

AWARD

Solar PV Project of the Year | IKEA Canada

NOMINEE

Jonathan Boodhoo | IKEA Canada

Summary:

Set out a brief synopsis of the initiative (i.e. project, technology, service). This summary may be used during the event promotion.

As part of its national commitment to solar, IKEA Canada completed its largest rooftop solar project to date in Edmonton, Alberta this year. This project is worthy of the acknowledgment of the Canadian Solar Industries Association as it recognizes a project in a jurisdiction where commercial rooftop arrays are scarce, and it applauds IKEA Canada for its vision for solar on all of its stores.

Description:

Please provide as much detail as you can to describe the initiative. Simply provide a description of the project, technology, service, etc. being considered. Do not address here how it was done or what it achieved.

This project involved over 1MW DC of rooftop solar (1060.325kW DC / 840kW AC), making it the second largest rooftop array in the province of Alberta. Nearly 3,000 Hanwha Solar Q.Plus 365W solar PV modules power the array with KB Ekonorack 2.0 foot-based ballasted racking at a 10 degree tilt, and 35 Fronius Symo 24kW string inverters completing the main components of the system.

1. Innovative Approach:

25/100 points

Please describe which kind of innovation and creative approach that was used to achieve outstanding results. In what way has the initiative pushed the envelope of current norms, traditional results and standard approaches?

With over 1MW of DC generating power, this size of rooftop system has only been attempted once before in the entire province of Alberta. The in-house expertise of RESCo Energy was pivotal in ensuring that the installation met IKEA expectations and utility regulations; bringing over twelve years of Ontario integrative solar PV expertise to the west.

2. Economic Benefit:

25/100 points

Highlight the benefits, with a sense of financial benefit, cost savings, emission reductions or other directly attributable benefits of the initiative. Did this initiative deliver or exceed anticipated value, results and returns? If you include confidential and commercially sensitive information, it will be treated as such. Please ensure you note the following - do not publicize.

Alberta produces electricity primarily through fossil fuels (approximately 47% coal fire plants and 40% from natural gas) . Wind, hydro and biomass has begun to make its way through the province in recent years, but commercial rooftop solar had yet to make a big stance until IKEA came in with its vision. As a result of this project in Edmonton alone, IKEA has ensured that nearly one million pounds of coal per year will not be burned to operate their Edmonton store.

3. Engagement:

25/100 points

In what way(s) did the nominee undergo meaningful stakeholder/customer engagement and how has it been incorporated into the design and execution of the initiative? Highlight the manner in which the initiative was communicated to promote the importance and benefits of solar energy while achieving business and stakeholder/client objectives. Demonstrate how the proponent listened to its audience and acted on the advice.

IKEA made it clear, right from project development and design that their goal for this building was to incorporate large scale rooftop solar to help to offset its energy consumption. IKEA hired subcontractors that understood and, in turn, committed to this goal. Local labour was sourced to achieve this objective, expanding the knowledge base of renewables in the western province. Ontario expertise, via RESCO, was onsite delivering the project along with local sources, industry best practices were shared and a general acceptance of solar PV integration was achieved by the utility.

4. Corporate and Sustainable Responsibility:

25/100 points

Describe the environmentally conscientious approach during the design and execution of the initiative. Give concrete examples of how your initiative has benefited the environment (ex: saved X amount of CO2 emissions, reduced X amount of GHG, etc.) Explain the ways and manners by which this initiative was undertaken with the intent of demonstrating true corporate responsibility.

IKEA knew that solar was to be a big part of the design process heading into the development of this store a few years ago. They worked with their building contractors at the time to make sure that solar remained to be an integrated element of the building. Several years later, they had not forgotten about their solar goals. This is an important step for IKEA to reach its RE100 green energy target; a commitment made to produce as much renewable energy as it consumes by 2020. As a result of this project in Edmonton alone, IKEA has ensured that nearly one million pounds of coal per year will not be burned to operate their Edmonton store.

PHOTOS

