

HIROKI SUGIMOTO

DRIVING SUSTAINABLE INNOVATION IN SOLAR CELL MANUFACTURING

Leaders in the solar cell manufacturing industry who possess a deep understanding of technology play a vital role in driving innovation. Their expertise spans ground applications, vehicle integrations, and space satellites, offering a versatile and comprehensive perspective on the industry. This extensive knowledge allows leaders like Hiroki Sugimoto to tackle diverse challenges, deploy state-of-the-art solutions, and stay ahead of emerging trends, promoting the advancement and sustainability of solar energy technologies. In light of this, Hiroki's leadership is crucial for fostering growth and enhancing efficiency within the sector.

Hiroki Sugimoto, the Chief Technology Officer of PXP Corporation, is a distinguished figure in the field of solar energy with a remarkable career spanning over two decades. Holding a Doctor of Engineering from Tokyo University, Hiroki has dedicated his professional life to the research, development, and manufacturing of solar cells, making significant contributions across ground applications, vehicle integrations, and space satellites.

Below is an excerpt of Hiroki Sugimoto's exclusive interaction with CEO Insights ASIA magazine.

Could you briefly describe your professional background, experiences, and motivation driving your daily routine?

I've had the privilege of working at a prestigious research institute, renowned for producing Nobel laureates, this experience has profoundly inspired my career. With over 20 years dedicated to solar panel research and development, I've explored various applications - from solar cells on space satellites to ground-based solar panels. Recently, I founded a startup focused on innovative solar solutions for vehicles, including solar bikes.

My motivation stems from a belief in the power of interdisciplinary collaboration and the importance



Hiroki Sugimoto
CTO
PXP Corporation

Hiroki Sugimoto, CTO of PXP Corporation, brings over 20 years of experience in solar cell R&D and manufacturing, with expertise in ground, vehicle, and space applications. He co-founded PXP in 2020, spearheading the development of next-generation solar panels and driving innovation in sustainable energy solutions.

of turning ideas into tangible innovations. This drive fuels my daily routine and ongoing projects.

As the CTO, what are the factors you look into when developing strategies for long-term digital transformation?

As CTO, I focus on future societal needs by identifying intersections of emerging technologies, and innovation thrives where technologies converge. Our strategy emphasizes anticipating future demand rather than current needs. In Japan, renewable energy and electric vehicles represent significant future markets, and we're developing technologies that combine these areas, such as solar cells for electric vehicles. This forward-looking approach ensures we stay ahead of trends and drive innovation. By integrating solar energy with the burgeoning electric vehicle market, we're poised to create groundbreaking solutions that meet the evolving demands of tomorrow's world.

How do you drive a culture of innovation in your team?

To drive a culture of innovation, I ensure our team is exposed to advancements across various fields, not just solar cells. We actively share innovative breakthroughs via social media and encourage participation in international conferences. Diversity is key; we bring in members from different nationalities and genders to foster diverse perspectives. Additionally, we promote collaboration with global

research institutes, facilitating discussions and networking that spark fresh ideas. This inclusive and interconnected approach nurtures creativity and drives innovation, ensuring our team remains at the forefront of technological advancements.

Tell us about your leadership approach. What are the guidelines or methodologies you follow as a leader?

My leadership approach begins by clearly sharing the project's vision and mission with the team, highlighting its potential social impact. This helps everyone envision the innovation and transformative change we aim to achieve, turning challenges into sources of excitement and joy. During discussions, I focus on understanding the underlying mechanisms behind outcomes, not just the results. I ask probing questions to encourage deeper thinking and problem-solving. This method fosters an inspired and motivated team, where difficulties are seen as opportunities for growth and innovation. By aligning everyone with our mission, we work together with passion and purpose.

What is your anticipation about the market, going forward?

Anticipating market trends, I foresee significant growth in demand for domestically produced solar panels in Japan, driven by geopolitical risks and energy security concerns. Japan's limited land area

further necessitates the development of lightweight, next-generation solar panels that can be installed on rooftops and other unconventional spaces. This shift creates a substantial opportunity for innovative, flexible solar solutions. As the government emphasizes 'Made in Japan' products, our focus on producing lightweight, high-efficiency solar panels will position us at the forefront of this rapidly expanding market, meeting both energy needs and space constraints effectively.



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What are the future opportunities you forward to leading the company into to create impact?

In Japan, there are very few startups focused on next-generation solar panels, presenting us with a significant opportunity to become a leading company in this field. We aim to drive further innovation by integrating solar panels with storage batteries and other cutting-edge technologies. This approach will not only enhance our product offerings but also position us at the forefront of energy solutions. By leading the charge in combining solar energy with advanced storage solutions, we can create impactful, sustainable energy systems that address both current and future needs, setting new industry standards in Japan and beyond. **C1**