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Stakeholder Perceived Barriers to the Use of Solar Energy in Thailand's Buildings

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Manda Trevarthen

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Abstract

Energy efficiency and use of renewable energy is currently a key topic given rising fuel prices and concerns regarding future energy security. Governments around the world are looking for ways to reduce the demand for energy from unsustainable sources either through improving energy efficiency or through generating energy using renewable sources.

The building industry is one industry where it is considered that energy demand can be reduced. Studies have shown that green building practices, such as the use of solar energy, can substantially reduce the energy demand of residential and commercial buildings. However for green building practices such as solar energy to be incorporated into a building design, industry stakeholders must understand the benefits.

Despite Thailand having a tropical climate there is little adoption of either passive solar design strategies or solar energy technologies. In this study 30 interviews were conducted with stakeholders in the Thai building industry and analysed using grounded theory methodology to determine what stakeholders perceive as the barriers to using solar energy in buildings in Thailand. As well as analysis of the interview transcripts, research participants also completed a 20 question Likert scale survey designed to gauge opinions towards known barriers to the use of solar energy in buildings.

The research identifies 25 barriers that stakeholders in the building industry perceive to be barriers to the use of solar energy in buildings in Thailand. The core concept of the research is that stakeholders perceive a difference between the concepts of awareness and knowledge and a lack of awareness and a lack of knowledge is the primary reason solar energy is not used more often. Increasing both awareness and knowledge of solar energy is the primary way to encourage consideration of solar energy in Thailand's building projects.

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- Experientia docet -

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“We need to develop energy resources for greater self-reliance in order to increase energy stability and to sufficiently meet the demand at both domestic and international level.”

Abhisit Vejjajiva
Thailand Prime Minister
December 2008

From Thailand's Renewable Energy and its Energy Future (Sutabutr, 2009)

