

Initial country report: THE NETHERLANDS

The following presents an update of the status mid 2006 of requirements on building regulation, product certification, subsidy on purchase and testing with respect to solar thermal systems.

Background/status

Regulations

Building regulations

- Solar thermal systems and components shall fulfil all requirements as described in the general building regulations (called Bouwbesluit, 2003) including safety, health and energy performance. Determination of the energy performance is further detailed in NEN5128 for residential buildings and NEN2916 for non-residential buildings. It is expected that the coming EPBD standard for solar thermal systems will be incorporated in the next update of these national standards.
- Energy performance of solar thermal systems is taken into account in the two standards mentioned above. The standards indicate default values for performance of solar domestic hot water systems and solar combisystems depending on size and heat demand. Calculation procedure is suitable and reasonably accurate for system sizes and characteristics common in the Netherlands, hence, applicability is restricted. Applicability will be larger when the coming EPBD standard for solar thermal systems will be implemented.
- Declaration of conformity can overrule the default values of solar thermal systems in the standards. These declarations can be based on assessment from testing or may be determined otherwise. When the coming EPBD standard for solar thermal systems will be implemented, declaration of conformity will not be necessary anymore as results from the test report can be used directly.

Regulations on water

- All installations using mains water shall fulfil NEN1006, as among others mentioned in the Bouwbesluit.
- A possible frost protection fluid in the collector loop shall have a so-called KIWA-ATA certificate, i.e. in order to prevent health risks if the collector fluid mixes with drinking water.

Regulations on system operation

- Hot water temperature shall be restricted to 85⁰C.
- Systems working at mains pressure shall be able to withstand 15 bar. Otherwise, clear indication of the maximum operational pressure shall be indicated and this system shall withstand 1.5 times the pressure indicated.
- Restrictions with respect to use of fluids in heat exchangers shall be indicated. That includes chloride concentration and DH-values for mains water.

Subsidies

- There is no governmental subsidy scheme for solar thermal systems anymore. Some local subsidies exist. Lack of clear governmental decision on availability of subsidy has frustrated solar thermal market growth for over two years now, especially for existing housing.

Testing

- After a period of being fully prepared for EN testing of solar thermal products for Solar Keymark, TNO had to decide to stop their accredited status due to the Dutch market situation.

Certification

- Product certification: From January 2004, national certification scheme for solar domestic hot water systems 'Zonnekeur' is in operation. Zonnekeur considers criteria and characterisation according to EN12976 plus additional criteria as mentioned above under regulation. Energy performance determination has been described in NPR7976, also enabling performance assessment of subsystems with somewhat larger or smaller collector area and/or heat store and of multi-floor systems (with collective solar collector area and individual heat stores). Presently, Zonnekeur requires energy performance derived from testing and declarations of the manufacturers on the other quality aspects mentioned in EN12976. The intention is to upgrade Zonnekeur into full testing of all quality aspects if the market picks up. Zonnekeur is being issued by Gastec Certification.
- Product certification according to Solar Keymark: Zonnekeur fully accepts Solar Keymark, but the additional requirements as mentioned above under regulation has to be fulfilled as well.
- GIW certification for new-built houses: this certification requires the Zonnekeur certificate if solar thermal systems are applied. It is expected that the link between both certificates comes into operation (about) beginning of 2007.

Insurance

- Insurance of the house is generally not affected by the installation of a solar thermal system.

Others