

PVJapan 2011 Report

EVENT NAME	PVJapan 2011 -A Total Photovoltaics Event-
DATE	December 5 - December 7, 2011
VENUE	Makuhari Messe (Chiba, Japan)
ORGANIZERS	SEMI, JPEA (Japan Photovoltaic Energy Association)
SUPPORTED BY	Ministry of Economy, Trade and Industry (METI) Ministry of the Environment Tokyo Metropolitan Government New Energy and Industrial Technology Development Organization (NEDO)
CO-SPONSORS (alphabetical order)	American State Offices Association (ASOA) Architectural Institute of Japan (AIJ) Japan Electric Construction Association (JECA) Japan Electrical Safety & Environment Technology Laboratories (JET) Japan Federation of Construction Contractors (JFCC) Japan Organization for the Promotion of Renewable Energy Japan Society for the Promotion, The 175th Committee Innovative Photovoltaic Power Generating Systems Japan Society of Energy and Resources Japan Solar Energy Society (JSES) National Institute of Advanced Industrial Science and Technology (AIST) New Energy Foundation (NEF) New Energy Promotion Council Optoelectronic Industry and Technology Development Association (OITDA) Photovoltaic Power Generation Technology Research Association (PVTEC) Saitama Council for the Promotion of Solar Power Semiconductor Equipment Association of Japan (SEAJ) Solar System Development Association (SSDA) The Electrochemical Society of Japan (ECSJ) The Institute of Applied Energy (IAE) The Institute of Electrical Engineers of Japan (IEEJ) The International Solar Energy Society The Japan Electrical Manufacturers' Association (JEMA) The Japan Institute of Architects (JIA) The Japan Institute of Energy (JIE) The Japan Society of Applied Physics (JSAP) The Society of Chemical Engineers, Japan (SCEJ)
CONCURRENT EVENT	6 th RENEWABLE ENERGY 2011 EXHIBITION Organizer: Japan Council for Renewable Energy (JCRE)

I. EXHIBITOR NUMBERS

PVJapan 2011	242 Exhibitors	596 Booths	6 Countries/Regions
REORLD FAIR 2011	384 Exhibitors	808 Booths	13 Countries/Regions

*PVJapan 2011 was co-located with 6th RENEWABLE ENERGY 2011 EXHIBITION as RENEWABLE ENERGY WORLD FAIR 2011.

2. VISITOR NUMBERS OF RENEWABLE ENERGY WORLD FAIR

Date	Weather	Visitor Number
Mon., Dec 5	Fair	9,788
Tue., Dec 6	Cloudy / Rain	10,661
Wed., Dec 7	Fair	17,145
Total		37,594

*Total number of PVJapan 2011 and 6th RENEWABLE ENERGY 2011 EXHIBITION.

3. EXHIBITION ZONE AND THEME EXHIBITS AREA

3-1. Exhibition Zone (7 Categories) and Special Exhibits Plaza (2 Plazas)

- Solar cells/modules, Related products, Applications Zone
- Components, Materials and Facilities Zone
- Manufacturing equipment Zone
- Inspection and Measurement tools Zone
- System, BOS and Smart network technology Zone
- System integrate and Construction service Zone
- Other related products and service Zone
- Next generation solar cell Plaza
- Solar system installation proposal Plaza

3-2. Theme Exhibits Area

Beneficial information about Photovoltaic technology, market and industry were provided to visitors at the theme exhibits area in the exhibition hall.

- ◆ PV Industry and Market Update
Supported by RTS Corporation
- ◆ Current Topics in PV Standardization
Supported by National Institute of Advanced Industrial Science and Technology (AIST)
- ◆ Japan FIT and Expanding Projects of Mega-solar and Smartnetwork Systems
Supported by Environmental and Energy Industry News, Sangyo Times Inc.
- ◆ Handmade Solar Panel Contributing to the Local Community and Challenging to the World
Supported by Higashine Technical High School, Yamagata
- ◆ Illustrated Guide; How Solar Cells are Made
Supervised by National Institute of Advanced Industrial Science and Technology (AIST)

3-3. Academic Gallery

Supported by The 175th Committee Innovative Photovoltaic Power Generating Systems and The Japan Society of Applied Physics, universities and institute presented their latest R&D activities on photovoltaics. Academic Gallery resulted in an ideal venue for network building between industry and academia.

◆ The number of Universities and Institute at Academic Gallery

PVJapan 2011 18 universities
 REWORLD FAIR 40 universities

4. PVJapan 2011 Sponsors

◆ Platinum Sponsors

ECO HOLDINGS / Greentec / LDK Solar Hi-Tech / Tokyo Electron



◆ Gold Sponsors

Canadian Solar / Choshu Industry / KANEKA / Mitsubishi Electric / Panasonic / Solar Frontier / Toshiba
 WEST HOLDINGS



◆ Silver Sponsors

Applied Materials / Ferrotec / KYOCERA / Q-cells SE / SHARP / Suntech Power / ULVAC / Upsolar



5. Television Broadcast of PVJapan (from Dec 5 to Dec 13)

◆ Date	◆ TV Station	◆ Program
2011/12/5	TBS	HIRUOBI
2011/12/5	EX	ANN News
2011/12/5	NHK	News (18:00)
2011/12/5	NHK	NHK News 7
2011/12/5	NHK	Bizspo
2011/12/5	TBS	N-sta
2011/12/5	TBS	NEWS 23 X
2011/12/5	EX	TV Station
2011/12/5	TX	WBS News
2011/12/7	NTV	SUKKIRI
2011/12/13	TX	WBS News

6. OPENING DAY / EXECUTIVE EVENTS

6-1. Opening Ceremony

9:40-10:00 December 5, 2011 at Esplanade, Int'l Exhibition Hall 10, Makuhari Messe

◆Welcome Remark

Yoshiro Owadano Exhibition committee chair, Vice representative, Japan Council for Renewable Energy (JCRE)
 Denny McGuirk President and CEO, SEMI

◆Guest Speech

Keisuke Murakami Director, New and Renewable Energy Div, Energy Conservation and Renewable Energy Dept, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry (METI)

◆Ribbon Cutting Ceremony

Keisuke Murakami Director, New and Renewable Energy Div, Energy Conservation and Renewable Energy Dept, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry (METI)
 Hisao Kayaoka Secretary General, Japan Photovoltaic Energy Association (JPEA)
 Denny McGuirk President and CEO, SEMI
 Hank Nakagawa President, SEMI Japan
 Kosuke Kurokawa Representative, Japan Council for Renewable Energy (JCRE)
 Masayuki Kamimoto Steering committee chair, Vice Representative, Japan Council for Renewable Energy (JCRE)
 Yoshiro Owadano Exhibition committee chair, Vice Representative, Japan Council for Renewable Energy (JCRE)

6-2. RENEWABLE ENERGY WORLD FAIR Keynote Speech

10:30-12:30 December 5, 2011 at Int'l Conference Room, Int'l Conference Hall, Makuhari Messe

◆Welcome Speech

Kosuke Kurokawa Representative, Japan Council for Renewable Energy (JCRE)

◆Keynote Speech

Keisuke Murakami Director, New and Renewable Energy Div, Energy Conservation and Renewable Energy Dept, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry (METI)
 Tokuya Wada Director, Climate Change Policy Division, Ministry of Environment (MOE)
 Koichi Kitazawa Former Representative, Japan Science and Technology Agency (JST)
 Jonathan T. Fried Ambassador in Japan, Canada Embassy

6-3. PVJapan "Executive Forum"

14:10-17:00 December 5, 2011 at Int'l Conference Room, Int'l Conference Hall, Makuhari Messe

◆Chair

Akira Izumi Director General, New Energy Technology Dept, New Energy and Industrial Technology Development Organization (NEDO)
 Michio Kondo Director, Research Center for Photovoltaic Technologies, National Institute of Advanced Industrial Science and Technology (AIST)

◆Speech

Hideaki Izumi Energy section Chief, Resource Energy Environment Division, Energy Section, Tohoku Bureau of Ministry of Economy, Trade and Industry (METI)
 Liang Wu Vice President, SuZhou GCL Industrial Application R&D Institute
 Dick Swanson President Emeritus, SunPower
 Atsuhiko Hirano Senior VP, International sales, Domestic sales and Saudi Arabia Project, Solar Frontier
 Seethapathy Chander Chair, Energy Committee Office of Information Systems and Technology, Asian Development Bank

6-4. RENEWABLE ENERGY WORLD FAIR VIP Reception

17:30-18:30 December 5, 2011 at Convention Hall, Int'l Conference Hall, Makuhari Messe

◆ Opening Remark

Kosuke Kurokawa Representative, Japan Council for Renewable Energy (JCRE)

◆ Guest Speech

Takahide Soeda Deputy Director, New and Renewable Energy Div, Energy Conservation and Renewable Energy Dept, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry (METI)

◆ Toast Ceremony

Akira Izumi Director General, New Energy Technology Dept, New Energy and Industrial Technology Development Organization (NEDO)
 Yoshiro Owadano Deputy Director General, Environment and Energy, National Institute of Advanced Industrial Science and Technology (AIST)
 Michio Kondo Director, Research Center for Photovoltaic Technologies, National Institute of Advanced Industrial Science and Technology (AIST)
 Elyes Kasri Ambassador of the Republic of Tunisia
 Hiroshi Morimoto Executive Officer, Group General Manager, Solar Systems Development Group, Sharp
 Atsuhiko Hirano Senior VP, International sales, Domestic sales and Saudi Arabia Project, Solar Frontier
 Tetsuro Higashi Chairman of the Board, Tokyo Electron
 Katsuhiko Toda Director, Sustainability Energy & Environment Strategic Planning Dept., Mitsubishi Heavy Industries
 Luke Eginton Managing Director, Vestas Wind Technology Japan
 Kosuke Kurokawa Representative, Japan Council for Renewable Energy (JCRE)
 Denny McGuirk President and CEO, SEMI

◆ Toast Speech

Hiroshi Morimoto Executive Officer, Group General Manager, Solar Systems Development Group, Sharp

◆ Closing Speech

Denny McGuirk President and CEO, SEMI

7. PVJapan 2011 SEMINARS

21 Sessions 2,781 Attendees

◆ Keynote Speech

RENEWABLE ENERGY WORLD FAIR Keynote Speech
 Executive Forum

◆ Technical Seminar

Special Trends of Crystalline Silicon Solar Cell in Asia
 -Current status and prospects of crystalline silicon Solar Cell in China, Taiwan and Korea-
 Session 1 Reliability and Life Time
 -R&D for Higher Reliability and Longer Life Time of Solar Module-
 Session 2 Materials
 -Technological Progress and Roadmap for Higher Efficiency and Reliability-
 Session 3 Market Trend
 -Latest Trends of the Market in Major and Emerging Countries in Competitive Environment-
 Session 4 Manufacturing and Evaluation Technology
 -Novel Technology : Wafer Slicing, Evaluation of Cell and Module, Module Manufacturing Facilities-
 Session 5 Crystalline Silicon Solar Cells
 -Current Technological Trends towards Higher Quality & Lower Cost-
 Session 6 Next Generation Photovoltaic Cells
 -Concentrator, Organic thin-film and Dye Sensitized Solar Cells; Most Prominent Technological Growth-

Session 7 Thin Film Solar Cells

-Discuss Technology and Business Strategy of Thin-Film Solar Cell-

Session 8 Electricity System and Application

-PV Power Plant and Emerging Utility Application; Current and Future of PV Utility and Commercial Market-

◆ **Tutorial / Business / SEMI Standard**

SEMI Tutorial: Photovoltaic Technology Seminar "Crystalline Silicon Solar Cell"

SEMI Tutorial: Photovoltaic Technology Seminar "Silicon Thin-Film Solar Cell"

SEMI Tutorial: Photovoltaic Technology Seminar "CIGS Solar Cell"

SEMI Tutorial: Photovoltaic Technology Seminar "Organic Solar Cell"

JPEA Seminar: Design and Installation of PV Systems

JPEA Seminar: Current Residential PV Systems and Training / Qualification for Installation

JPEA Seminar: Business Development of Japanese PV Companies in Global Market

Workshop on SEMI Standards related to Horizontal Communication between PV Equipment

SEMI Standards PV (Photovoltaic) related Technical Committee Meetings

8. NEW PRODUCTS & TECHNOLOGY RELEASE / PRODUCTS & TECHNOLOGY UPDATE

31 Sessions 2,075 Attendees

◆ **Special Session**

"Japan Government Subsidy for Residential Photovoltaic System"

JAPAN PHOTOVOLTAIC EXPANSION CENTER (J-PEC)

"Tutorial on installation of PV System"

JAPAN CONSTRUCTION TECHNOLOGY CENTER (J-COT)

"Short Film; Thinking on Renewable Energy"

AGENCY FOR NATURAL RESOURCES AND ENERGY, METI

◆ **Presentations by exhibitors**

AMERICAN STATE OFFICES ASSOCIATION (ASOA)

CHEMITOX

EXCEL

FUJIKIN

INSTITUTE OF SCIENTIFIC AND INDUSTRIAL RESEARCH, OSAKA UNIVERSITY

KANAGAWA INSTITUTE OF TECHNOLOGY

LASERTEC

LOOP

NAGASE INTEGRIX

NAVI

NIPPON KERNEL SYSTEM

PHOTOVOL-TEC

PowerFilm

RESEARCH CENTER FOR PHOTOVOLTAIC TECHNOLOGIES, AIST

RTS

SEMI TAIWAN

SUNEDISON JAPAN

TAIYOKOU-SUPPORT-CENTER

TATEYAMA KASEI

TUV RHEINLAND JAPAN