

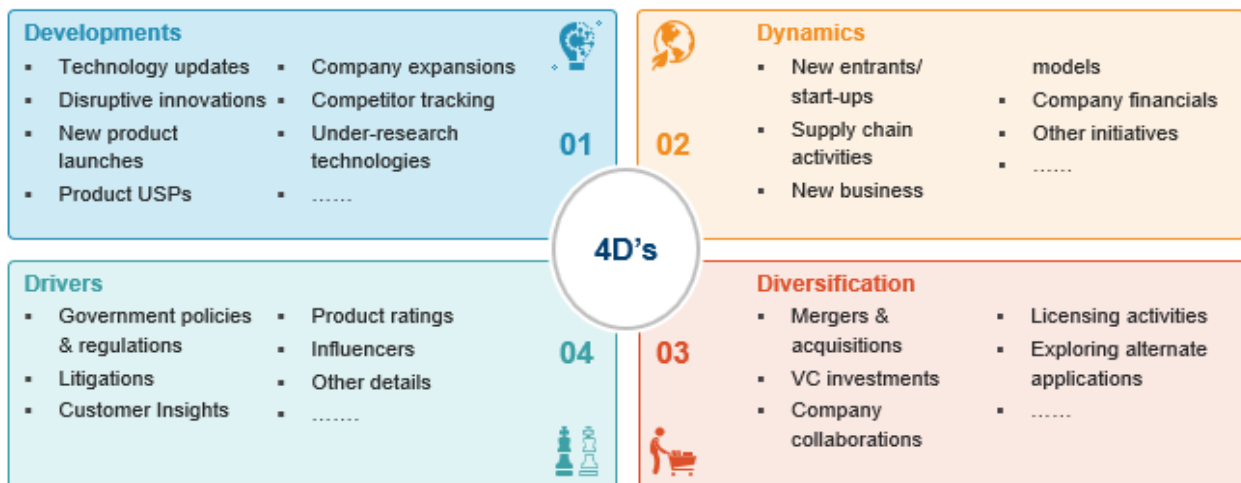
INTELLOTRACKER

Solar Energy Harnessing

May 2023



ARANCA'S QUARTERLY SECTORIAL UPDATE ACROSS FOUR DIMENSIONS....





DEVELOPMENTS

Technology/ Innovations		Researchers from University of Maryland are developing a novel approach that combines solar panels with plant-based systems, called "biogenic photovoltaics," to increase the efficiency of solar panels by mimicking the process of photosynthesis in plants. <i>Source: SciTechDaily</i>
New Product Launch		NEXT Energy Technologies has successfully installed energy-generating windows, which utilize transparent solar panels, at Patagonia's headquarters, allowing the building to generate renewable energy while maintaining its aesthetic appeal. <i>Source: businesswire</i>
Technology/ Innovations		Engineers from Purdue University have made advancements in improving the efficiency and stability of solar cells by developing a method to stabilize a key material, potentially leading to more reliable and efficient solar energy conversion. <i>Source: University Website</i>
Company Expansion		A Korean firm, Qcells, plans to invest \$2.5 billion in establishing new solar panel plants in Georgia, indicating a significant investment in renewable energy infrastructure. <i>Source: US News</i>
Company Expansion		AC Energy (ACEN) is progressing with the development of a 720 MW solar farm in Australia, demonstrating their commitment to expanding renewable energy capacity in the country. <i>Source: PV Magazine</i>
Company Expansion		Goldi Solar, an Indian solar panel manufacturer, plans to hire 5,000 employees by FY25, signaling their intention to expand their workforce as the company grows in the renewable energy sector. <i>Source: Economic Times</i>
Company Expansion		EDP Renewables, a global renewable energy company, has placed an order for 1.8 GWdc of First Solar modules. The modules will be delivered up to 2028 and will power US projects developed by EDP Renewables North America. <i>Source: Globe Newswire</i>
Technology/ Innovations		Researchers at the SPECIFIC Innovation and Knowledge Centre at Swansea University have achieved a significant breakthrough by developing the world's first fully printable perovskite photovoltaic solar cells using a roll-to-roll process. <i>Source: Interesting Engineering</i>



DYNAMICS

New Entrants/ Start-ups		Swiss start-up Sun-Ways is installing solar panels in the spaces between railway tracks, utilizing the unused space to generate renewable energy and contribute to sustainability efforts. <i>Source: Interesting Engineering</i>
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DIVERSIFICATION

VC Investments		The Power Grid Corporation in India has received board approval for investments totaling nearly INR 4,071 crore in two solar energy projects, showcasing the company's commitment to expanding renewable energy infrastructure. <i>Source: CNBC TV</i>
Company Collaboration		Sena Solar Energy and Shizen International (Thailand) have signed an MOU to explore investment and expansion opportunities in Thailand's renewable energy market, including a potential hybrid solar project and collaboration on solar generation facilities. <i>Source: Company news</i>
VC Investments		Israel-based Econergy has received a €30 million equity funding tranche from RGreen Invest, which will likely be utilized for the development and expansion of solar-related initiatives. <i>Source: Company news</i>
Mergers & Acquisitions		Greenvolt, a Portuguese renewables company, has entered into an agreement to acquire a 37.3% stake in Solarelit, a Milan-based company specializing in distributed generation (DG) solar energy solutions in Italy. <i>Source: Company News</i>
VC Investments		The University of Sydney (spin off company, SunDrive) has been awarded \$2.78 million in research funding from the Australian Renewable Energy Agency (ARENA) to commercialise advanced solar technology using perovskite-silicon cells. <i>Source: University News</i>
VC Investments		Silfab Solar raises \$125 million from ARC Financial to fund its expansion of domestic PV cell and module production at a third facility to open in the United States. <i>Source: Company News</i>
VC Investments		Essar Group plans to invest \$3.6 billion in low-carbon energy transition including solar projects in the UK and India over the next five years. <i>Source: Mercom India</i>

Mergers & Acquisitions	WEC Energy Group Samson Solar	WEC Energy Group has agreed to acquire an 80% ownership interest in Samson's Solar Energy Center, a 250-MW project. The project was developed by Invenergy and is generating renewable energy under a long-term power purchase agreement with AT&T. Source: PR Newswire
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DRIVERS

Government Policies		The South African government is planning to stimulate investment in renewable energy by offering R9 billion in tax incentives through a reworked bounce-back scheme, aiming to encourage the growth of the renewables sector. Source: Engineering News
Government Policies		The Solar Energy Corporation of India (SECI), which is the nodal agency for the Indian government's Production-Linked Incentive (PLI) scheme, providing incentives of INR 13,937.575 crore for setting up 39.6 GW. Source: Money Control
Government Policies		The Indian government is considering pausing the Approved List of Models and Manufacturers (ALMM) for two years due to concerns about the policy's impact on prices, quality, and capacity addition. Source: Times of India

SOLUTION PORTFOLIO – TECHNOLOGY RESEARCH & ADVISORY

IP Strategy	Technology Intelligence	Growth & Strategy

How best can we proactively manage and monetise our technical knowhow / intellectual property?

How best can we keep abreast of technology trends, competitor activity and headwinds / tailwinds in our domain?

Which technologies do we invest in? How do we ensure quick wins? Speed to market?

- IP Portfolio Analysis
- IP Monetisation
- IP Valuation
- Prior Art Searches

- Competitor Benchmarking
- Tech / IP Landscapes
- Technology Watch
- Market Analysis / Trends

- R&D Strategy Roadmaps
- Technology Scouting
- Open Innovation
- Product Development

GROWTH ADVISORY	INVESTMENT RESEARCH & ANALYTICS	VALUATION & FINANCIAL ADVISORY	TECHNOLOGY RESEARCH & ADVISORY	PROCUREMENT & SUPPLY CHAIN INTELLIGENCE

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