

2021/2022



THE PV TECHNOLOGY ROADMAP FORUM

Find out more at: celltech.solarenergyevents.com  or email: pvcelltech@solarmedia.co.uk

INTRODUCING PV CELLTECH 2021/2022

PV manufacturing technology has gone through rapid changes in the past few years, as the industry made a rapid switch from multi-crystalline wafers and cells to mono-based alternatives. Today, the industry is dominated by one technology, p-mono PERC, with more than 90% market-share in 2021 forecast. Running in parallel to this change has been the move from 156-166mm wafers to 182-210mm sizes, alongside larger module formats where rated powers now exceed 600 Watts.

These changes have come during a growth phase in the industry from about 50 GW of annual production to levels close to 200 GW in 2021. However, it is the next growth phase (from 200 GW annual to the TW-level by 2030) that could potentially see the biggest shift yet in terms of cell technology and efficiency levels. This involves finally moving from p-type to n-type; and taking mainstream cell production levels above 25%.

The PV CellTech conferences have now been running for over five years, and we have been charting the full transition from multi to mono PERC this time.

Going forward now, the event will be focused on predicting the key metrics underpinning the next big shift to n-type.

When exactly will this happen? Which companies will be first to 10 GW capacity and production? Who will be the key equipment suppliers for the new production lines? Which n-type process flow / architecture will emerge as the front-runner? What will polysilicon purity and wafer thickness levels look like for optimized n-type manufacturing, and what will the upstream poly/wafer supply-chain look like in 5 years from now?

The recent PV CellTech conference - held online during 27-29 October 2020 - provided the first glimpse into how the p-type to n-type transition may evolve in the next 12-18 months. At this event, almost all leading cell producers and equipment suppliers were keen to talk about initial production data, mostly related to n-type TOPCon/PERT and heterojunction options. Cell efficiency, tool throughput, CapEx and OpEx were key themes repeated during the talks and discussions, often looking at pilot line arrangements and projecting to mass production levels.

The technical scope and agenda of the forthcoming PV CellTech events - to be held over the next 12 months (online and in-person when allowable) - will see further changes to the October 2020 event, by addressing specifically where the barriers are to n-type adoption today. In particular, this will include volume mass-production n-type issues, moving somewhat from the pilot-line narrative of the past 12 months.

Ultimately, this is where PV CellTech has been most effective as an industry forum, and the invited speakers will all come from companies that are leaders in n-type production volumes, not simply from companies and institutes pushing hero-cell or R&D records in the lab.

Furthermore, with the industry moving at a rapid rate - deployment levels, new capacities being announced/built, more n-type market entrants - PV CellTech will now be occurring more often, with a pre-event online conference taking place between the annual full-event meetings. The first of these events will take place online in August 2021, with the full annual event occurring the following March. The mid-year, pre-event online-specific version of PV CellTech will examine closely how manufacturing and technology has evolved since the last main event, and preview where it is expected to be in six months time. Therefore, this will provide the perfect platform to see if n-type targets are really being met: and if not, where are the bottlenecks or barriers?

We look forward then to more frequent engagement with many of our regular speakers and attendees at PV CellTech in the future. Being able also to get everyone globally involved online at least once a year will also help keep PV CellTech as the premier event in the industry today, and the best way to fully understand PV technology changes before they happen.



Finlay Colville
Head of Research, PV Tech

FEATURES & BENEFITS

PV CELLTECH 2021/2022

- ▶ **PV CellTech 2022 returns to April 2022 schedule with a full-event agenda, focused on PV technology and capex for 2022 and beyond**
- ▶ **Pre-event online-specific preview to occur during August 2021, with summary of key outputs from the previous (March 2021) event and highlighting content/trends expected during the forthcoming full (April 2022) event**
- ▶ **Increased coverage enabled to global audience through more regular coverage of PV manufacturing and technology developments**
- ▶ **Partners can participate across both full-event and online preview, with increased scope to reach out to a global audience**

ONLINE AGENDA & SPEAKER PROTOCOL

- ▶ The August mid-year preview event will be held online.
- ▶ Each day will feature different sessions, spread out to allow access in different zones.
- ▶ Speakers will deliver presentations remotely, viewed on the online conference platform.
- ▶ Presentations will be uploaded by the event organizers prior to delivery.
- ▶ Similar to the Penang events, each session will be moderated and allow for audience Q&A.
- ▶ Each talk will be 20 minutes in duration (similar to previous PV CellTech events), with 10 minutes after each talk for questions from the audience/moderator.

SPONSOR/PARTNER MARKETING & PROMOTION

- ▶ All partner company branding (logos, profiles, advertising) will be promoted through various online/digital platforms:
 - The new PV CellTech Online digital conferencing facility.
 - PV CellTech event website (same as previous events), including White Papers, etc.
 - Email marketing campaigns by the PV CellTech / PV-Tech.org teams (same as previous events).
 - PV-Tech Q&A features (same as previous events)
- ▶ Enhanced lead generation features:
 - Audience participation and engagement with speaker topics.
 - Attendee list including contact details will be shared with partnering companies.
- ▶ Delegate tickets & VIP allocations/nominations are similar to in-person events.

PARTNERSHIP OPTIONS

All packages below include participation at both the online August event and the April event.

	SPEAKING PARTNER PACKAGES (GOLD, SILVER, BRONZE)	SUPPORTING PARTNERS
20 Minute Speaking Slot	Yes	No
Speaking Slot Session Choice	Various Options based on Gold, Silver or Bronze Partnership	
Exhibition Space	Yes	Yes
Attendee List	Yes (Before Event)	Yes (After Event)
Corporate Branding	Yes	Yes
Company Attendees	Multiple based on Gold, Silver, Bronze	2 (max)
VIP Attendees (Non-Company)	Multiple based on Gold, Silver, Bronze	5 (max)

RECENT TESTIMONIALS

“ The online format was excellent. Being able to watch sessions live or later made the conference effective and convenient, all while eliminating travel time, CO2 emissions, and COVID risk
Doug Rose, SunPower Corporation

“ PV CellTech provides a unique perspective on solar technology that is being implemented and is a great compliment to the more technical PV conferences
Bill Rever, Advanced Silicon Group

“ I like the way which the conference was held. It was very organized and systematic. The seminars was kept within the time limit. The Q&A session was very interactive.
Zheren Du, Jolywood

“ PV CellTech was a great opportunity to learn about the latest cell technology developments and roadmap for the next years. It provided a good insight of what the PV market will bring us in the next few years.
Carmen Morilla, Brookfield Renewables

“ PV CellTech was this time an opportunity for people that can not physically meet the industry leaders to listen to them in an uninterrupted manner and in their own time zone using the recording option
Ronen Frish, DR Utilight

“ I thought the online format worked well and it was great that you could access the presentations within 2 hours after it had finished. The portal was easy to access and navigate regardless of what time zone you were in. As a first time attendee of a PV CellTech conference, I thought it was great. There were a wide range of speakers and research discussed and I found very informative.
Sophie Burrage, UNSW

“ PVCellTech kept me up-to-date at a time where networking and exchange is more difficult than usual. The speakers are required to show their own achievements and to talk about their own activities. This makes the content very useful and unique.
Pietro Altermatt, Trinasolar

“ Great conference delivering quick insights into technology development and adoption, hosted by Finlay who puts everything so well into context.
Fabian Wany, Blueleaf Energy

“ This was the first time attending PV CellTech conference. It was a great information package for someone usually more focused on module technology. Great overview to the cell technology landscape.
Antti Tolvanen, Endeas Oy

“ PV CellTech conference provides an excellent update on market trends, cell technologies, manufacturing equipment and materials in 3 days. All major players in PV cell manufacturing are present and provide high quality presentations.
Martijn Zwegers, Meco Equipment Engineers BV

“ What I like about CellTech is all company/people's presentations are backed by data, charts, trends, etc and Finlay questions leading the speakers to provide additional and important information.
Pilar Riano, Powertis

Contact us for more information

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