



From Canadian roots to global solar leader

Founded in 2009, Polar Racking emerged from the Ontario Green Energy Act, aiming to provide high quality, low maintenance solar racking solutions. Now a North American leader, the company has expanded globally, innovating with agrivoltaic solutions and advanced tracking technologies. PES was keen to learn more about this impressive growth from the company's CEO, Vishal Lala.



As we evolved over the next 15 years, we continued to follow our customers, who went from rooftop to ground mount. Once again, we offered a distinguished solution by providing geotechnical engineering services, foundation design and supply, along with a ground mount racking product that was more robust and quicker to assemble than our competitors.

In late 2021, we acquired our largest competitor in Canada, which enabled us to add a single axis tracker to our product lineup. Around the same time, we introduced our carport offering. We continue to enhance our existing products, and later this year, we will launch our range of agrivoltaic solutions. To date, our team has successfully worked on over 3 GW of projects across more than 10 countries in North America, solidifying our position as a recognized leader in the industry.

PES: I would imagine that, just with any business, you faced some initial challenges. Can you tell us about them?

VL: We had to quickly learn the ins and outs of the industry. Solar was quite new for everyone in Canada at the time and we saw a huge opportunity in learning faster than others and sharing that information with our clients. We explored installation best practices and the complexities involved in project deployment. We also gained knowledge in development, allowing us to engage in meaningful conversations with our customers.

We always wanted to set the standard for quality, and I feel very strongly that is why we are still here while others are not. There were close to 70 racking companies in Ontario alone in the early days, and now there are just a small handful of Canadian companies left.

Our major early challenges were around timing. The programme from the government was new, and the release date of contracts was always very uncertain. There were a lot of feast and famine time, so juggling that with retaining and growing talent was very difficult. I'm happy to say that today, we still have many employees that have been with us over 10 years and who have lived with us through the ups and downs. Those employees are now leaders in our company as we continue to grow.

PES: When did it become apparent that there was a market and a need for racking solutions in the solar industry?

VL: The local market was great until 2017, however when the newly elected government cancelled the programme, it was a very challenging time. We were already selling a little in some other parts of Canada, but we needed to pivot quickly. Over the next few years, we spent a lot of time in Alberta, the US and the Caribbean and were able to thrive despite the bust of the local market. As we had done here, we focused on our strengths in the new markets by developing products and services that met the local requirements.

PES: It would be great to begin by sharing the story behind the founding of Polar Racking and the inspiration for the company, if you wouldn't mind? What was your initial vision for the business, and how has that evolved?

Vishal Lala: Polar Racking was founded in 2009 as a flat rooftop racking manufacturer. Our mission was clear; to offer the most value to our customers for the lowest installed cost per kilowatt hour. We wanted our customers to not only source and assemble their racking competitively, but we also wanted project owners to have a product with little to no maintenance, which would withstand the harsh climates they were building in. With a great focus on quality and innovation, we set out from the start to bring a differentiated level of product quality and service to our customers.

The opportunity we identified for us to enter the solar business was when the government of Ontario launched its Green Energy Act, which offered a great feed in

tariff for renewable energy developers. The requirement at the time to qualify for the incentives was that developers had to use equipment, meaning modules, inverters, racking, wind turbines, etc. produced in Ontario. This set up a great industry here and as a young entrepreneur, I saw an opportunity to contribute to a sector that I felt was the future of all energy.

From the beginning Polar Racking enjoyed great success, quickly becoming the largest rooftop solar mounting system supplier in Canada, working with the largest developers, EPCs and owners in the country. What set us apart was that most of our competitors came from Europe or the US, or copied solutions from those markets, whereas we immediately focused on developing a product lineup that was made for the market. We thought about the local loads and the unique conditions of installing products in the hard Canadian climate. Moreover, we invested in state-of-the-art tooling to offer a premium quality product at competitive pricing.

We decided at the time that in each market we entered, we were going to supply a better product and service to customers than the incumbent. That resonated well with project owners and resulted in the growth that we continue to enjoy today.

PES: Polar Racking has grown significantly since its inception. What have been some of the key milestones in your growth journey?

VL: A few major milestones stand out; moving into ground mount, offering geotechnical services, and acquiring a leading single axis tracker solution. These have all contributed to our growth.

In Canada, one milestone was becoming the key racking and foundation supplier for the largest urban solar project in Western Canada. We supplied two brownfield sites in the centre of Calgary with our ballasted ground mount racking solution: 93 MW DC/ 72 MW AC.

The real key though has been staying true to our core values and assembling an extraordinary team, who are all in tune with our vision. It is great to be surrounded with a team that all want to win and be the best. We are truly blessed in that way at Polar Racking.

PES: How has your product line expanded and developed since the early days?

VL: We started as a flat rooftop racking manufacturer, and we're now a North American leader in the design, engineering, and manufacturing of solar PV ground mount racking systems. We specialize in utility scale

and commercial ground mount solutions; single axis tracker, fixed tilt, solar carports, agrivoltaic, along with a wide variety of solar foundation solutions.

PES: Has your company culture and internal team evolved as you've grown too?

VL: The culture was very natural when we were smaller, we all were and remain very passionate. We worked hard together and enjoyed fun times, often in the spur of the moment.

Now, we are a lot more intentional about bringing the team together and communicating our goals and values. The comment we get from new employees is that everyone wants to help, even if it's not their job. I really appreciate and respect that about our people. They care about the company, their colleagues and our clients. We all want to be the best and you will find that spirit in everyone you meet and spend time with. I never want that to change.

PES: Can you discuss some strategic partnerships or collaborations that have been pivotal in your growth?

VL: We have done well with owners who appreciate quality. As a result, we do not get many one off projects. Finding those key clients that care about quality, reliability and service has been crucial to our growth. Anyone can sell racking that works on day one, we aim to offer products that will be just as good in year 20 and beyond.



Vishal Lala

PES: It's fair to say, isn't it, that you are less well known outside of Canada, but how has your presence in North America expanded over the years, and what markets are you currently serving?

VL: It's true, we are a well known and respected name in Canada and around the several key islands in the Caribbean. We are growing our presence in the US. We have supplied hundreds of megawatts in over 20 states. In New York state alone we have close to 500 MW of both tracker and fixed solar racking.

As project owners are getting burned by other fly by night companies offering shiny products and low prices, we find that there is movement towards quality and a proven track record. This is playing well to our strengths and is enabling our growth in many new key states in the US.

We are also expanding overseas. We will have our first projects in Africa in 2024 and are currently working on proposals for projects in Australia and the Middle East. We are excited about these new markets and will be spending a lot more time over the next three years executing our growth plans in these regions.

PES: What technological advancements have you incorporated into your products to stay ahead in the solar racking industry?

VL: The innovation of our tracker sets us apart. We recognized a long time ago that the areas where trackers are being installed were moving from the middle of large deserts to sites that were not totally flat, in frost zones, which needed to accommodate different types of foundations.

We also noticed that the maintenance of trackers was difficult because to carry out repairs on a site with large heavy torque tubes, requires heavy machinery for even minor maintenance. In addition, we noticed that obtaining permits for these sites is getting harder, due to the restriction on grading the land.

Our single axis tracker product is more like a fixed ground mount solution. It's very easy to



put together, lots of pre-assembly is possible to save on labour, it works well on large slopes to eliminate the need for grading and every component is a two person lift, which means two people in a pickup truck can do all the necessary repairs and maintenance in the future.

Moreover, we can connect directly to any type of foundation, driven, helical, screws, or ballast, without the need for a third party adaptor or double the number of foundations.

Everyone who visits our sites is amazed that we can build on such steep slopes. The fact is that local building permit offices don't like it when developers disturb the natural lay of the land, because it causes many issues aside from just angry neighbours. We designed a solution to eliminate the need for that.

This autumn, we'll be launching the latest advancements for our SOL-X single axis tracker including 3D Backtracking, Advanced Overcast, and Severe Weather Protection. While we're already known to build solar racking to withstand harsh climates, these next generation solutions will ensure our customers are successful under the most complex of terrains or severe weather conditions, from solar panel shading, overcast conditions, undulating terrain, rolling hills, hurricanes, and floods, we'll now be able to

ensure maximum solar capture under any conditions.

Our next innovation is one that I am very excited about. Over the next 12 months we are launching a lineup of fixed and tracker, agrivoltaics solutions. These products will allow farmers to continue to use their land for its intended use while also allowing for the production of solar energy.

This will enable farmers to gain an additional source of revenue from lease payments or energy production, while continuing their core business. Different agrivoltaic configurations, such as combining PV with croplands, pastures, or pollinator habitats, may contribute to achieving sustainable energy and food goals simultaneously, while possibly reducing local opposition to PV deployment, such as we're seeing in Europe and other countries. We aim to be the first North American supplier of purpose use agrivoltaics fixed and tracker products. We are getting ready to build our first sites this fall.

PES: Some of the biggest trends shaping the future of the solar market in North America are increasing efficiency, decreasing costs, energy storage advancements, government incentives, and rising corporate sustainability commitments. Would you agree with this from your perspective too?

VL: Absolutely. There are several elements that will shape the future of the solar market in North America. Resilience and adaptability will be key in solving an ever changing global energy crisis. While some pressures have eased, the future remains uncertain. Despite these challenges, we anticipate photovoltaic solar to continue to dominate.

At Polar Racking, our continued efforts to diversify and innovate in this area will have a big impact on the future of clean energy, and we're excited to see what happens next.

PES: What are Polar Racking's plans and goals for the next five to ten years in terms of innovation and market presence?

VL: Within the next five to 10 years, we plan to be a global supplier of high quality solar mounting solutions. Our growth at home enables us to increase our reach and there is definite demand for what we are offering.

We're excited about the future of Polar Racking and of the solar industry in general. Contributing our part in this fight against climate change, while building a business we can be proud of continues to be a very rewarding experience, and even after 15 years, we feel that we have a long way to go.

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