Broader Perspectives

From Candles to PV Electricity: a Four-Year Experience at IguapeCananéia, Brazil

Roberto Zilles1.*, Eduardo Lorenzo2 and Paulo Serpa1

¹ Instituto de Electrotécnica e Energia, Universidade de São Paulo, 05508-900 São Paulo, Brazil

A PV rural electrification experience, based on the solar home system (SHS), is being carried out at a coastal region in the state of São Paulo (Brazil). Particular attention has been paid to aspects, relating to the integration of PV technology into the pre-existing social system. Regarding technical aspects, some special features have been designed: a 'battery shelter' made by the users; combined use of 'high power' fluorescent light with 'low power' incandescent light, etc. Regarding organizational aspects the technical training should be outlined. We initially decided to train one user in each community more intensively. This user was chosen from among those who appeared to be more skillful in relation to our requirements. This apparently common-sense oriented procedure was shown to be less than appropriate, because it interfered with social relationships that we knew very little about. We observed that later on the community decided who would be responsible for the maintenance; this time widely accepted by all the users. The technical and organizational aspects together conform to a particular rural electrification scheme that can be useful for general SHS projects. Copyright © 2000 John Wiley & Sons, Ltd.

² Instituto de Energia Solar, ETSI Telecommunicación, Unversidad Politécnica de Madrid, Ciudad Universitária, 28040 Madrid, Spain