

**ENEX** 2023  
Energy and Environment Exhibition

**DER  
Microgrid  
Japan** 2023



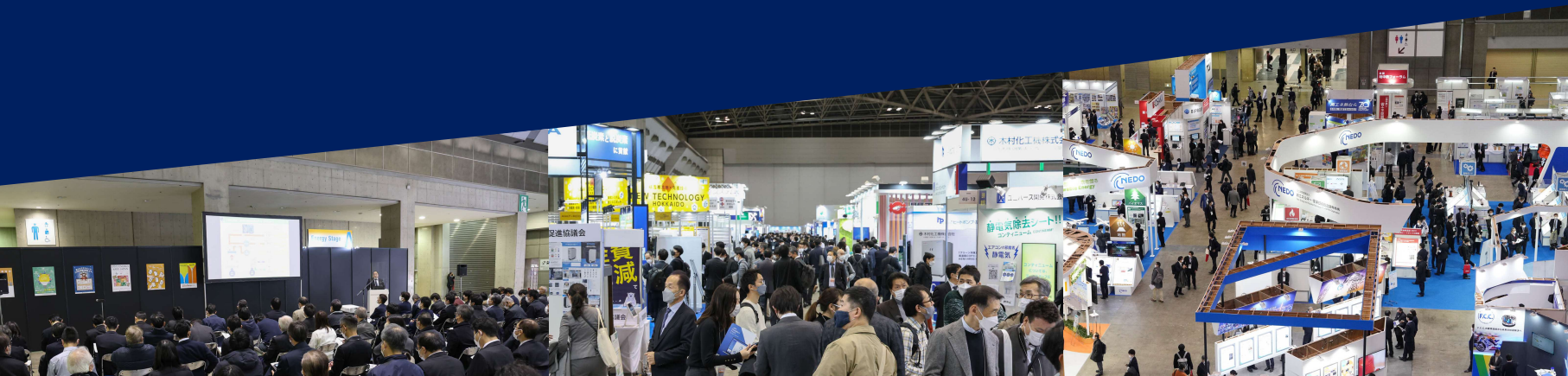
**RENEWABLE ENERGY 2023**  
第17回再生可能エネルギー世界展示会&フォーラム

# 2023 Previous Show Report

## Comprehensive Exhibition on Decarbonization and Energy Innovation

**ENEX2023 (The 47th Energy and Environment Exhibition)**  
**DER/Microgrid Japan2023 (Distributed Energy Resources / Microgrid Japan)**  
**17th Renewable Energy World Exhibition & Forum (RENEWABLE ENERGY 2023)**

Organizer : The Energy Conservation Center, Japan / JTB Communication Design Inc./ Renewable Energy Council



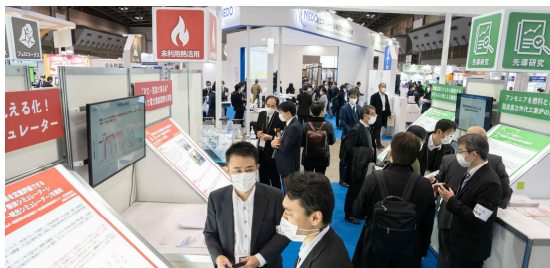
## Theme of event

## Comprehensive Exhibition on Decarbonization and Energy Innovation ~GX and DX to reach the 2050 target~

In order for Japan as a whole to achieve carbon neutrality by 2050, new innovations as well as existing technologies are indispensable. For businesses, the promotion of "decarbonization" means creating new value for the company, and it is important to start by understanding the various initiatives, technologies, products, etc. in the world.

ENEX, the only comprehensive energy conservation exhibition in Japan, DER/Microgrid Japan, an exhibition for distributed energy and regional microgrids, and the Renewable Energy World Exhibition & Forum, which will accelerate the introduction of renewable energy, are now in their 47th year. The theme of the exhibition was "2050 Targets with GX and DX" and was held to contribute to the achievement of the 2050 Targets from the perspectives of both energy conservation and renewable energy.

Exhibitors' booths were the main attraction, with seminars and lectures by experts and specialists, introductions of advanced approaches, presentations of R&D results, and tours of facilities, all of which contributed to active business discussions on energy conservation and the introduction of renewable energy.



## Composition Exhibition



### ENEX2023 The 47th Energy and Environment Exhibition

Organized by The Energy Conservation Center, Japan



### DER/Microgrid Japan2023 (Distributed Energy Resources / Microgrid Japan)

Organized by JTB Communication Design, Inc.



### 17th Renewable Energy World Exhibition & Forum (RENEWABLE ENERGY 2023)

Organized by Renewable Energy Council

## Dates/Venues

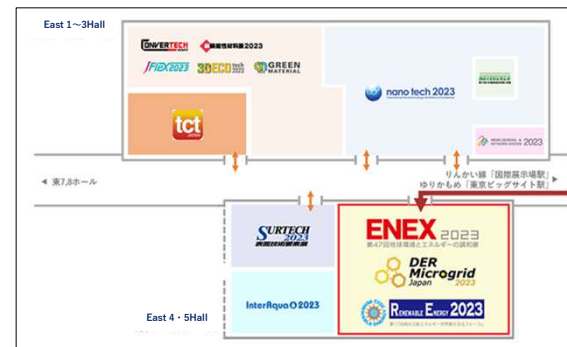
**February 1 (Wed.) - 3 (Fri.), 2023 10:00 - 17:00**

Tokyo Big Sight East Halls 4 & 5 & Conference Tower

**Thursday, December 1, 2022 - Tuesday, February 28, 2023**

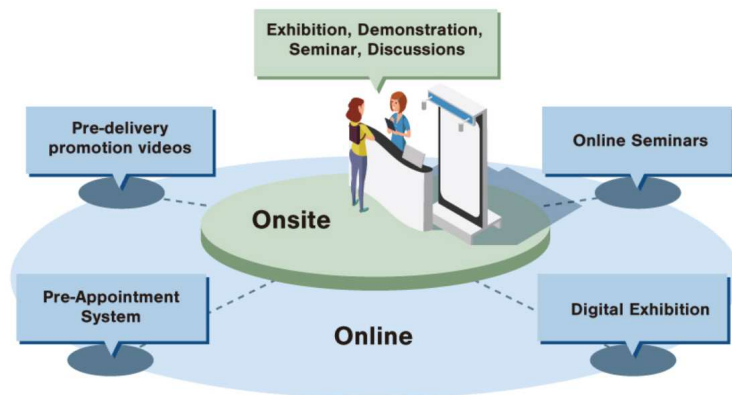
Online (official website)

## Concurrent Events



With in-person business event being restricted by the Corona Disaster, the exhibition was held in a hybrid format of a conventional exhibition centered on booths and online services as a measure to prevent exhibitors from losing business opportunities. The functions have been expanded since the previous show to improve the satisfaction level of online exhibitors.

## Maximize each and every business opportunities.



## Points of Hybrid Exhibition

### Increased opportunities to research latest information

#### Conventional Onsite Exhibition

- Presentations at exhibitor's booths
- Face-to-Face Product Demonstration
- Provided novelties such as pamphlets
- Onsite Seminars



#### Digital Exhibition

- Visitors:
- Collecting substantial information
  - Attending Online seminars is available

- Exhibitors:
- Posting of Materials & Videos of exhibited products.
  - Promotion at online seminars

### Increased opportunities for business discussions

#### Conventional Onsite Exhibition

- Face-to-Face discussions at the booths
- Networking and Serendipitous encounters at the venue



#### Digital Exhibition

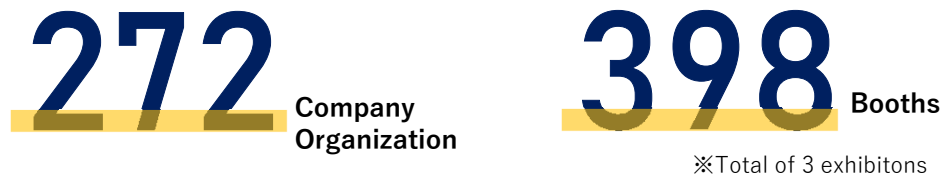
- Set up business discussions before the event with the Business Matching System

#### Business Matching System ▶

## Exhibitors/Booths

The exhibition attracted 272 companies and organizations, more than the number of exhibitors held before the new virus epidemic, and was the largest of its kind since 2020, with 398 booths.

\*ENEX/Smart Energy Japan/Electricity & Gas New Business Expo, held in January 2020, 242 companies and organizations, 373 booths



## Number of visitors

The number of visitors to Tokyo Big Sight exceeded 30,000 over the three days, 2.9 times more than the previous show.

東京ビッグサイト開催 / Exhibitions at Tokyo Big Sight		
開催日 / Date	天候 / Weather	来場者数 / Visitors
2023/02/01 (Wed)	Fine weather	8,653
2023/02/02 (Thu)	Cloudy weather	10,750
2023/02/03 (Fri)	Cloudy weather	11,734
計 / Total		31,137

\*Including 14 concurrent exhibitions

## ENEX2023

### ■Support

Ministry of Economy, Trade and Industry / Ministry of Education, Culture, Sports, Science and Technology / Ministry of Land, Infrastructure, Transport and Tourism / Ministry of the Environment / Tokyo Metropolitan Government / Kanagawa Prefecture / Saitama Prefecture / Chiba Prefecture / Kawasaki City / Saitama City / Chiba City / New Energy and Industrial Technology Development Organization (NEDO) / Organization for Small & Medium Enterprises and Regional Innovation, JAPAN / Japan External Trade Organization (JETRO) / New Energy Foundation (NEF) The New Energy Foundation (NEF) / The Tokyo Chamber of Commerce and Industry / TBS Television Corporation / Fuji Television Network, Inc. (in no particular order)

### ■Cooperation

Flat Glass Association of Japan / Urethane Foam Industry Association / ESCO Energy Management Promotion Council / Extruded Polystyrene Foam Industry Association / Home Appliances Association of Japan / Glass Fiber Manufacturers Association of Japan / Foundation for Transportation Ecology and Mobility / Cogeneration and Advanced Energy Use Center of Japan Japan Cogeneration and Energy Utilization Center/Japan Environmental Management Association for Industry/Japan Petroleum Energy Technology Center/Japan Cement Association/Japan Solar System Development Association/Institute of Global Industrial Culture/Japan Federation of Electric Power Companies/Japan Electronics and Information Technology Industries Association/Japan Electro-Heat Technology Center/Japan Japan Federation of Electric Power Companies, Inc. Japan Association of Heating Appliances Manufacturers, Japan Chain Stores Association, Japan Iron and Steel Federation, Japan Electrical Manufacturers' Association, Japan Internal Combustion Power Generating Equipment Association, Japan Heat Supply Industry Association, Japan Valve Manufacturers' Association, Japan Building Energy Management Technology Association, Japan Association of Building Energy Management, Japan Automobile Manufacturers Association, Japan Automobile Research Institute, Japan Consumer Association, Inc. Japan Valve Manufacturers Association, Inc. Japan Association for New Office Promotion / Japan Heat Pump and Thermal Storage Center / Japan Business Machine and Information System Industries Association / Building Automation Association of Japan / Rock Wool Industry Association (in no particular order)

## 17th Renewable Energy World Exhibition & Forum

### ■Support

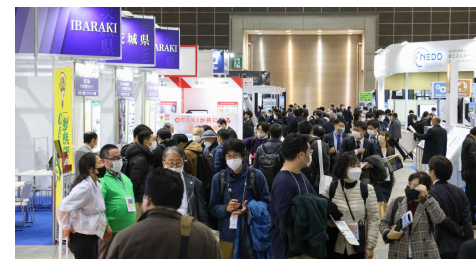
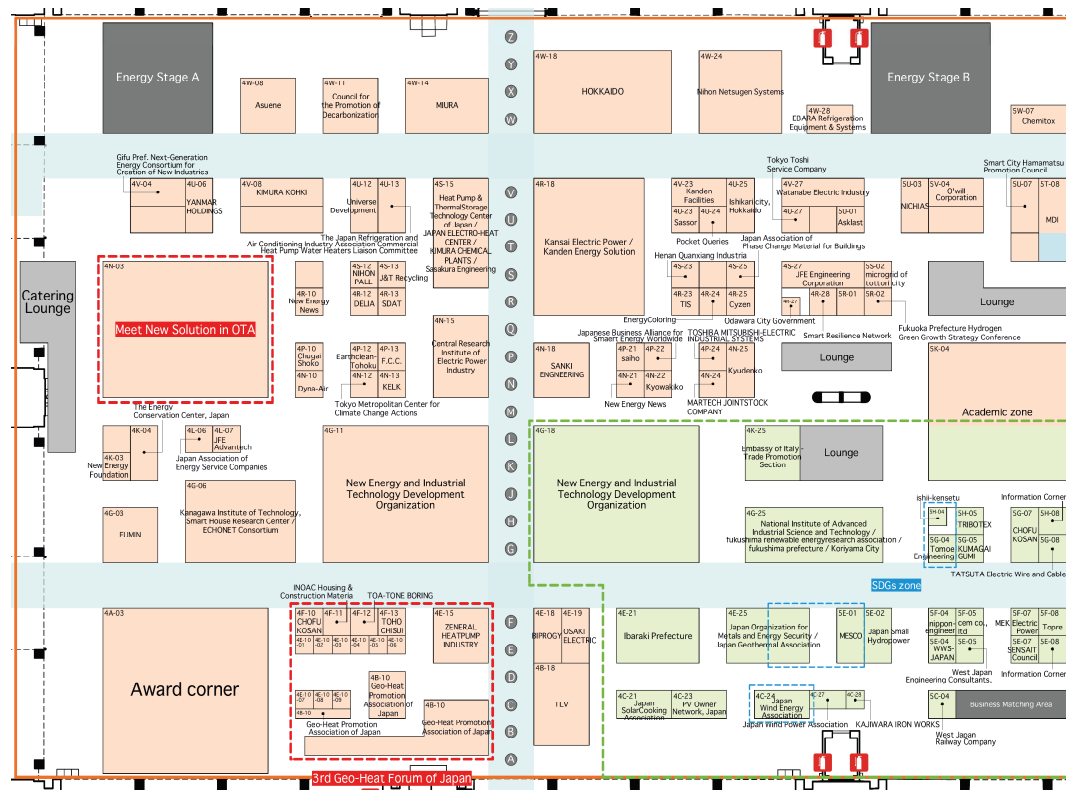
Ministry of Economy, Trade and Industry / Ministry of the Environment

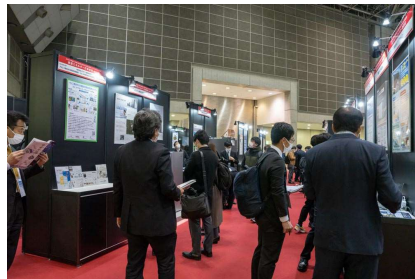
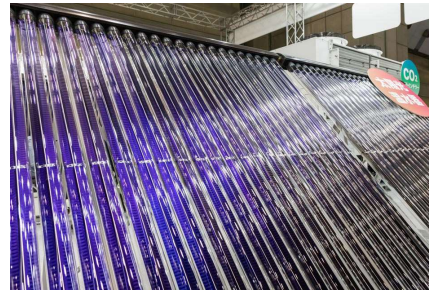
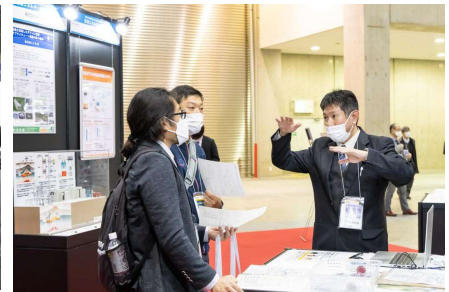
### ■Cooperation

Federation of Electric Power Companies of Japan/Japan Electric Association/Japan Petroleum Association of Japan/Japan Gas Association/Japan Federation of Construction Contractors Associations/Japan Electronics and Information Technology Industries Association/Japan Information and Communications Network Industry Association/Japan Water Works Association/Japan Hydrogen Supply & Utilization Technology Association/Japan Hydrogen Energy Association Japan Hydrogen Energy Association/Japan Hydrogen Energy Association/Japan Hydrogen Energy Development Information Center/ National Institute for Environmental Studies/ National Maritime Research Institute/ National Maritime Research Institute/ National Maritime, Port and Aviation Research Institute/ Port and Airport Research Institute/ International Agriculture, Forestry and Fisheries Research Center/ National Institute of Agro-Environmental Sciences/ National Institute for Marine Science and Technology/ National Institute for Port and Aviation Technology/ National Institute of Advanced Industrial Science and Technology/ National Institute of Agro-Environmental Science and Technology/ National Institute for Food Safety and Consumer Affairs National Institute for Maritime Research and Development (NIED), National Maritime Research Institute, Port and Airport Research Institute, National Maritime and Port Authority of Japan (NMRI), International Agriculture, Forestry and Fisheries Research Center, National Agriculture and Food Research Organization (NARO), National Forestry Research and Development Institute (NFRI), National Institute for Materials Science and Technology, National Institute for Energy and Minerals Resources, Japan (NIMS), Japan Society for Naval Architects and Ocean Engineers (JSAM), Japan Science and Technology Foundation (JSTF), Japan Semiconductor Equipment Association, Inc. Japan Institute of Marine Engineers, Japan Society of Naval Architects and Ocean Engineers, Japan Society of Naval Architects and Ocean Engineers, Japan Science and Technology Corporation, Japan Semiconductor Equipment Association, Japan, Japan Automobile Research Institute, Japan, World Business Council for Energy Conservation, Japan, Research Institute of Innovative Technology for the Earth, Energy Research Institute, Japan, Central Research Institute of Electric Power Industry, Japan, Energy Conservation Center, Inc. The Energy Conservation Center, Japan/Japan Wind Power Association/Japan Heat Pump and Thermal Storage Center/Japan Weather Association/Japan Solar System Development Association/Japan Federation of Housing Organizations/Japan Building Material and Housing Equipment Industries Association/Japan Center for Housing and Building SDGs Japan Association of Geothermal Engineers/Japan Geothermal Association/Japan Association for the Promotion of Geothermal Heat Application/Japan Society of Turbo Machinery/Japan Hydraulics Academy/Japan Society of Refrigerating and Air Conditioning Engineers/Japan Heat Island Society/Japan Photovoltaic Technology Research Association/Japan Wind Engineering Association/Japan Wind Engineering Association/ Japan Association of Wind Power Promotion Municipalities/Japan Alcohol Association/Japan Organic Resources Association/Japan LCA Society/Japan Electrical Construction Equipment and Materials Association/Japan Ocean Energy Resources Utilization Promotion Organization/Japan Solar Energy Society/Japan Wind Energy Society (in no particular order)



## Tokyo Big Sight East 4・5Hall







## Latest trends in energy conservation and renewable

**3,000 attendees in 3days to achieve carbon neutral goal**

What do we need to work on to achieve the goal of carbon neutrality. 26 programs on multifaceted topics, 105 speakers and presentations. The venue was filled with enthusiasm and overflowed with more than 3,000 enthusiastic attendees over the three days of the event.

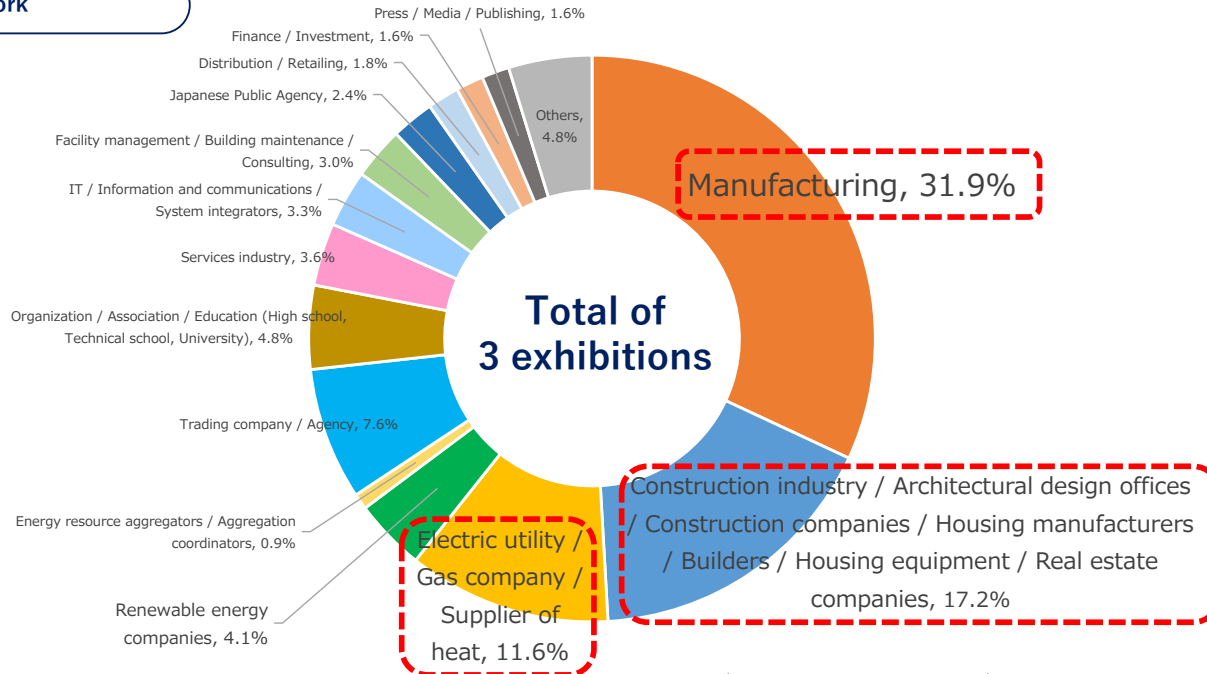
**■ Main Theme**

- Keynote Speech ~Energy Policy Trends Toward GX Realization~
- Frontiers of Perovskite Solar Cells
- Use of Storage Batteries to Achieve Carbon Neutrality
- State of the art decarbonization solutions to help you meet your 2050 goals
- GX and DX to achieve carbon neutrality
- National and International Trends on Climate Change and Green Transformation
- Distributed energy, Microgrids and urban development
- Data Application of Distributed Energy Resources to Strengthen Regional Resilience
- Achieving energy transformation
- Geothermal Fostering Decarbonization and the SDGs
- Local VPPs and Microgrids
- Utilization of waste heat energy
- IoT smart house
- Coordinated control to achieve carbon neutrality



The top three industries were 1. Manufacturing, 2. Construction industry / Architectural design offices / Construction companies / Housing manufacturers / Builders / Housing equipment / Real estate companies, and 3. Electric utility / Gas company / Supplier of heat, accounting for 60% of all visitors.

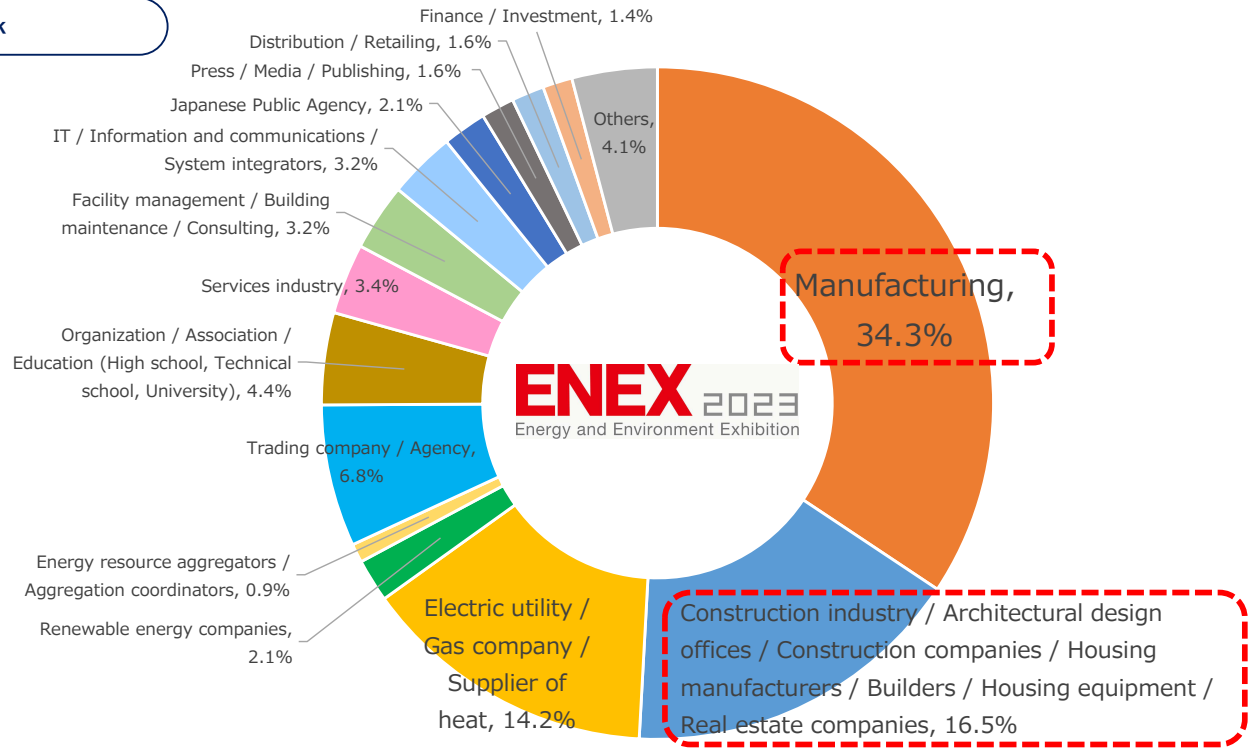
### Field of work



ENEX/DER · Microgrid Japan2023/17th Renewable Energy World Exhibition & Forum  
Number of Visitors Registration: 10,225

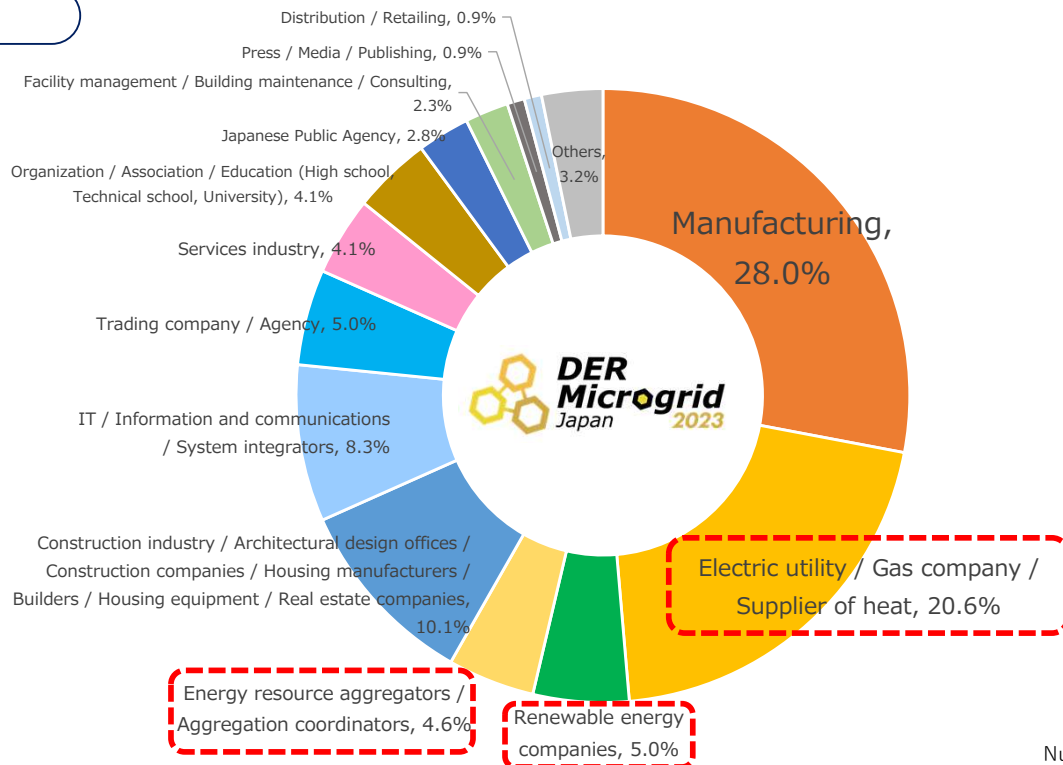
The manufacturing industry, the first largest, accounted for more than 30%, and together with the construction industry, the second largest, accounted for 50% of the total in ENEX.

Field of work



DER/Microgrid Japan is characterized by the large number of visitors from Electric utility / Gas company / Supplier of heat. Together with renewable energy companies and energy resource aggregators, they account for 30% of the visitors.

## Field of work

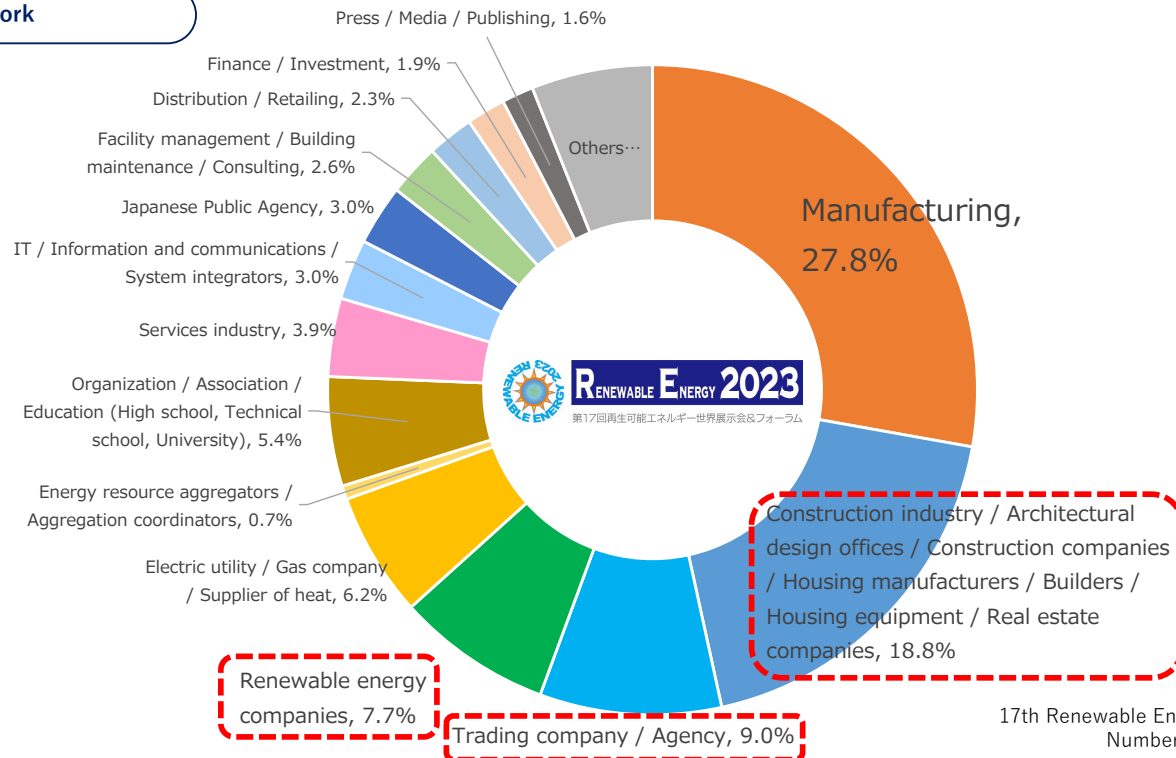


DER・Microgrid Japan2023  
Number of Visitors Registration: 218



The percentage of visitors from the Construction industry, Trading company /agency, and Renewable energy companies was higher than that of ENEX and DER/Microgrid Japan.

## Field of work

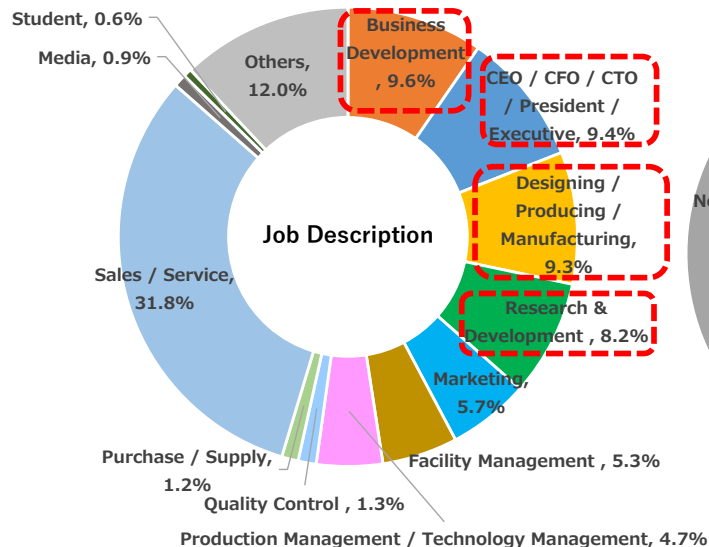


17th Renewable Energy World Exhibition & Forum  
Number of Visitors Registration: 3,549

Business development, Executive, Designing, and research and development accounted for 40% of the visitors, and 60% of all visitors were in positions involved in product purchasing and technology introduction decisions.

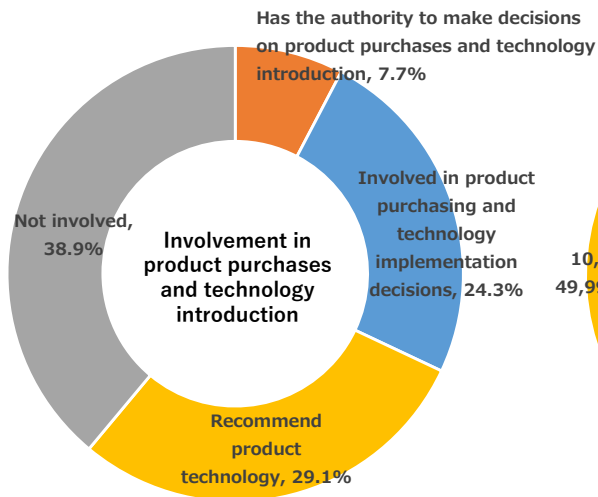
## Job Description

N=7,031



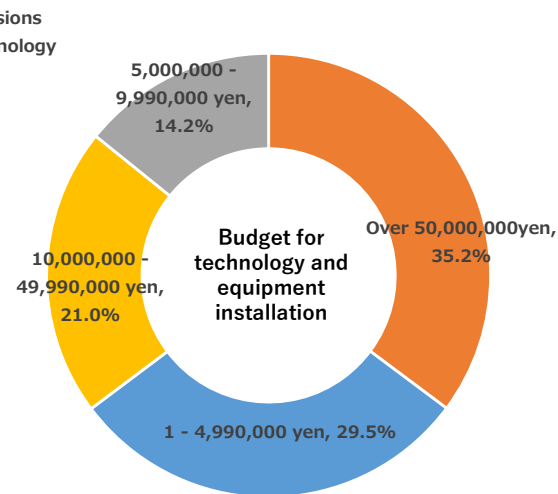
## Involvement in product purchases and technology introduction

N=7,031



## Budget for technology and equipment installation

n=1,929



# Visitor number ranking TOP100

This ranking excludes admission with exhibitor badges

	Company / Organization name	number
1	TOKYO GAS	107
2	TEPCO Energy Partner	80
3	DAIKIN INDUSTRIES	70
4	The Kansai Electric Power Company	50
5	Honda Motor	49
6	Tokyo Gas Engineering Solutions	44
7	SANKI ENGINEERING	41
8	NIPPON DENSETSU KOGYO	36
9	Panasonic	36
10	MIURA	34
11	TAKENAKA	32
12	KIMURA KOHKI	31
13	FUJI ELECTRIC	30
14	Central Research Institute of Electric Power Industry	27
15	KANDENKO	27
16	Chubu Electric Power Miraiz Company	25
17	Mitsubishi Electric	25
18	OSAKI ELECTRIC	24
19	SHIMIZU	24
20	Tokyo Toshi Service Company	22
21	Tokyo Electric Power Company Holdings	22
22	Takasago Thermal Engineering	22
23	Tohoku Electric Power	21
24	EBARA REFRIGERATION EQUIPMENT & SYSTEMS	21
25	Japan Facility Solutions	20

	Company / Organization name	Number
26	TOKYO GAS NETWORK	20
27	OBAYASHI	20
28	Toshiba Carrier	19
29	Toshiba Mitsubishi-Electric Industrial Systems	19
30	Dai Nippon Printing	19
31	Keiyo Gas	19
32	NITTO KOGYO	18
33	Yurtec	18
34	TOHO GAS	17
35	Kyushu Electric Power Company	17
36	East Japan Railway Company	16
37	Furukawa Electric	16
38	Kumagai Gumi	16
39	TEPCO Power Grid	15
40	National Institute of Advanced Industrial Science and Technology (AIST)	15
41	Capti	15
42	Nippon Air Conditioning Services	14
43	Toppan	14
44	New Energy and Industrial Technology Development Organization (NEDO)	14
45	PENTA-OCEAN CONSTRUCTION	14
46	SANKEN SETSUBI KOGYO	14
47	Kanden Facilities	14
48	RICOH	14
49	Toshiba Energy Systems & Solutions	13
50	ASAHI KOGYOSHA	13

	Company / Organization name	number
51	TODA	13
52	Noritz	13
53	Hokkaido Gas	12
54	Green Power Development Corporation of Japan	12
55	TOYOTA INDUSTRIES	12
56	Tokyo Reiki Kogyo	12
57	Tokyo Metro	12
58	TOKYO GAS LIVING ADVANCE	12
59	SEKISUI CHEMICAL	12
60	Japan Petroleum Exploration	12
61	NICHIAS	12
62	KINDEN	12
63	Hitachi Plant Services	11
64	Nissan Motor	11
65	The Energy Conservation Center, Japan	11
66	SHINRYO	11
67	Idemitsu Kosan	11
68	Kawasaki Heavy Industries	11
69	OIWA MACHINERY	11
70	DAIICHI JITSUGYO	11
71	Mitsubishi Heavy Industries	11
72	Kyudenko	11
73	TOYOTA MOTOR	11
74	TAKIGEN MFG.	11
75	DENSO	11

	Company / Organization name	number
76	DAI-DAN	11
77	E-TECS JAPAN	11
78	Azbil	11
79	Daigas Energy	11
80	NEC Facilities	11
81	Hokuriku Electric Power Company	10
82	Toyota Tsusho	10
83	Nippon Koei	10
84	Yazaki Energy System	10
85	TOKYO ENERGY & SYSTEMS	10
86	Chubu Electric Power Company	10
87	West Japan Railway Company	10
88	MAYEKAWA MFG.	10
89	KYOCERA	10
90	Panasonic Holdings	10
91	NTT Anode Energy	10
92	AGC	10
93	BIPROGY	10
94	MEIDENSHA	9
95	Central Japan Railway Company	9
96	TAKAOKA TOKO	9
97	Panasonic Environmental Systems & Engineering	9
98	TOENEC	9
99	AIR WATER	9
100	IHI	9

	Keywords	Total
1	Award Corner / Award	742
2	Thermal solution	525
3	Photovoltaic Power Generation	271
4	Energy	196
5	Carbon Neutrality	175
6	Electric power	140
7	Hydrogen	139
8	Biomass	118
9	Energy Conservation	113
10	Storage battery	111
11	Hydraulic power	98
12	Heat pump	93
13	CO2 / Carbon dioxide	92
14	Perovskite	86
15	Renewable energy	84
16	power generation	78
17	Ground heat	73
18	Wind power	65
19	Exhaust Heat	64
20	Thermoelectricity	63
21	Geothermal heat	61
22	Electric vehicle (EV)	61
23	Air conditioning	57
24	New energy	56
25	waste heat	56

	Keywords	Total
26	Gas	55
27	Fuel Cells	48
28	Electricity storage	45
29	Bio	43
30	Heat storage	41
31	Carbon	40
32	Solar Cells	38
33	Water	37
34	Automobile	36
35	Binary power generation	36
36	VPP	35
37	Cells	33
38	Small hydropower	32
39	Energy Management	32
40	Microgrid	27
41	ORC	26
42	Solar	25
43	AI	24
44	Solar panels	24
45	Sensors	24
46	Steam	23
47	Railway	23
48	Water treatment	22
49	Renewable	22
50	PPA	22

	Keywords	Total
51	Ammonia	21
52	DER/Distributed energy	21
53	Heat insulation	20
54	Solar heat	18
55	Flexible	16
56	Wind power generation	16
57	Hydroelectric power generation	16
58	IoT	15
59	Simulation	15
60	Methane	15
61	Light	14
62	Battery	14
63	RE	14
64	Visualization	14
65	GHG	14
66	CNF	13
67	Adsorption	13
68	Micro	13
69	Galvano	13
70	Measurement	12
71	Lithium	12
72	Cooling	12
73	Reverse osmosis membrane	12
74	Next generation	12
75	Demand	12

	Keywords	Total
76	Boiler	12
77	Refrigerating machine	12
78	Heat source	12
79	Cellulose	11
80	Graphene	11
81	Distribution	11
82	Aluminum	11
83	Pump	11
84	Bioreactor	11
85	DR	11
86	Heat dissipation	10
87	DX	10
88	LED	10
89	Membranes	10
90	Heat shielding	10
91	Drainage	10
92	Heat exchange	10
93	Whole building air conditioning	10
94	Hydrogen power generation	10
95	Power generator	10
96	Subsidy	10
97	Cleaning	9
98	Thermo-	9
99	Recovery	9
100	Woody	9



## Official Website



80,780pv (95.2% of 2022 show)

\*Number of Page View during online exhibition period

## Exhibitor List Page



65,119pv (74.4% of 2022 Show)

\*Total number of exhibitor page views in the 3 exhibitions

## Average page views per company



485.4pv (129.3% of 2022 Show)

\*The number of exhibitor page views divided by the number of exhibitors in the 3 exhibitions

## Number of document downloads

Average 24,4  
※Per product  
※88.7% of 2022 show

## Video views

Average 14,5  
※Per product  
※73.2% of 2022 show

Counting period : Dec.1, 2022 – Feb.28, 2023