

# THE PASSIVE HOUSE – A VIABLE SOLUTION FOR THE „CÂMPIA CRIȘURILOR” REGION

**POPA Tania-Mariana**  
University of Oradea  
[tania\\_popa@yahoo.com](mailto:tania_popa@yahoo.com)

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- The solar energy is an alternative to the classic energetic systems, in terms of the more and more intense requirements for energy and the conversion to the ecologic ways to produce it; in the future, the construction of houses fitted with passive solar energy collectors is envisaged.

The direct conversion of the solar energy into caloric energy is made by means of simple constructions, named as “passive houses”. These are defined as constructions that ensure an optimal inner climate, either in the summer and in the winter, with little intervention of a conventional energy source or even without it at all. In the case of passive houses, the solar energy collected from the outside is transformed into caloric energy, in sufficient amounts to maintain a comfortable inner temperature in the cold season.

The construction of a solar house needs a compact wall, made of materials with great solar heat collecting and stocking capability (earth, concrete), with an incline as close as possible to the optimal inclination angle for that particular region. In order to increase the solar energy retaining capability, the collecting wall will be painted with dark colour, even black, as seen in fig.1.



Fig.1. Passive house.

## REFERENCES

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