

2010

MARKET OUTLOOK



INTRODUCTION

PV markets have never performed so well in their entire history. While the awareness about the PV's capabilities grows in the public opinion, it now appears on the energy map of several countries. In Spain penetration went up to 4% of the electricity production during 2010 summer. In 2010, prices for large systems decreased as low as 2.5 Eur/Wp in some countries. The total of newly installed capacity added in 2010 represents in average the electricity production of two large coal-fired power plants. In several countries, grid parity for residential systems is reachable in the coming years. In some specific cases in countries or regions with very high electricity prices, PV could already become competitive soon with net-metering only.

Adequate support policies that have been driving the markets so far must continue and be further encouraged. The PV Industry also supports well-designed support schemes that limit the cost of FIT for electricity consumers, while ensuring the development of the markets and industry.

MARKET OUTLOOK 2010

The global PV market in 2010: approximately 16 GW.

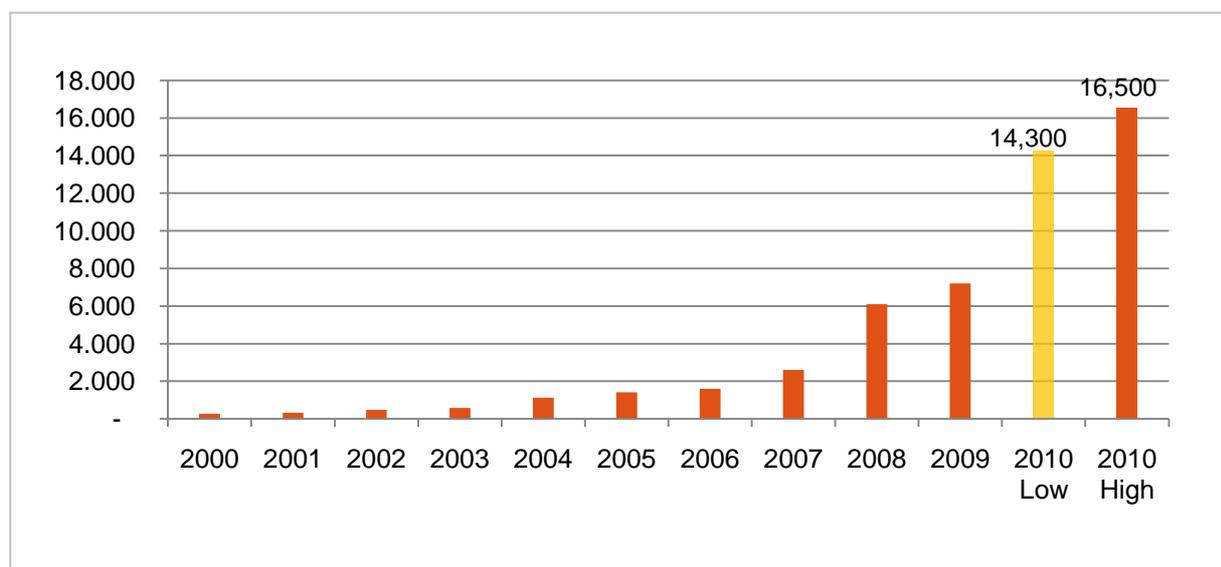


Figure 1: Annual worldwide installed PV capacity from 2000 to 2010 in the World (in MW)

Once again in 2010, the growth of the PV markets worldwide has been impressive. With an estimated installed capacity between 14.3 and 16.5 GW for this year only, PV could have experienced a 100% growth compared to the previous year. The range between both estimates reflects the uncertainties of the market evolution at the end of the year in several key markets.

Considering the shipments that were reported throughout 2010¹ the maximum installed capacity seems to be around 16.5 GW at the end of 2010. Inverter shipments seem to confirm that maximum as well. With a high number of shipments in Q4 in 2010, a market boom could have been expected once again during December - before the cut of FiT in Germany. However, part of these shipments could also end up in inventories in case the market would fail to reach the expected summits.

In addition, the delay in reporting new installations can vary from one country to another, complicating forecasts even further. The last reports from Germany have shown that the market was not performing in December 2010 as well as in December 2009 or June 2010 before significant cuts in FiTs. In Italy and Belgium, a number of installations from 2010 will be reported during the first months of 2011 only. For Italy, a huge uncertainty remains to be cleared up; with the beginning of February some announcements from the Italian regulators

¹ Provisionary data from Navigant Consulting, courtesy of Ms. Paula Mints.

estimate almost 4 GW that could have been installed but not yet reported. This will be confirmed in the coming weeks and months but in the meantime, we remain on the safe side.

All these elements tend to estimate the global market to be most likely between 14.3 and 16.5 GW in 2010, with a reasonable probability of a market size around 15.5 GW based on recent mid-February information.

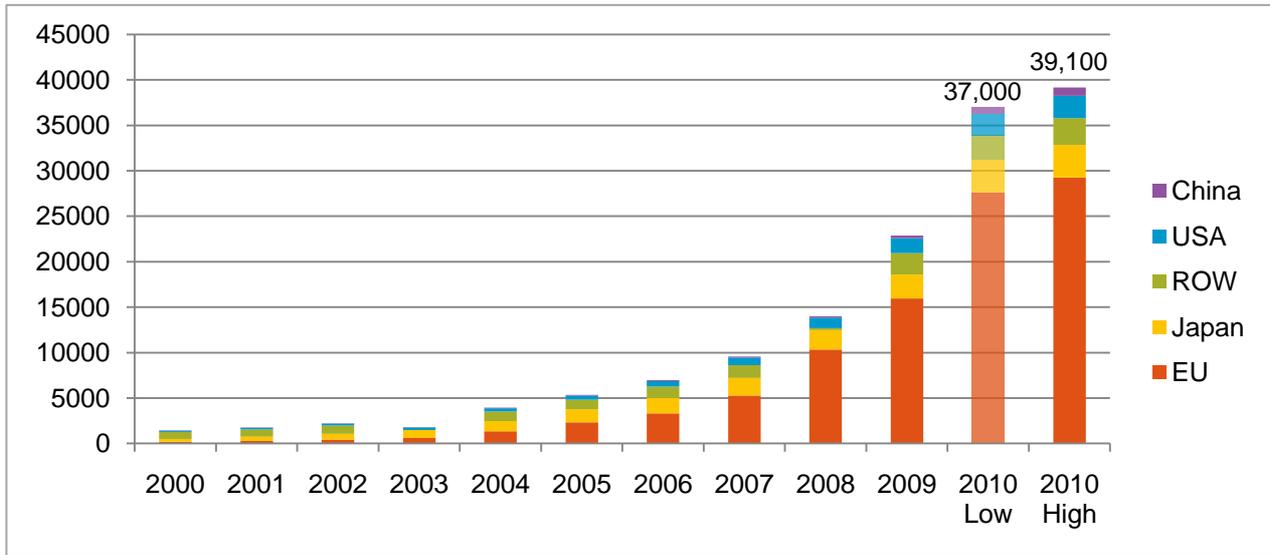


Figure 2: Evolution of global cumulative installed capacity worldwide (in MW)

The total installed capacity has therefore reached at least the 37 GW mark and can be possibly up to almost 40 GW. The increase of the capacity from 2009 to 2010 is the most impressively represented in absolute values.

European markets: at least 3 “GW markets” in 2010

In 2010, Europe alone added between 11.6 and 13.3 GW of new PV installed capacities. Even though 12.5 GW seems to be a good assumption at the moment, it will have to be refined with updated information during the first months of 2011.

While Germany retains its leadership for the second year in a row, the evolution of the main markets shows notable discrepancies.

Behind Germany, Italy’s PV market grew above 1 GW for the first time, scoring the second rank. In Europe, Czech Republic underwent a tremendous market surge that will most likely affect the PV development there in the worst possible way in the coming months and years. But while Spain failed to reach the 500 MW of the CAP, it reached around 375 MW despite strong adverse lobbying and policy instability. In France finally around 500 MW have been installed, Greece reached 150 MW, and in the meanwhile, the UK appeared on the map while the Belgian market scored once again to more than 200 MW. In other EU countries, PV remains at crossroads. Several small but existing markets progressed in 2010 (such as Austria, the Netherlands, Slovakia and Slovenia), while most other eastern European markets did not make any significant progress; such as in the case of Bulgaria.

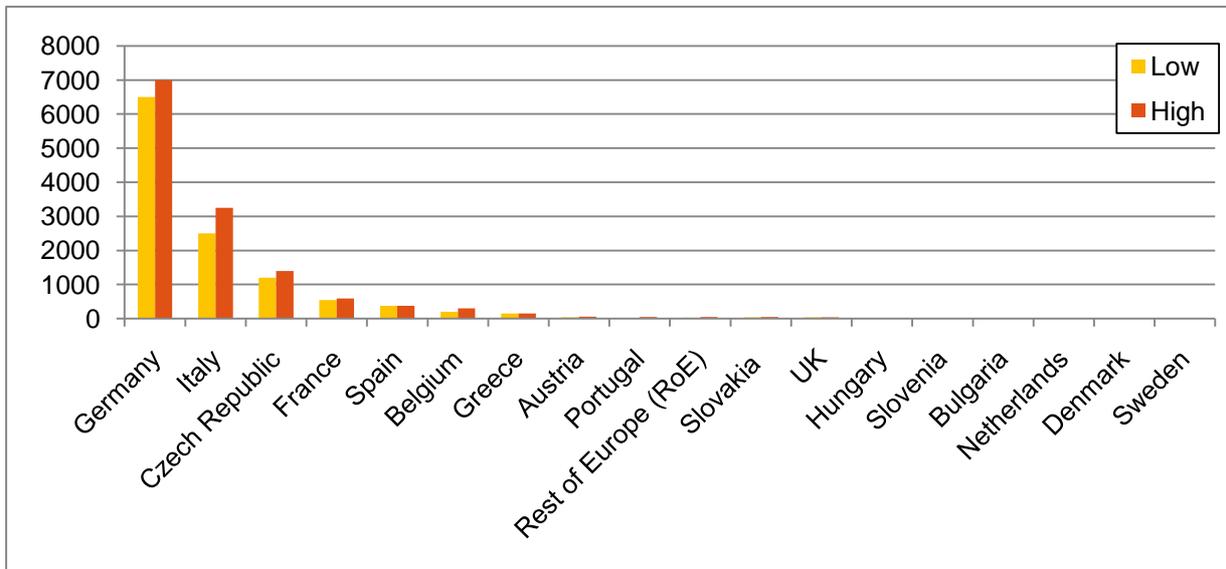


Figure 3 - Newly installed capacity in Europe in 2010 (in MW)

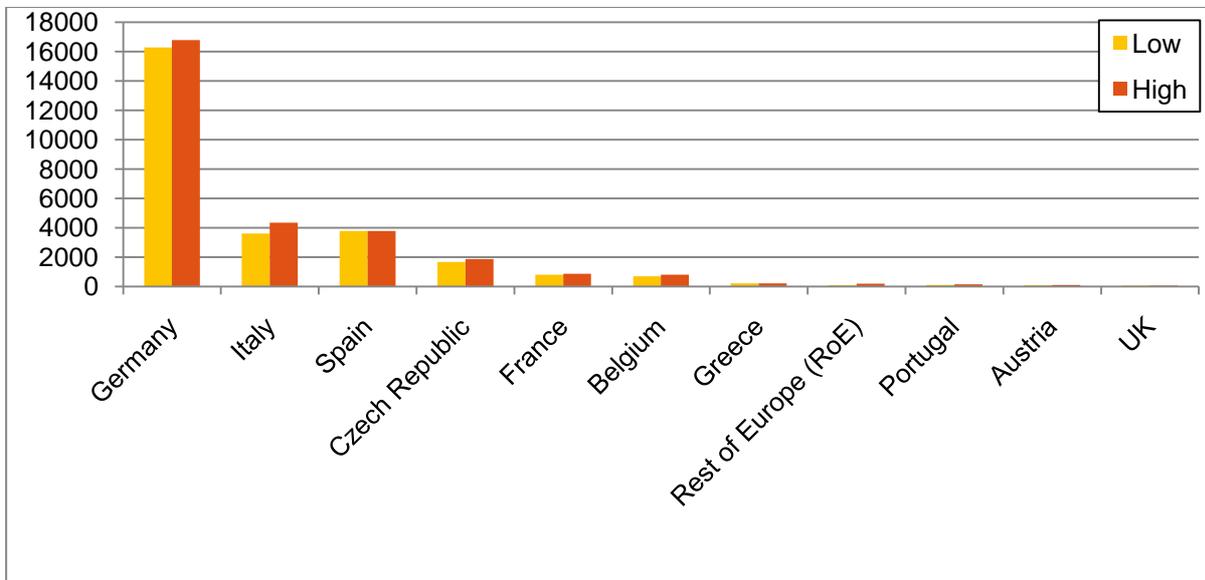


Figure 4: Estimated cumulative PV capacity in Europe in 2010 (in MW)

PV markets outside Europe: Japan approaching the GW mark, US progressing

Representing 20% of the global PV market, non-European countries represent a massive potential in the coming years. In 2010, the major markets progressed to reach in total between 2.6 and 3.2 GW.

Japan has been a vigorous market this year and approached the 1 GW mark, while the US progressed as well to around 700 and 800 MW. Despite the insufficient support, the Chinese market could reach around 400 to 600 MW in 2010. While this number could be considered as a major leap towards a real PV market, it does not imply the giant has awakened yet.

Canada and Australia confirmed to be promising markets that could reach 180 MW and between 150 and 250 MW respectively. The case of South-Korea has been disappointing for the second year in a row but a solid growth is expected for 2011. We expect some additional MW from markets such as Taiwan, India, Malaysia and Thailand but exact numbers were not known yet.

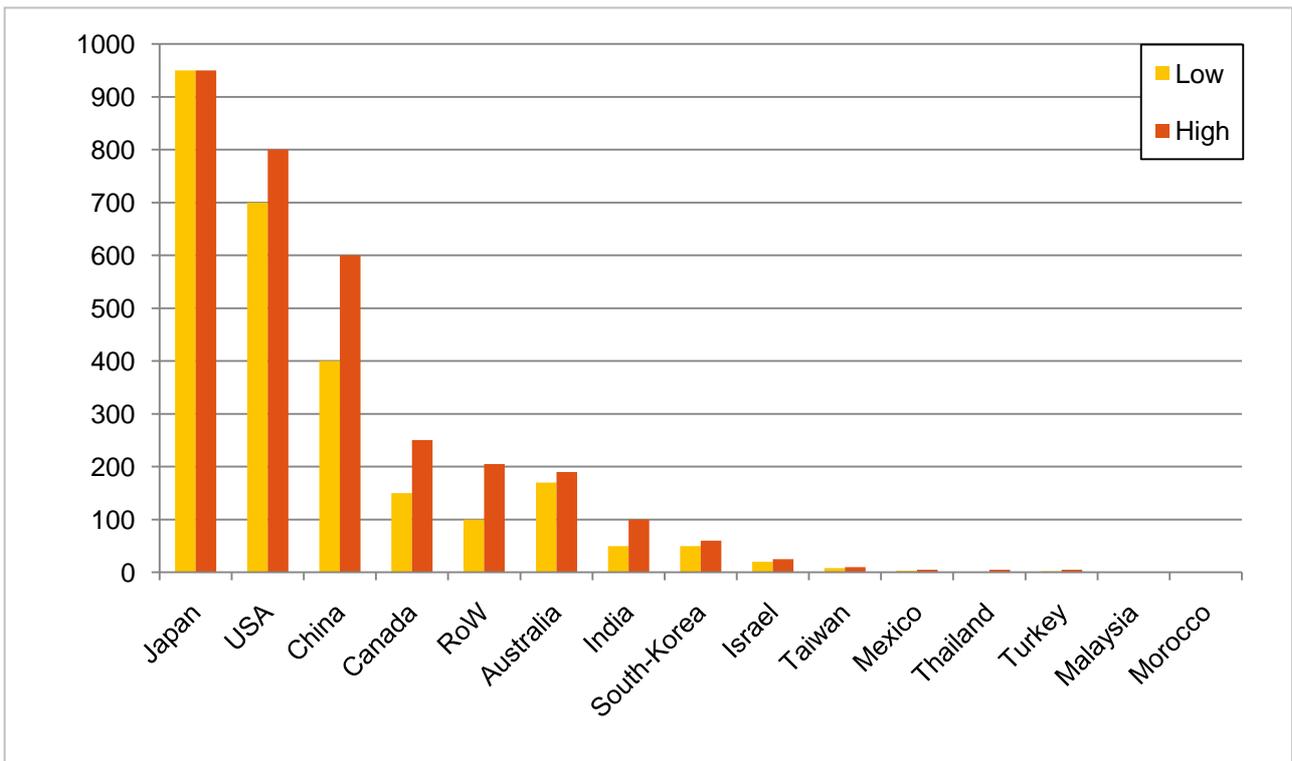


Figure 5: Newly installed capacity outside Europe in 2010 (MWp)

PV IN 2011: ANOTHER RECORD YEAR?

While the supply of PV products will grow significantly in 2011, growth in the global market is likely as well. The possible decrease of the German market in 2011 (that is to depend on political choices) could be limited to 1 or 2 GW in the optimistic scenario. Depending on what was installed in 2010 in the end, Italy could grow to 4 to 6 GW in the most optimistic case. On the other hand, only few markets in the world are at a development phase where high levels of PV penetration would be reached. After one and a half years of strong growth, the demand could stagnate in Europe during the first half of 2011, which will most likely trigger a further price decrease. Prices are even more pushed downwards because of the increased production capacities at the supply side. This could restart the market in Q2 2011 and help to reach similar levels as in 2010 or even higher.

Germany and Italy are followed at reasonable distance by medium sized markets in Europe, such as France, Spain, Greece, Belgium, the UK and possibly Portugal. It is seen that most eastern European markets will either stagnate or slowly grow. Outside Europe, Japan and the US could reach the GW mark, while China's growth will strongly depend on the support measures that the government might put in place. South Korea will add more PV than in 2008 and India could start developing fast, possibly as large as 800 MW according to some national authorities. The addition of medium sized APEC markets could allow the total market in 2011 to equal or overtake the one from 2010.

In a policy-driven scenario, things could change even today. However, if taking the global policy situation towards PV into account, this seems less likely. The market could grow in several countries with a real potential such as France and Spain in Europe, the US (where the potential remains globally untapped), and of course, in China and India. New markets could start as well in 2011 if the political willingness to move forward is confirmed. **In a moderate scenario, the market in 2011 could stagnate around the 16 GW level. In a policy-driven scenario, 20 GW could be reached.**

GLOBAL MARKET OUTLOOK FOR PHOTOVOLTAICS UNTIL 2015

Estimations on 2010 market figures will be confirmed in the coming week. Forecasts for the next 5 years will be approved by the industry at the approaching EPIA's annual Workshop on Market Potential to take place on 18 March 2011 and will be then included in the EPIA Global Market Outlook for Photovoltaics until 2015 due to be published by the end of March 2011.

This is a key publication for the PV sector. Based on an internal analysis of market data from industry members, national associations, government agencies and electric utilities. For years, EPIA has put a great deal of effort into observing and analyzing PV markets. Thanks to its intimate contact with key players of the industry, national PV associations and its deep knowledge of PV policies and support schemes, EPIA market figures are a credible and authoritative source of short-term market forecasts as well as long-term scenarios. With the massive growth of the market, data reliability is becoming a crucial issue: industry players, electric utilities and policy makers must count on reliable data to orientate their decisions, launch investments or plan legislation updates. EPIA is advocating for the availability of quick, transparent and reliable market information and therefore encourages the adoption of effective monitoring systems.

The European Photovoltaic Industry Association is the World's largest industry association devoted to the solar electricity market. The association aims to promote photovoltaics at the national, European and world-wide levels and to assist its Members in the development of their businesses in both the European and in export markets.

DISCLAIMER: Please note that all historical figures provided in this brochure are valid at the time of publication and will be revised when new and proven figures will be available. All forecast figures are based on EPIA knowledge at the time of publication (15 February 2010).



European Photovoltaic Industry Association
Renewable Energy House
Rue d'Arlon 63-67, 1040 Brussels - Belgium
Tel.: +32 2 465 38 84 - Fax: +32 2 400 10 10
www.epia.org