



Copper Alliance



IMSIA.CN

Market Development Strategies for Solar Cooling Products/Systems

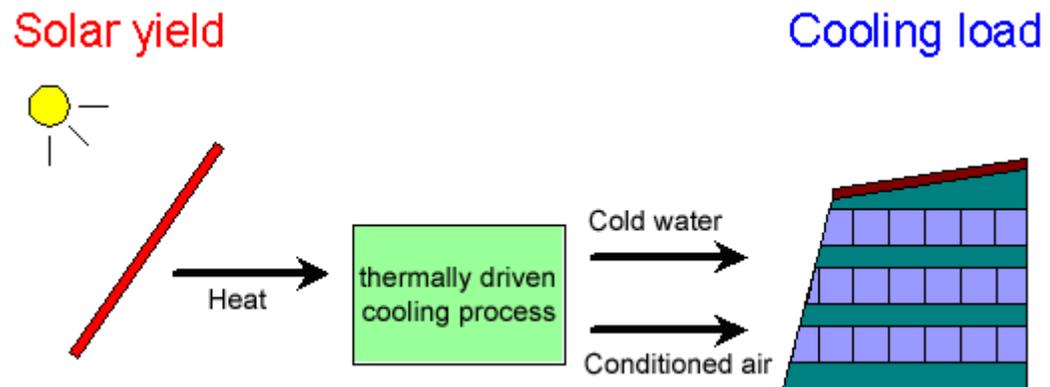
Joseph Huang

March, 27th, 2015; Chinese Solar Cooling Conference'2015



Brief intro. Of IMSIA

IMSIA's market development strategies for solar cooling products/systems



Brief intro. Of IMSIA



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Who is IMSIA

- Industrial alliance.
- Represents 60% production of flat plate, heat pipe and U pipe solar collectors in China till now.



Brief intro. Of IMSIA



IMSIA's core members

- **8** solar water heater manufacturers joined IMSIA as core members.
- **122** design institutes attended training seminars on solar buildings national wide.
- **6** leading real estate developers agreed to initiate a trial program with ICA China who would provide technical support to some selected buildings for the design and renovation of solar water heating system.



Brief intro. Of IMSIA



IMSIA's achievements

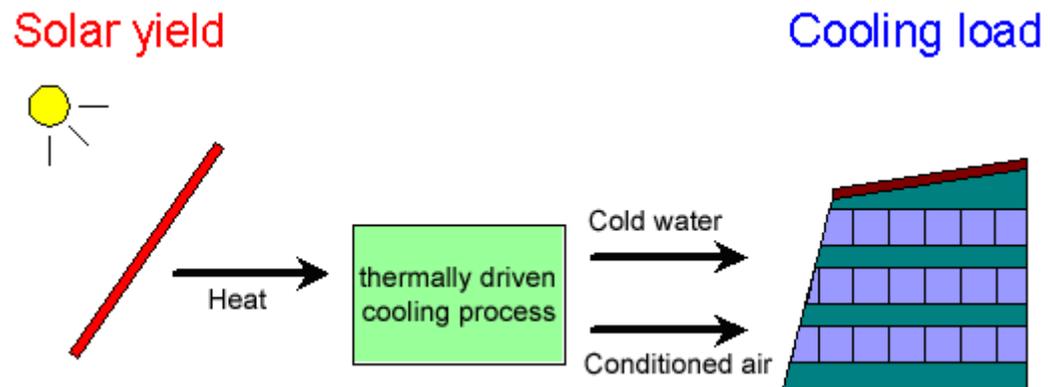
- Policies & regulations: 12th -5-Year Plan
- Codes & standards: **22** product manufacturing or system design standards
- Consumers: Trained **3000** engineers, **1500** architectural students,

\$8,000,000 investment for market development and promotion for metal solar water heating system during the past 6 years.



Brief intro. Of IMSIA

IMSIA's market development strategies for solar cooling products/systems



Major barriers for the marketization of solar cooling products/systems



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No.1 ROI, payback time

No.2 Lack of incentive policy

No.3 Maturity of technologies

IMSIA's market development strategies for solar cooling products/systems



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IMSIA's strategies for market development

- Customer choice: large public buildings, library, museum, etc.



United World College in Singapore, 3900 m² solar collectors on the roof, delivering 2200 MWh per year and providing a cooling power of 1.5 MW. Heat is converted into cooling by an absorption chiller.

IMSIA's market development strategies for solar cooling products/systems



IMSIA's strategies for market development

- Economical issue: Considering electricity prices and gas prices



Field of solar collectors with a gross surface area of 1.330 m² on the roof of Festo AG & Co. KG in Esslingen.

IMSIA's market development strategies for solar cooling products/systems



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Choice of technology for heat absorption

- U-pipe solar collector



A library in Hainan University, 1492m² collector. Payback time 10 years. Haikou.

IMSIA's market development strategies for solar cooling products/systems



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Choice of technology for heat absorption

- Heat pipe solar collector



360kW solar cooling system with heat pipe solar collectors, Sanpu company Office building, Beijing

IMSIA's market development strategies for solar cooling products/systems



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Choice of technology for heat absorption

- U-pipe with CPC reflector solar collector

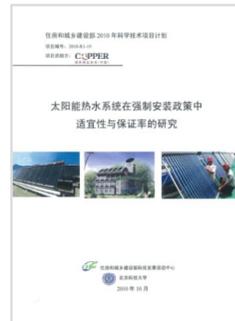
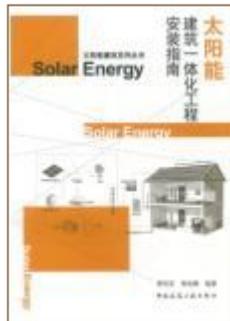


The U-pipe with CPC solar collector from Linuo Company

IMSIA's market development strategies for solar cooling products/systems



Lobby the government to implement more favorable policies for solar cooling.



IMSIA's market development strategies for solar cooling products/systems



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Improve the codes and standards, develop guidelines for designing, construction and operation for solar cooling systems.

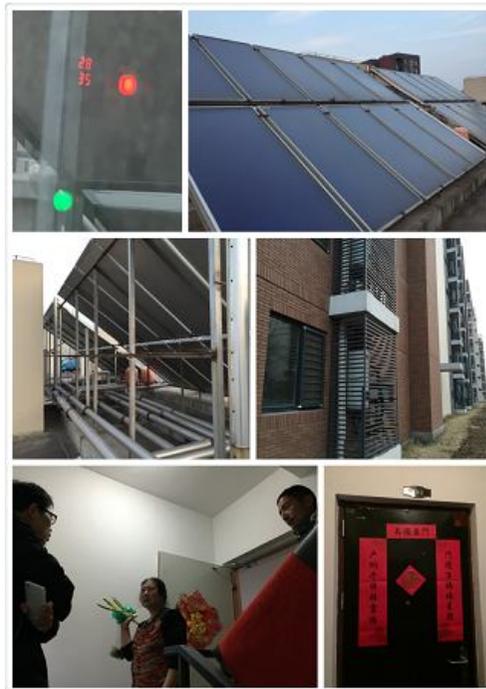


IMSIA's market development strategies for solar cooling products/systems



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Integrate the supply chains of solar cooling products/systems



IMSIA's market development strategies for solar cooling products/systems



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Influence local government official, designers and owners by conference and seminars



Kunming



Kunming



Zhengzhou



Zhengzhou



Hefei



Hefei



Ningbo

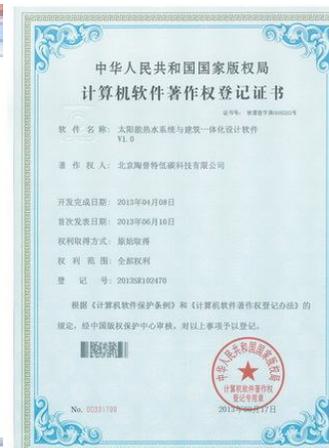


Ningbo

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Provide solar water heating system design software to designers freely

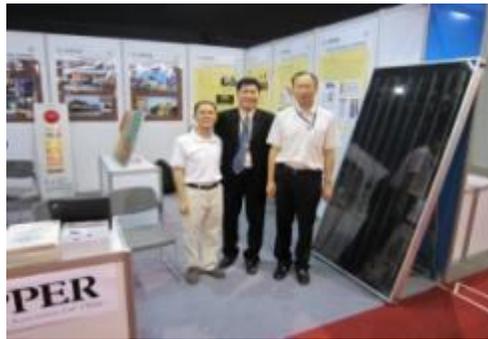


IMSIA's market development strategies for solar cooling products/systems



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Develop oversea market



Bangkok, 2011



Kuala Lumpur, 2010



Bangkok, 2012



Berlin, 2012



Zurich, 2013



IMSIA's market development strategies for solar cooling products/systems



Welcome to join us!

IMSIA Solar Cooling working Group

A professional market promotion organization for solar cooling.



Contact us



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Thank you

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