis. This thermal treatment at moderate temperature (180-250°C) modifies the wood's lignin molecules. The retification process is a low-energy technique with consumption situated between solid wood and composite wood. The main advantage of retified wood is that of having a very low impact on the environment, out of all proportion to the exotic woods currently used for outdoor construction.

ORGANIC PLANTS

The hardest task is finding organically cultivated plants. The Croux nursery has an organic subsidiary which provides us here with shrubs and Scots pines. The Pépinières de la Bambouseraie d'Anduze have created an organic bamboo production line.

SOLAR PHOTOVOLTAIC PANELS

Before getting into solar energy, start by foreseeing energy-saving lighting. It is the most sustainable approach. Installing panels does raise several questions. Many years of producing electricity are needed to amortize the energy used in manufacturing and recycling a solar photovoltaic panel. The choice of solar energy in lighting your garden becomes interesting if you link the solar panel to the local network (e.g. EDF) and selling off the surplus.



RECYCLING AND SAVING WATER

Saving water is an important challenge and even if solutions exist, putting them into practice inside a building is not so simple. It involves recycling rainwater, finding a place to store it, foreseeing a solution in the case of insufficient rainfall. Recycling is usually done by a diversion from the roof-gutter of your house or from the apartment-building's rainwater column if you live in town. The water is stored in a reservoir. If it is made-to-measure, it can be concealed in wooden casing that can be used as a bench or in the space beneath the flooring of a terrace. If the reservoir is not placed high enough (lacking pressure by gravity), you have to install a pump that will operate when needed: manual sprinkling or electromechanical solenoid valves for automatic sprinkling. In this latter case, provide for a bascule-converter to the public water supply during a rainfall-shortage.