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Industry Spotlight: Solar Industry

Elisabeth McClatchie
elisabethstarrm@gmail.com

INDUSTRY SPOTLIGHT:

SOLAR ENERGY

BY ELISABETH MCCLATCHIE

IN RECENT DECADES, the human ability to leverage the sun has expanded well beyond tanning and frying ants on the sidewalk. Revolutionized technology and research has both illuminated sustainability issues and provided potential solutions, many of which are being successfully implemented. Within suburban neighborhoods, it is common to see solar panels on every other house, wind turbines on visits to the beach, and see cars pulling in to electric charging stations. Perhaps the most accessible, realistic and reliable source for the everyday American is solar energy.

Pinpointing an exact date of the creation of solar panels is almost impossible, considering the vast number of contributors to the research and engineering thereof. From the invention of the solar cell by Edmond Becquerel to the discovery of selenium-created electricity to Albert Einstein's publication of the photoelectric effect, the steps leading to the modern concept of solar energy began in the late eighteenth century.

Today, there is overwhelming evidence of the work of those contributors coming to fruition. Taking a look at the increase in solar panels in the twenty-first century, the annual increase from 2000 to 2008 is almost negligible. Yet the statistics beginning in 2009 mark the beginning of a new story. That year, the American Recovery and Reinvestment Act was passed by President Obama, providing almost $90 billion for renewable energy advancement.

The statistics give hope for an increasingly green future, although a sudden decrease in the growing rate of solar energy capacity in North America in 2017 comes as a surprise. A potential reason for the suddenly stunted increase in solar energy growth was clarified by a former Vivint Solar employee. According to the employee, solar panels required zero cash down in America up until 2016. But in 2017, a price increase led to a decreased rate of solar energy growth. Although solar panels still eventually pay for themselves through lower energy bills (and the ecological benefits may prove to be priceless), the price tag still deters customers.

Despite North America having been a global leader in renewable energy, Asia takes the #1 spot, with China at the frontline. In 2011, China's solar energy capacity began to take off. Yet Asia has managed to keep a very consistent increase and has risen to more than seven times the solar energy capability of North America in 2017. Although the extreme difference between these two continents can partially be explained by a difference in population density, it is still clear that Asia is in the lead.

The reasoning behind this may be answered in part by the high likelihood that the tag on your shirt reads, "Made in China." As a manufacturing metropolis and Asia's leading country in solar energy, China produces a high number of solar panels annually and has managed to increase national solar capacity by remarkable proportions and investments in renewable energy. Last year, China accounted for over half of the overall global investment in solar energy, demonstrating their commitment to a green future, as well as confidence in the economic benefits. With the United States' recent withdrawal from the Paris Agreement, China has unofficially become the leader within the agreement that over 150 countries have accepted. With constantly debated politics and opinions, it remains to be seen if China's recent success will motivate the United States to take another look at its sustainability efforts, moving the United States forward in the solar energy race.

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