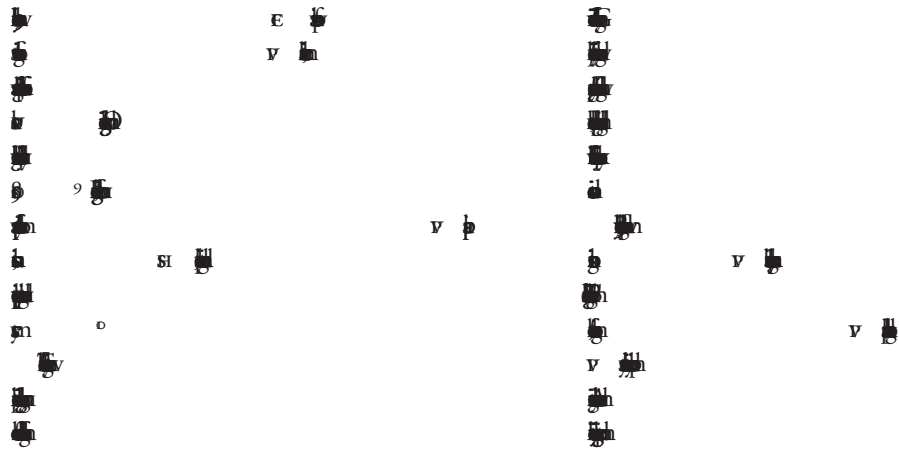
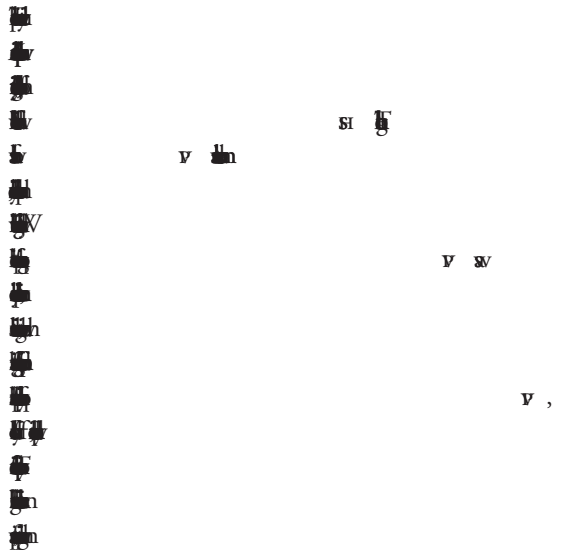


# E l a n a E 9

## FIGURA 1



## FIGURA 2



**SIGNIFICANT SOLAR PV MARKET TRENDS**

During the period in which IFC's solar PV projects were implemented, there were a number of well-documented market trends that emerged in the global solar PV market that had a significant impact on solar PV markets in the developing world. These were the discontinuation of the expected downward trend in solar PV module prices, the increased demand for large solar PV systems in the industrialized world, and the global economic shocks that occurred in the late 1990s and early 2000s (the Asian and Russian financial crises of 1997 and 1998, respectively, the Argentine economic crisis of 1999, and the 9/11 attacks). While these market trends were not on their own responsible for the limited success of IFC's portfolio, they did serve to further exacerbate existing obstacles.

Prices did not decrease as expected and, in recent years, the exact opposite has occurred. According to the United States Department of Energy's Energy Information Administration (EIA), the average price for silicon contracts increased by approximately 25 percent between 2004 and 2006.<sup>12</sup> As silicon is a key component in the construction of solar PV panels, this has had a serious impact on the overall price of solar PV systems. The main reasons for this increase were the continued tight supply of high-grade silicon, as well as the increased demand for solar PV, fueled by subsidized programs in the industrialized world.

It is currently estimated that as much as 50 percent of the cost of solar PV electricity is paid for through transitional subsidies. Most of this is for grid-connected systems, which currently represent well over three quarters<sup>13</sup> of the total solar PV market. In Germany, for example, the electric utilities are now paying customers a significant premium for any surplus solar PV power they sell back to the grid. This huge premium has resulted in a sizable increase in the global demand for solar PV systems.

The increase in demand for solar PV in the industrialized world has affected solar PV markets in the developing world, not only through increased prices, but also by shifting production away from the smaller modules. Load requirements in industrialized countries are significantly higher than those in developing countries, and manufacturers have chosen to move away from the manufacture of smaller modules in favor of the increased profitability and steady cash flow associated with catering to the industrialized country market. The lack of supply of smaller modules has led to increased working capital requirements for smaller integrators,<sup>14</sup> as well as increased pressure on prices for smaller modules. In the period between mid-2005 and the end of 2006, the price of 40-watt panels has increased by 50 percent (36 percent for 20-watt panels).<sup>15</sup>