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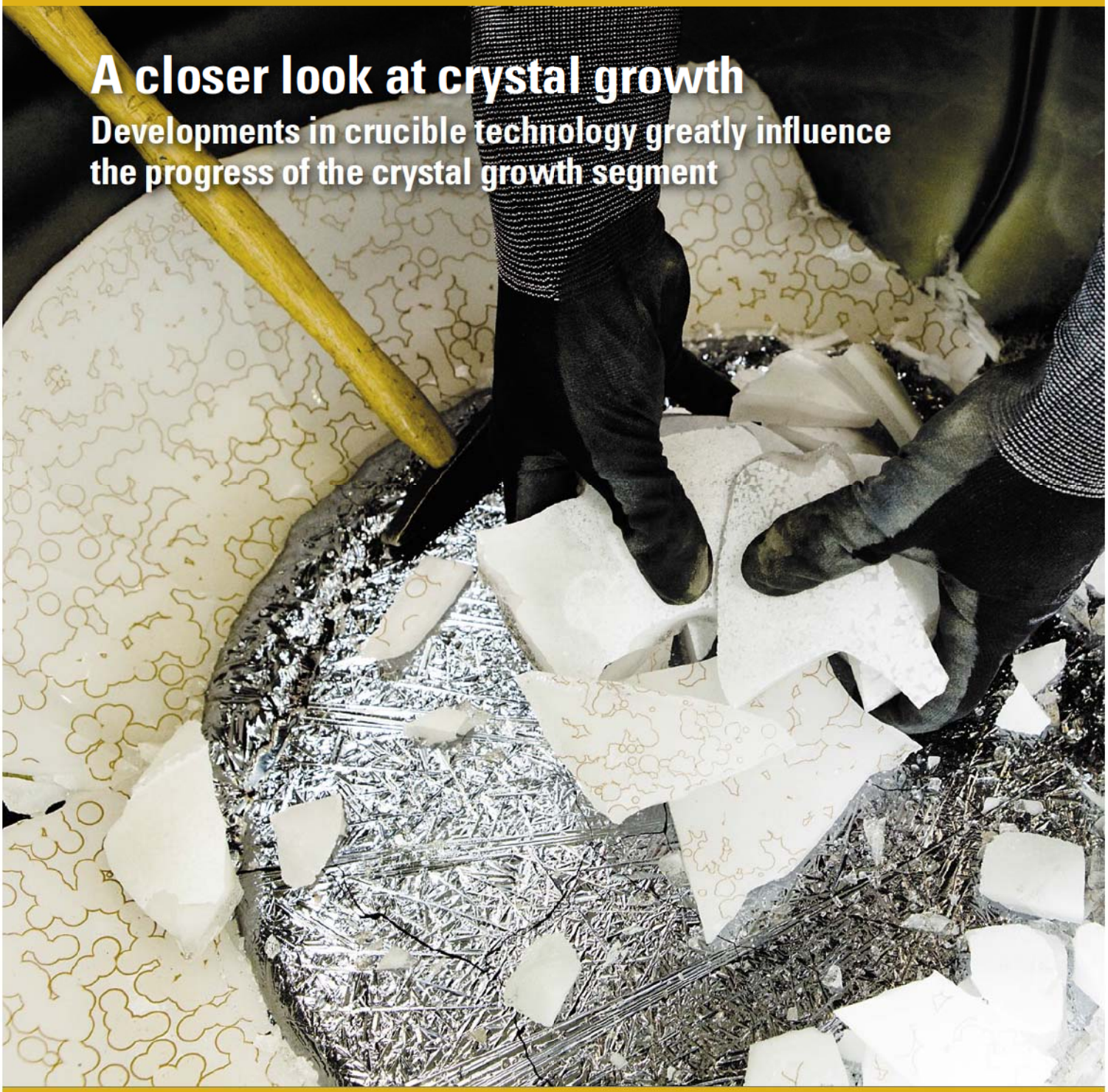
A closer look at crystal growth

Developments in crucible technology greatly influence the progress of the crystal growth segment



Gigawatt Fab
Research institutes led by Fraunhofer ISE are advocating a European »solar Airbus«

Growatt, the new No. 2
Chinese inverter manufacturer achieves the second-best ever PHOTON Lab test result

Intersolar preview
Over the last 6 years, Intersolar Europe has become a completely different fair

Yield measurement
Results for the first 4 months show a group of monocrystalline modules taking the lead

The Climate Group, SEIA join forces to help reduce pollution

In 1970, the first ever Earth Day was held to demonstrate broad global support for environmental protection. At the time, the world's population stood at 3.63 billion people. Today, that number has more than doubled.

Well, guess what? Greenhouse gas emissions have doubled since then, too, raising widespread alarm nationwide. Simply put, America has woken up, and environmentalism has grown up.

Today, the environment has gone from being a fringe issue to a mainstream concern. So in celebration of Earth Day 2014 – and as a way to encourage the widespread use of non-polluting energy sources – The Climate Group and the Solar Energy Industries Association (SEIA) teamed up recently to create a Facebook campaign designed to accelerate the adoption of solar energy in the US.

The »I LIKE SOLAR« initiative centers around solar energy's widespread popular appeal – demonstrated by a recent national Hart poll that shows that 9 out of 10 Americans favor more solar deployment – as well as the »buzz« solar energy creates on social media. In fact, it's estimated that roughly half of all new residential installations in the US result from personal references. What's more, research by the University of Texas shows that someone who has a friend, relative or neighbor with solar will make a decision to »go solar« three times faster than other people.

The primary goals of this innovative Earth Day campaign include:

- Substantially increasing the use of residential solar in America
- Significantly reducing harmful greenhouse gas emissions
- Harnessing Facebook's powerful social network to create a virtual solar neighborhood
- Optimizing solar messaging on Facebook and other social media platforms

GTM Research and the Solar Energy Industries Association's (SEIA) 2013 year-end report calculates installed solar capacity in the US at 13 gigawatts (GW). When it comes to greenhouse gas emissions, that's enough clean electricity to displace 14.2 billion pounds of coal or 1.5 billion gallons of gasoline. Put another way, it's the equivalent of taking 2.7 million passenger cars off US highways.

It's time to be honest with ourselves. We are facing a watershed moment in our nation's history. Today, climate change is a real and growing threat to America and the rest of the world. It's indisputable. Sea levels are rising. We're experiencing more intense and unpredictable storms. And droughts plague the world. Clearly, climate change threatens our economy, our future progress, our health and safety, and even our way of life. Every day, the Earth suffers a little more from human neglect. We can't wish this problem away, and pointing fingers won't solve it, either. There's no better way to celebrate Earth Day – and pay respect to our planet – than to embark on a campaign that can have a positive, demonstrable and measurable impact on our environment.

Today, solar is the fastest-growing source of renewable energy in the US, employing 143,00 Americans and accounting for nearly 30 percent of all new electric generation capacity installed in 2013 – second only to natural gas. In fact, more solar has been brought online in the past 18 months than in the 30 prior years combined. All totaled, solar is now generating enough clean, reliable and affordable electricity to effectively power nearly 2.5 million homes.

The I LIKE SOLAR campaign is an exciting, new collaborative effort. Facebook has 180 million users in the US and reaches 71 percent of all online adults. Creating a robust community of solar owners to share their stories and offer personal testimonials about the value of solar – both from an economic and environmental standpoint – will certainly pay dividends in our fight against pollution and climate change.

Additionally, SEIA is working with its membership and external stakeholders to develop the »Solar Commitment to Environmental and Social Responsibility.« This important voluntary commitment details a set of solar industry guidelines that promote environmental and social responsibility. For more information, please visit www.seia.org. ● rr

▲ Rhone Resch, president of the US Solar Energy Industries Association (SEIA).

rooftop solar. According to the article, the state government is also planning to raise a further $100 million for the program by issuing new bonds. With net energy metering, customers with rooftop PV systems receive full retail credit for any surplus electricity they generate and send to the grid. The credit is then used to offset the electricity they take from the grid when the output from their PV system is insufficient to meet their demand.

A total of 17,609 PV installations representing 129 MW of installed PV capacity were connected to the Hawaiian Electric Co. Inc. (HECO), Maui Electric Co. Ltd. (MECO) and Hawaii Electric Light Co. Inc. (HELCO) grids in 2013, according to the latest figures from HECO. This represents 39 percent year-on-year growth. Together HECO, MECO and HELCO – all owned by electricity supplier Hawaiian Electric Industries Inc. – supply electricity to roughly 95 percent of the Hawaiian population. As of Dec. 31, 2013, the grids of these three electric companies hosted a total of 40,159 PV systems with a total capacity of 300 MW. Of those installations, 96 percent take advantage of net energy metering.

HECO now has 221 MW of PV power on its grid, while HELCO has 38 MW and MECO 41 MW. Residential PV systems account for the majority of PV capacity installed in the state.