



Case Study



Rizhao, Shandong Province, China - Solar heat and PV Utilization

Solar heat and power Rizhao, an urban area with about 350,000 inhabitants in the cold climate zone, is using solar energy to provide water, heating, and lighting. Under a municipal government retrofit program starting in the 1990s, the city made it mandatory for all buildings to install solar water heaters. After fifteen years of efforts, 99% of households in the central district obtained solar water heaters. Solar water heating is now considered common sense. In the total, the city has over half a million m² of solar water heating panels, the equivalent of about 0.5 MW of electric water heaters. Most traffic signals and street and park lights are powered by solar cells, reducing the city's carbon emissions and local pollution. The achievement was the result of three key factors: a regional government that promotes and financially support the research, development and deployment of solar water heating technologies; a new industry which took the opportunity to engage in the business of producing affordable panels; and a city leadership. The cost of solar water heaters was reduced to that of a conventional electric water heater, and households were assisted with installation of new panels on their houses. The city assisted with awareness raising and publicity on mass media. Since 2001, the city has been promoting the solar panels through building regulations, and public engagement and education. Building regulations require solar energy equipment to be designed, constructed, examined and approved during new-build construction, solving technical and policy problems. As a result, 99% of buildings in urban areas, and over 30% of houses in rural areas are installed with solar water heaters. On top of this, most of the city's traffic signaling, street lighting, and park illumination are powered by photovoltaic panels.

Solar water heaters in Rizhao



Source: <http://news.66wz.com/system/2009/10/07/101455359.shtml>

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Credentials

Authors: Paul Suding, and Florian Steinberg. Edited by: Florian Steinberg