

# **Results and Perspectives for CSTS Market Development In France**

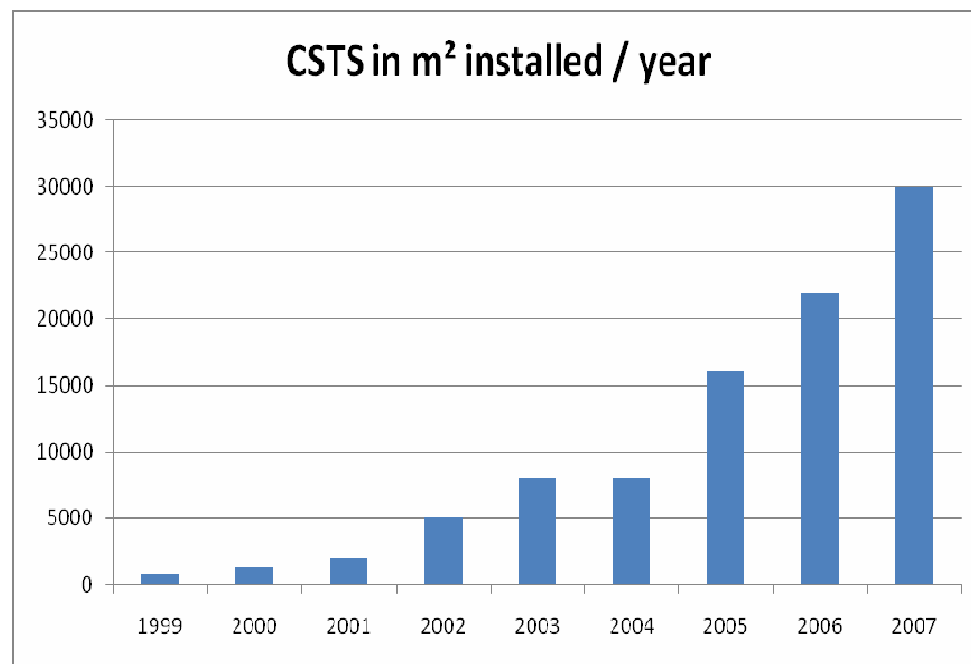
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# Political review in France

- CSTS market is developed since a long time in France, and a **national strategy has been developed since 1999 to now**
- **A efficient public subsidies scheme for CSTS** (state and local authorities) with specific criteria, since 1999 in the frame of Plan Soleil :
  - **To decide** : subsidies 80 % of pre-diagnostic (simple technical survey) in limits of 3 800 €
  - **To invest** : up to 350 euros/m<sup>2</sup> (solar collector) from ADEME incentive in 2007 + additional regional contributions (in the limit of European State Aid limits) = subsidies from 40 to 80 % of the installation costs (limits in 650 €/m<sup>2</sup>)

# Market review in France

- ❑ CSTS market is already and relatively “well” developed
- ❑ **30 000 m<sup>2</sup> / 21 MWth newly installed in 2007 (expected).** 11,5 % of the annual ST metropolitan market 2007
- ❑ In total, since 1999 to 2007 with the “Plan Soleil”, **93 000 m<sup>2</sup> (65,1 MWth) have been installed for CSTS**
- ❑ **CSTS represents 12,4 % of the ST metropolitan market (753 700 m<sup>2</sup> installed from 1999 to 2007).**



# Political review in France

- **Energy law voted in 2005**, with a clear target about renewable heating (declined with solar thermal, with a target about CSTS by 2010 and 2015)
- ❑ **New thermal regulation 2005 (effective since October 06)** : new requirements concerning reduction of energy consumption for hot water production would progressively lead to a greater use of solar equipments
- ❑ **The future thermal regulation 2010, (-20 % on the reference RT 05)**. The new requirements concerning reduction of energy consumption would lead to a greater use of solar equipments

# Political review in France

- ❑ **The future thermal regulation 2012 : 50 kWh/m<sup>2</sup> of housing for new building**, would put solar equipment for hot water as a standard of the art for the building sector
- ❑ **The thermal regulation for existing building (attended in 2008 or 09)**, would also lead to a greater use of solar equipments in the existing and refurbishing MFH

## Impact of thermal regulation (2010 and 2012), with stricter requirements in new buildings for hot water production

=> development of the share of CSTS for new  
building (until **50 % of new dwellings after 2010**)

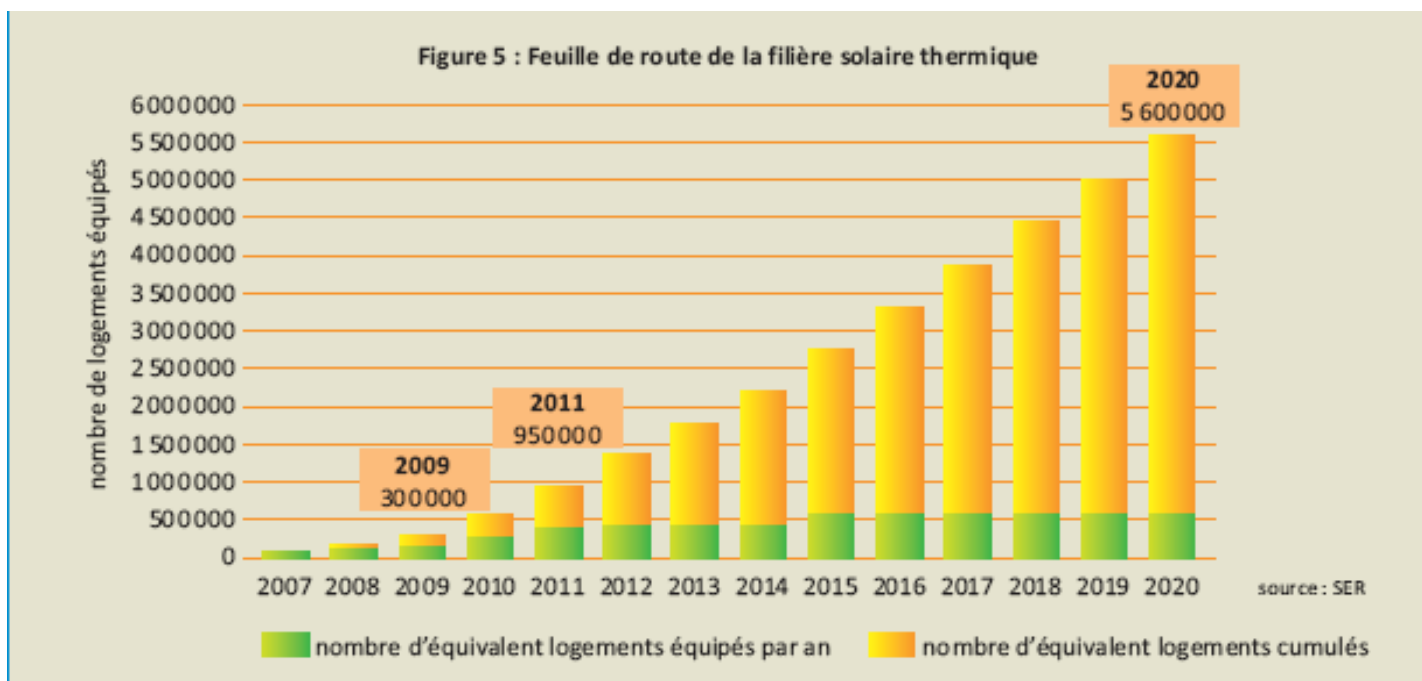
=> The market should rise quickly and strongly, up  
to **100 000 m<sup>2</sup> (70 MWth) per year** on the  
segment of CSTS for new MFH

- ❑ **Existing building continue to be a main target for CSTS**, in link with refurbishment
  - ❑ CSTS market depend of the **policy** (application of an thermal regulation for existing building) and **subsidies for voluntary installation** (CSTS would be not an obligation of Thermal Regulation)
- => Estimated market on existing building : 50 000 to 100 000 m<sup>2</sup> (35 to 70 MWth) of CSTS newly installed per year after 2010.

- ❑ The **CSTS market after 2010 in France**, could represent **150 000 m<sup>2</sup> (105 MWth) newly installed per year**, equivalent to **100 000 dwellings of MFH** equipped with CSTS per year
- ❑ In 2020, CSTS could represent at least 20 to 30 % of the annual global solar thermal market in France.



Equivalent to **150 000 dwellings in MFH equipped with CSTS per year in 2020**, the equivalent market would be to **225 000 m<sup>2</sup> installed per year (157,5 MWth / year)**.



## Current situation about quality promotion on CSTS :

- Providing a « Garantie Solar Results » for each one CSTS applications
- The challenge is not only to have a well designed CSTS installation, but also to keep the performance at the good level on a long time

## Current situation about technical activities :

- **Development of a qualification for CSTS designer (form less than 100 now, to thousands)**
- **Develop the solar « culture & experience» of the maintainer**
- **Development of a collective experience about CSTS :**
  - Share the expertise down/up & up/down,
  - Done survey on the market,
  - Solving the problems (technicals, juridics, ...) at a global level

# Supply side on French level

- Ademe has produced in 2007, a referential of training for designer of CSTS. Training sessions of trainers are previous for 2008 and after.**
- The qualification and certification (OPQIBI) of designer is already apply, without a big success. It should be revised in the future.
- In the framework of Qualisol (quality scheme for installers, 12 000 at the end of 2007), a referential of training could be developed on CSTS in 2008, also for the maintenance.
- Architects are not yet focused for training plan.

## Current situation about political & awareness activities :

- Some Regions are very pro-active for CSTS development, specially for social housing and touristic sector
- Guidelines are developed at national level :



# Supply side on French level

**Current situation about political  
& awareness activities :**

**Enerplan and Ademe are  
present on key events (like  
annual social housing  
congress, hotel fair, ...)**

**Regional campaigns are done  
(Alsace, Rhône Alpes, Paca,  
LaRo, ...)**



# Supply side on French level

**Current situation about political  
and awareness activities :**

- **Survey trip and meeting for  
key decisioners in building**
- **Events for inauguration of  
new CSTS**



## Current situation :

- **The housing sector is moving on CSTS. Each one (more or less) has at least one CSTS project for a new building. A few group of social housing actors generalise CSTS when is it feasible (economically and technically)**
- **The private sector starts on CSTS, where the political pression is strong (obligation of solar hot water to have the permit building) and/or to produce a better building offer for energy efficiency**
- **The planners/designers still to be late with the demand side**



# Upcoming Developments and Perspectives on French level

- **With the perspective of thermal regulation of 2010, the building actors anticipate to have experience on CSTS**
- **The Labels (high efficiency and renewable, Effinergie equivalent to passive house, ...) should be very positive for CSTS in new building . Labels prepare the next standarts**
- **A thermal regulation should be introduce for the exiting building. It should be a first step on the far way for the thermal renovation of the stock**

# Upcoming Developments and Perspectives on French level

- **The financial condition of the development of CSTS is a key question for medium term**
- **The quality schemes (training, GRS, ...) is a high priority for a sustainable market development of CSTS**
- **Campaigning at national and regional levels still to be necessary for a long time, in synergy with ESCO and utilities**