

17.2.3.3 The Japanese residential PV promotion program

One of the worldwide largest dissemination programs has been launched in Japan in 1994. In the following years the number of small grid-connected systems skyrocketed [25]. This programme was to some extent combined with low-interest consumer loans and comprehensive education and awareness activities for PV. The programme makes blocks of funds available to PV system retailers in a competitive bid programme.

In 1997, the “New Energy Promotion Law” was introduced with subsidies for PV and a target of 400 MW_p by 2000 and 4600 MW_p by 2010. Up to the end of 1998, about 15 000 small grid-connected systems with an average capacity of about 3.6 kW_p have been installed; in 1999 alone, about 18 000 systems were installed. This led to cumulated installed capacity of 200 MW in Japan by the end of the year 1999 (see Figure 17.24).

It appears that the Japanese programme has brought down the PV prices over the last years substantially along with the continuously decreasing subsidies. They were reduced from 50% of the total investment costs in 1994 to about 30% in 1999. The upper limit for rebates has been reduced from 900 000¥ per kW in 1994 to 270 000¥ per kW in 2000 (see Figure 17.25).

A result of this effort is that Japan is now the world leader in the development of grid-connected systems. This success is the direct result of a conscious policy to promote PV technology, both for reasons of national energy security (Japan imports most of its fuels) and for reasons of economic development (Japan aims to dominate PV manufacturing to the same extent as it dominates the production of electronic equipment).

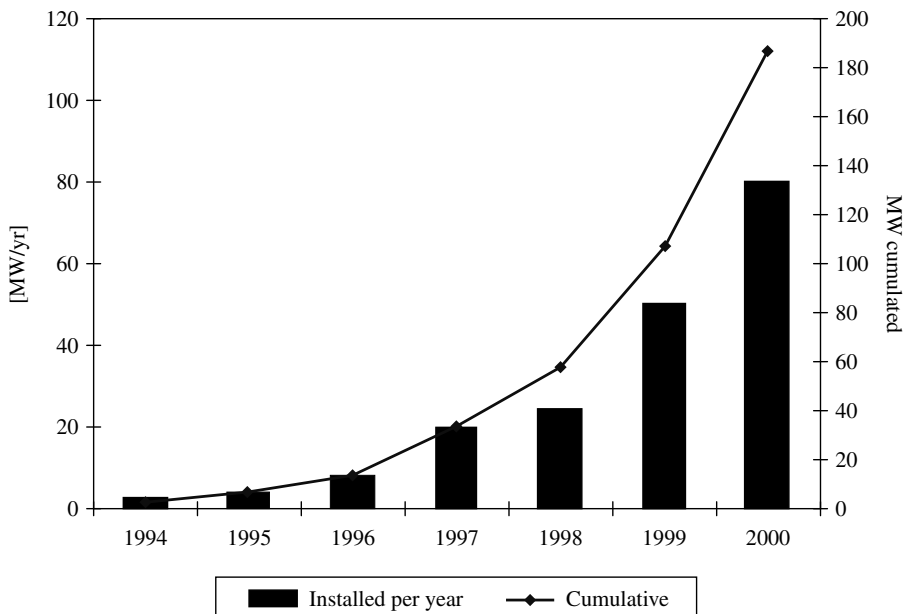


Figure 17.24 Japanese residential PV promotion programme: development of installed capacity and average capacity [25]