



# Global ISO 50001 Achievements:

Reducing costs, energy use, and CO<sub>2</sub> emissions around the world

2018 ENERGY MANAGEMENT LEADERSHIP AWARDS



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In 2018, 50 organizations across 103 countries/economies received global recognition.

This booklet highlights their successes using the ISO 50001 energy management system standard.

The **Clean Energy Ministerial's Energy Management Working Group (EMWG)** has been driving the global dialogue on quality ISO 50001 implementation since 2010.

To showcase leading organizations and share their ISO 50001 energy management successes, the EMWG organizes the Energy Management Leadership Awards.

To qualify for these awards, organizations prepare case studies to share a high-quality and replicable description of their ISO 50001 implementation and certification, resulting business benefits, and useful advice on lessons learned and keys to success. An independent panel of international experts select the winners.

In 2018, 50 organizations across 103 countries received global recognition.

In late May, three organizations will receive the top honor, the Award of Excellence in Energy Management, at the ninth Clean Energy Ministerial (CEM9) in Copenhagen, Denmark:

- An Garda Síochána (Ireland)
- PJSC "Magnitogorsk Iron & Steel Works" (Russia), and
- PT PJB Gresik Power Plant (Indonesia).

Another 47 organizations received Energy Management Insight Awards for helping to build global insight on the benefits of energy management systems.

This booklet highlights the business benefits achieved by the awardees through use of ISO 50001. All awardees are listed on the next page, and at the end of the booklet, awardees are listed by country and by sector.

### **Clean Energy Ministerial**

The Clean Energy Ministerial (CEM) is a high-level international forum that promotes policies and programs to advance clean energy.

Through the EMWG, government officials worldwide share best practices and leverage their collective expertise to accelerate the use of EnMS in industry and commercial buildings.

Governments participating in the EMWG include Argentina, Australia, Canada, Chile, China, Denmark, the European Commission, Finland, Germany, India, Indonesia, Japan, Mexico, the Republic of Korea, Saudi Arabia, South Africa, Sweden, United Arab Emirates, and the United States. The EMWG was launched in 2010 by the CEM and International Partnership for Energy Efficiency Cooperation.

[www.cleanenergyministerial.org/initiative-clean-energy-ministerial/energy-management-working-group](http://www.cleanenergyministerial.org/initiative-clean-energy-ministerial/energy-management-working-group)

ISO 50001 is a framework to help organizations of all sizes and in diverse sectors continually improve their energy performance and reduce emissions.

## Why ISO 50001?

Countries and organizations are looking for strategies to reduce energy and carbon emissions. A strategic approach to energy management has demonstrated value. Energy efficiency is the least expensive, most quickly deployable, and cleanest of all energy resources.

**ISO 50001** *Energy management systems – Requirements with guidance for use* (or simply “ISO 50001”) is the international energy management standard that was published in June 2011, and represents the effort of over 50 countries from around the world to develop an international best practice to help organizations better manage energy.

Leading organizations around the world are achieving their energy and carbon reduction goals using the global ISO 50001 standard for energy management systems. These early adopters are proving the business value of ISO 50001 and paving the way for its broad implementation.

The CEM Energy Management Leadership Awards highlight the strong business benefits realized when organizations of all sizes and in diverse sectors invest in energy efficiency. The 2018 class of awardees represents several sectors new to the competition, such as clay building material and refractories manufacturing, defense, educational services, electricity regulation, hospitality, information technology, machinery manufacturing, public transportation, and shipping ports.

This expansion reflects the growing use of the global ISO 50001 energy management system standard, across sectors and around the globe.

Collectively, the 2018 award recipients reported energy cost savings of up to USD \$383 million and annual greenhouse gas emission reductions of up to 4.3 million metric tons of CO<sub>2</sub>, which is equivalent to taking 919,000 passenger vehicles off the road per year.

## CEM 2018 AWARDS OF EXCELLENCE IN ENERGY MANAGEMENT

### **An Garda Síochána**

*Ireland (3 sites): Dublin (2); Tipperary*

### **PJSC "Magnitogorsk Iron & Steel Works" (MMK)**

*Russia: Magnitogorsk*

### **PT PJB Gresik Power Plant**

*Indonesia (3 sites): Gresik (3)*

## CEM 2018 ENERGY MANAGEMENT INSIGHT AWARDS

### **ABB S.A.**

*Argentina: Valentín Alsina*

### **Abu Dhabi City Municipality**

*United Arab Emirates: Abu Dhabi*

### **Aguas Andinas**

*Chile (2 sites): Santiago (2)*

### **Allied Irish Bank**

*Ireland (5 sites): Dublin (5)*

### **Banco de Crédito e Inversiones**

*Chile: Santiago*

### **Beijing Capital International Airport Co., Ltd.**

*China: Beijing*

### **Bharat Aluminum Company Limited**

*India: Korba*

### **China National Heavy Duty Truck Group Co., Ltd.**

*China (16 sites): Chengdu; Chongqing; Datong; Hangzhou; Jinan (10); Jining; Yongan*

### **CMPC Pulp**

*Chile (3 sites): Collipulli, Laja, Nacimiento*

### **Dubai Municipality**

*United Arab Emirates: Dubai*

### **Dublin City University**

*Ireland (5 sites): Dublin (5)*

### **El Araby Company for Trading and Manufacturing**

*Egypt: Benha*

### **Empresa Nacional del Petróleo (ENAP)**

*Chile (5 sites): Concón; Hualpén; Punta Arenas (2); Santiago*

### **General Motors Ómnibus BB Transportes S.A.**

*Ecuador (7 sites): Quito (7)*

### **Google**

*Belgium: St. Ghislain*

*Finland: Hamina*

*Ireland: Dublin*

*Singapore: Singapore*

*Taiwan: Changhua County*

*United States of America (8 sites): Berkeley County, SC; Council Bluffs, IA (2); Douglas County, GA; Lenoir, NC; Mayes County, OK; Mountain View, CA; The Dalles, OR*

### **Grasim Industries Limited**

*India: Veraval*

### **Grupo Newsan**

*Argentina (2 sites): Ushuaia (2)*

### **Hilton**

*Worldwide in 103 countries (over 5,100 properties)*

### **JK Cement Ltd.**

*India: Chittorgarh*

### **JW Marriott**

*United States of America: Washington, D.C.*

### **Kangwon Land**

*Republic of Korea: Gangwon-do*

### **L&T MHPS Turbine Generators Pvt. Ltd**

*India: Surat*

### **LG Display**

*Republic of Korea (2 sites): Gumi; Paju*

### **LG Electronics Inc., Cheongju Plant**

*Republic of Korea: Cheongju-si*

### **LG Electronics Inc., Gasan R&D Campus**

*Republic of Korea: Seoul*

### **LG Electronics Inc., LG Digital Park**

*Republic of Korea: Pyeongtaek-si*

### **LG Innotek Co., Ltd.**

*Republic of Korea (2 sites): Gumi (2)*

### **Makstil AD**

*Republic of Macedonia (2 sites): Skopje (2)*

### **MAS KREDA Intimo**

*Sri Lanka: Biyagama*

### **Mastellone Hnos. S.A.**

*Argentina (2 sites): General Rodríguez (2)*

### **Misr Fertilizers Production Company (MOPCO)**

*Egypt: Damietta*

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## CEM 2018 ENERGY MANAGEMENT INSIGHT AWARDS (Continued)

### **Municipality of Sovizzo**

*Italy: Sovizzo*

### **Nissan North America, Inc.**

*United States of America (3 sites): Canton, MS;  
Decherd, TN; Smyrna, TN*

### **Oleoductos del Valle S.A. (OLDELVAL)**

*Argentina: Cipolletti*

### **Pacific (Panyu) Textiles Limited**

*China: Guangzhou*

### **Provincial Electricity Regulation Entity (EPRE)**

*Argentina: Mendoza*

### **PT Pupuk Kalimantan Timur (PUPUK KALTIM)**

*Indonesia: Bontang*

### **PT. Cheil Jedang Indonesia**

*Indonesia: Pasuruan*

### **PT. Pembangunan Jawa-Bali Paiton**

*Indonesia: Probolinggo*

### **Puerto Ventanas S.A.**

*Chile: Puchuncaví*

### **Raymond Limited**

*India: Vapi*

### **Roads and Transport Authority Dubai (RTA)**

*United Arab Emirates: Dubai*

### **SIN PAR S.A.**

*Argentina: Quilmes*

### **Sungshin Cement Co., Ltd.**

*Republic of Korea: Danyang-Gun*

### **Vardar Dolomit Doel**

*Republic of Macedonia: Gostivar*

### **Viña Cono Sur**

*Chile: Chimbarongo*

### **Zhilkomservice**

*Russia: Naberezhnye Chelny*

# PARTICIPATING ORGANIZATIONS





## CEM Award of Excellence in Energy Management

In 2018, three organizations earned the top honor, the Award of Excellence in Energy Management:

### **An Garda Síochána**

#### ***3 sites in Ireland***

An Garda Síochána is the first national police force in the world to achieve ISO 50001 certification. Using an ISO 50001-certified energy management system across its Transport Fleet and at two of its largest sites, Garda Headquarters and Garda College, the agency saved US \$11.3 million and reduced its CO<sub>2</sub> emissions by 70,340 metric tons over eight years.

### **PJSC "Magnitogorsk Iron & Steel Works"**

#### ***1 site in Russia***

MMK, a steel producer and metallurgical company, established an ISO 50001 energy management system that delivers US \$20.5 million in annual savings with no financial investment. Overall, site savings over three years total US \$38.6 million, reducing CO<sub>2</sub> emissions by 698,186 metric tons.

### **PT PJB Gresik Power Plant**

#### ***3 sites in Indonesia***

The PT PJB Gresik Power Plant operates a combined cycle power plant and four units of steam power plants to supply electricity to East Java. The facility implemented ISO 50001 to achieve government and internal goals; it saved US \$9.69 million and reduced CO<sub>2</sub> emissions by 2.72 million metric tons over three years.



# An Garda Síochána



## **ISO 50001 Certified:**

3 sites: Garda Transport Fleet, Garda Headquarters & and Garda College

Cost savings: \$11.3 million over 8 years

CO<sub>2</sub> reduction: 70,340 metric tons

Payback period: ~4 months

# PJSC "Magnitogorsk Iron & Steel Works"

## ISO 50001 Certified:

Magnitogorsk Iron & Steel Works

Cost savings: \$38.6 million over 3 years

CO<sub>2</sub> reduction: 698,186 metric tons

Payback period: >1 month



# PT PJB Gresik Power Plant



## **ISO 50001 Certified:**

3 sites in Indonesia

Cost savings: \$9.69 million over 3 years

CO<sub>2</sub> reduction: 2.72 million metric tons

Payback period: ~9 months



In addition, 47 organizations received Energy Management Insight Awards in 2018 for helping to build global insight on the benefits of energy management systems in industrial and commercial facilities.

# ABB S.A.

## ISO 50001 Certified:

ABB Buenos Aires

Cost savings: \$55,000 over 5 years

CO<sub>2</sub> reduction: 894 metric tons

Payback period: 2.2 years



# Abu Dhabi City Municipality



## **ISO 50001 Certified:**

Abu Dhabi Municipality Buildings

Cost savings: \$86,398 over 1 year

CO<sub>2</sub> reduction: 354,443 metric tons

Payback period: <10 months

# Aguas Andinas

## ISO 50001 Certified:

Mapocho Trebal & La Farfana

Cost savings: \$1 million over 5 years

CO<sub>2</sub> reduction: 5,000 metric tons

Payback period: 1.7 years



# Allied Irish Bank



## **ISO 50001 Certified:**

1 Bank Center & 4 Head Offices

Cost savings: ~\$1.6 over 4 years

CO<sub>2</sub> reduction: 9,015 metric tons

Payback period: ~7 months



# Banco de Crédito e Inversiones

## ISO 50001 Certified:

Edificio Corporativo

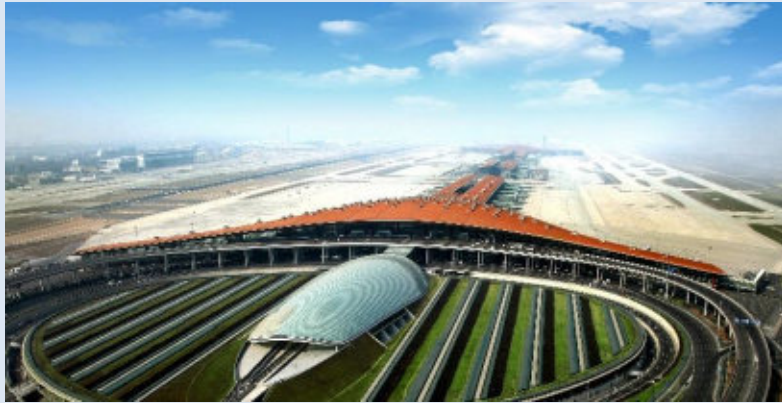
Cost savings: \$7,640 over 1 year

CO<sub>2</sub> reduction: 25 metric tons

Payback period: 5.8 years



# Beijing Capital International Airport Co., Ltd.



## **ISO 50001 Certified:**

Beijing Capital International Airport

Cost savings: \$9.3 million over 3 years

CO<sub>2</sub> reduction: 43,225 metric tons

Payback period: ~10 months

# Bharat Aluminum Company Limited (BALCO)

## ISO 50001 Certified:

BALCO

Cost savings: ~\$7.32 million over 3 years

CO<sub>2</sub> reduction: 114,264 metric tons

Payback period: 3 months



# China National Heavy Duty Truck Group Co., Ltd.



## ISO 50001 Certified:

16 sites in China

Cost savings: \$59.1 million over 4 years

CO<sub>2</sub> reduction: 99,600 metric tons

Payback period: 1.2 years

# CMPC Pulp

## ISO 50001 Certified:

Laja Plant, Pacifico & Santa Fe

Cost savings: \$40.2 million over 4 years

CO<sub>2</sub> reduction: 198,000 metric tons

Payback period: 1.3 years



# Dubai Municipality



## **ISO 50001 Certified:**

Al Tawar Centre

Cost savings: \$423,652 over 6 years

CO<sub>2</sub> reduction: 2,087.2 metric tons

Payback period: 5 months

# Dublin City University

## ISO 50001 Certified:

5 campuses

Cost Savings: >\$10 million over 11 years

CO<sub>2</sub> Reduction: 50,000 metric tons

Payback Period: <1 year



# El Araby Company for Trading and Manufacturing



## **ISO 50001 Certified:**

El Araby Company for Trading and Manufacturing

Cost savings: \$1.7 million over 3 years

CO<sub>2</sub> reduction: 7,901 metric tons

Payback period: 1.1 years



# Empresa Nacional del Petróleo (ENAP)

## ISO 50001 Certified:

5 sites in Chile

Cost savings: >\$15 million over 3 years

CO<sub>2</sub> reduction: 95,099 metric tons

Payback period: <3 months



# General Motors Ómnibus BB Transportes S.A.



## **ISO 50001 Certified:**

7 sites in Ecuador

Cost savings: \$617,626 over 5 years

CO<sub>2</sub> reduction: 20,463 metric tons

Payback period: <8 months

# Google

## ISO 50001 Certified:

HQ and 12 more sites across 6 countries

Cost savings: >\$1 billion

CO<sub>2</sub> reduction: 3.8 million metric tons  
over 3 years

Payback period: <1 year



# Grasim Industries Limited



## **ISO 50001 Certified:**

Unit - Indian Rayon, Veraval

Cost savings: \$1.27 million over 2 years

CO<sub>2</sub> reduction: 2,318 metric tons

Payback period: ~1 year

# Grupo Newsan

## ISO 50001 Certified:

Planta 3-4, Planta 6-CLI

Cost savings: \$367,732 over 1 year

CO<sub>2</sub> reduction: 2,620 metric tons

Payback period: ~2 months



# Hilton



## **ISO 50001 Certified:**

Over 5,100 sites globally

Cost savings: \$783.7 million from 2008-2016

CO<sub>2</sub> reduction: 769,356 metric tons

Payback period: <1 year

# JK Cement Ltd.

## ISO 50001 Certified:

JK Cement Mangrol

Cost savings: ~\$3.36 million from FY 2016-2017

CO<sub>2</sub> reduction: 49,026 metric tons

Payback period: <5 months



## JW Marriott



### **ISO 50001 Certified:**

JW Marriott Washington DC

Cost savings: \$471,891 over 3 years

CO<sub>2</sub> reduction: 4,136 metric tons

Payback period: 7 years



# Kangwon Land

## ISO 50001 Certified:

Kangwon Land

Cost savings: \$400,000 over 1 year

CO<sub>2</sub> reduction: 2,002 metric tons

Payback period: 2.2 years



# L&T MHPS Turbine Generators Pvt. Ltd



## **ISO 50001 Certified:**

L&T MHPS Turbine Generators Pvt.  
Ltd

Cost savings: \$1.93 million over 4 years

CO<sub>2</sub> reduction: 9,706 metric tons

Payback period: 6 months

# LG Display

## ISO 50001 Certified:

2 sites in Republic of Korea

Cost savings: ~\$11.77 million over 1 year

CO<sub>2</sub> reduction: 169,511 metric tons

Payback period: <5 months



# LG Electronics Inc.



## **ISO 50001 Certified:**

Cheongju Plant

Cost savings: \$328,000 over 1 year

CO<sub>2</sub> reduction: 722 metric tons

Payback period: 2.3 years

# LG Electronics Inc.

## ISO 50001 Certified:

Gasam R&D Campus

Cost savings: \$167,400 over 1 year

CO<sub>2</sub> reduction: 340 metric tons

Payback period: 4.51 years



# LG Electronics Inc.



## ISO 50001 Certified:

LG Digital Park

Cost savings: \$712,878 over 2 years

CO<sub>2</sub> reduction: 2,502 metric tons

Payback period: 2.6 years

## LG Innotek Co., Ltd.

### **ISO 50001 Certified:**

2 sites in Republic of Korea

Cost savings: \$1.15 billion over 3 years

CO<sub>2</sub> reduction: 3,236 metric tons

Payback period: <6 months



# Makstil AD



## **ISO 50001 Certified:**

2 sites in Republic of Macedonia

Cost savings: \$200,000 over 2 years

CO<sub>2</sub> reduction: 2,424 metric tons

Payback period: <4 months



# MAS KREEDA Intimo

## ISO 50001 Certified:

MAS KREEDA Intimo

Cost savings: \$34,522 over 1 year

CO<sub>2</sub> reduction: 817 metric tons

Payback period: 9 months



# Mastellone Hnos. S.A.



## **ISO 50001 Certified:**

2 sites in Argentina

Cost savings: \$65,658 over 1 year

CO<sub>2</sub> reduction: 263 metric tons

Payback period: <8 months

# Misr Fertilizers Production Company (MOPCO)

## ISO 50001 Certified:

MOPCO

Cost savings: \$5.4 million over 2 years

CO<sub>2</sub> reduction: 125,844 metric tons

Payback period: <4 months



# Municipality of Sovizzo



## **ISO 50001 Certified:**

Municipality of Sovizzo property management

Cost savings: \$96,251 over 4 years

CO<sub>2</sub> reduction: 146.5 metric tons

Payback period: 3.7 years

## Nissan North America, Inc.

### **ISO 50001 Certified:**

3 sites in United States

Cost savings: \$9.42 million over 3 years

CO<sub>2</sub> reduction: 132,199 metric tons

Payback period: <1 month



## Oleoductos del Valle S.A. (OLDELVAL)



### **ISO 50001 Certified:**

OLDELVAL

Cost savings: \$585,846 over 1 year

CO2 reduction: 5,342 metric tons

Payback period: <2 months

# Pacific (Panyu) Textiles Limited

## ISO 50001 Certified:

Panyu

Cost savings: \$4.89 million from 2011-2015

CO<sub>2</sub> reduction: 108,902 metric tons

Payback period: <10 months



# Provincial Electricity Regulation Entity (EPRE)



## **ISO 50001 Certified:**

EPRE Main Office

Cost savings: \$3,500 over 3 years

CO<sub>2</sub> reduction: 18 metric tons

Payback period: 3.55 years



# PT Pupuk Kalimantan Timur (PUPUK KALTIM)

## ISO 50001 Certified:

PKT-3 Plant

Cost savings: \$641,142 over 1 year

CO<sub>2</sub> reduction: 8,608 metric tons

Payback period: <7 months



# PT. Cheil Jedang Indonesia



## **ISO 50001 Certified:**

Pasuruan Plant

Cost savings: \$10.75 million over 3 years

CO<sub>2</sub> reduction: 61,053 metric tons

Payback period: <3 months

# PT. Pembangunan Jawa-Bali Paiton

## ISO 50001 Certified:

PT PJB Paiton

Cost savings: \$32 million over 5 years

CO<sub>2</sub> reduction: 3.32 million metric tons

Payback period: 3 months



## Puerto Ventanas S.A.



### **ISO 50001 Certified:**

Puerto Ventanas S.A.

Cost savings: \$136,084 over 4 years

CO<sub>2</sub> reduction: 511 metric tons

Payback period: <1 year

# Raymond Limited

**ISO 50001 Certified:**

Vapi Unit

Cost savings: \$671,142 over 1 year

CO<sub>2</sub> reduction: 4,137 metric tons

Payback period: <6 months



# Roads and Transport Authority Dubai (RTA)



## **ISO 50001 Certified:**

RTA Dubai

Cost savings: \$12.2 million over 4 years

CO<sub>2</sub> reduction: 81,362 metric tons

Payback period: ~3 months

# SIN PAR S.A.

## ISO 50001 Certified:

Conesa 10/21

Cost Savings: \$8,400 over 1 year

CO<sub>2</sub> Reduction: 253 metric tons

Payback Period: 1.1 years



# Sungshin Cement Co., Ltd.



## **ISO 50001 Certified:**

Danyang Plant

Cost savings: >\$7.66 million over 3 years

CO<sub>2</sub> reduction: 59,245 metric tons

Payback period: 1.3 years



# Vardar Dolomit Dooel

## **ISO 50001 Certified:**

Dolomite Production Facility

Cost savings: \$68,375 over 1 year

CO<sub>2</sub> reduction: 125,000 metric tons

Payback period: ~3 months



# Viña Cono Sur



## **ISO 50001 Certified:**

Fundo Santa Elisa

Cost savings: \$21,070 over 3 years

CO<sub>2</sub> reduction: 71.78 metric tons

Payback period: 2.4 years

# Zhilkomservice

## ISO 50001 Certified:

Zhilkomservice

Cost savings: \$1.16 million over 2 years

CO<sub>2</sub> reduction: 32,400 metric tons

Payback period: <1 month



## 2018 Participating Organizations, by Sector

### Aluminum Manufacturing

- Bharat Aluminum Company Limited

### Automotive & Parts Manufacturing

- China National Heavy Duty Truck Group Co., Ltd.
- Nissan North America, Inc.
- General Motors Ómnibus BB Transportes S.A.

### Cement Manufacturing

- JK Cement Ltd.
- Sungshin Cement Co., Ltd.

### Chemicals Manufacturing

- Misr Fertilizers Production Company (MOPCO)
- PT Pupuk Kalimantan Timur (PUPUK KALTIM)
- PT. Cheil Jedang Indonesia

### Clay Building Material and Refractories Manufacturing

- Vardar Dolomit Doeel

### Defense

- An Garda Síochána

### Educational Services

- Dublin City University

### Electrical Equipment Manufacturing

- ABB S.A.
- El Araby Company for Trading and Manufacturing
- Grupo Newsan
- LG Display
- LG Electronics Inc., Cheongju Plant
- LG Electronics Inc., Gasan R&D Campus
- LG Electronics Inc., LG Digital Park
- LG Innotek Co., Ltd.

### Electricity Regulation

- Provincial Electricity Regulation Entity (EPRE)

### Financial Services

- Allied Irish Bank
- Banco de Crédito e Inversiones

### Food and Beverage Manufacturing

- Mastellone Hnos. S.A.
- Viña Cono Sur

### Hospitality

- Hilton
- JW Marriott
- Kangwon Land

### Information Technology

- Google

### Insurance and Property Management

- Zhilkomservice

### Iron Steel and Fabricated Metals Manufacturing

- Makstil AD
- PJSC "Magnitogorsk Iron & Steel Works" (PJSC "MMK")

### Machinery Manufacturing

- L&T MHPS Turbine Generators Pvt. Ltd
- SIN PAR S.A.

### Manufacturing (General)

- Grasim Industries Limited

### Municipality

- Abu Dhabi City Municipality
- Dubai Municipality
- Municipality of Sovizzo

### Oil and Gas Production

- Empresa Nacional del Petróleo (ENAP)
- Oleoductos del Valle S.A. (OLDELVAL)

### Power Generation

- PT. Pembangkitan Jawa-Bali Paiton
- PT PJB Gresik Power Plant

### Public Transportation

- Beijing Capital International Airport Co., Ltd.
- Roads and Transport Authority Dubai (RTA)

### Pulp and Paper Manufacturing

- CMPC Pulp

### Shipping Ports

- Puerto Ventanas S.A.

### Textiles Manufacturing

- MAS KREEDA Intimo
- Pacific (Panyu) Textiles Limited
- Raymond Limited

### Water and Wastewater

- Aguas Andinas

## 2018 Participating Organizations, by Country/Economy

### Argentina

**ABB S.A.**, Valentín Alsina, Buenos Aires

**Grupo Newsan**, Ushuaia, Tierra del Fuego

**Hilton\***, 3 sites

**Mastellone Hnos. S.A.**, General Rodríguez, Buenos Aires

**Oleoductos del Valle S.A. (OLDELVAL)**, Cipolletti, Río Negro

**Provincial Electricity Regulation Entity (EPRE)**, Mendoza, Mendoza Province

**SIN PAR S.A.**, Quilmes, Buenos Aires

### Armenia

**Hilton\***, 1 site

### Aruba

**Hilton\***, 1 site

### Australia

**Hilton\***, 14 sites

### Austria

**Hilton\***, 4 sites

### Azerbaijan

**Hilton\***, 1 site

### Bahamas

**Hilton\***, 2 sites

### Barbados

**Hilton\***, 1 site

### Belarus

**Hilton\***, 2 sites

### Belgium

**Google\***, Saint-Ghislain, Hainaut

**Hilton\***, 4 sites

### Belize

**Hilton\***, 1 site

**Hilton\***, 1 site

### Brazil

**Hilton\***, 5 sites

### Bulgaria

**Hilton\***, 2 sites

### Cameroon

**Hilton\***, 1 site

### Canada

**Hilton\***, 125 sites

### Cape Verde

**Hilton\***, 1 site

### Chad

**Hilton\***, 1 site

### Chile

**Aguas Andinas**, Santiago, Santiago Province

**Banco de Crédito e Inversiones**, Santiago, Santiago Province

**CMPC Pulp**, Collipulli, Malleco; Laja, Bío Bío; Nacimiento, Bío Bío

**Empresa Nacional del Petróleo (ENAP)**, Concón, Valparaíso; Hualpén, Concepción; Punta Arenas, Magallanes; Santiago, Santiago Province

**Hilton\***, 3 sites

**Puerto Ventanas S.A.**, Puchuncaví, Valparaíso

**Viña Cono Sur**, Chimbarongo, Colchagua

### China

**Beijing Capital International Airport Co., Ltd.**, Beijing, Beijing Municipality

**China National Heavy Duty Truck Group Co., Ltd.**, Chengdu, Sichuan; Chongqing, Chongqing Municipality; Datong, Shanxi; Hangzhou, Zhejiang; Jinan, Shandong; Jining, Shandong; Yongan, Fujian

**Hilton\***, 126 sites

**Pacific (Panyu) Textiles Limited**, Guangzhou, Guangdong

### Colombia

**Hilton\***, 16 sites

### Costa Rica

**Hilton\***, 5 sites

### Croatia

**Hilton\***, 2 sites

### Curacao

**Hilton\***, 1 site

### Cyprus

**Hilton\***, 2 sites

### Czech Republic

**Hilton\***, 2 sites

### Dominican Republic

**Hilton\***, 2 sites

### Ecuador

**General Motors Ómnibus BB Transportes S.A.**, Quito, Pichincha

**Hilton\***, 2 sites

### Egypt

**El Araby Company for Trading and Manufacturing**, Benha, Qalyubia

**Hilton\***, 15 sites

**Misr Fertilizers Production Company (MOPCO)**, Damietta, Damietta Governorate

### Equatorial Guinea

**Hilton\***, 1 site

### Estonia

**Hilton\***, 1 site

### Ethiopia

**Hilton\***, 1 site

### Fiji

**Hilton\***, 2 sites

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## 2018 Participating Organizations, by Country/Economy (continued)

### Finland

**Google\***, Hamina, Kymenlaakso

**Hilton\***, 3 sites

### France

**Hilton\***, 8 sites

### French Polynesia

**Hilton\***, 2 sites

### Georgia

**Hilton\***, 1 site

### Germany

**Hilton\***, 24 sites

### Greece

**Hilton\***, 1 site

### Guam

**Hilton\***, 1 site

### Guatemala

**Hilton\***, 1 site

### Honduras

**Hilton\***, 2 sites

### Hungary

**Hilton\***, 2 sites

### Iceland

**Hilton\***, 2 sites

### India

**Bharat Aluminum Company Limited**, Korba, Chhattisgarh

**Grasim Industries Limited**, Veraval, Gujarat

**Hilton\***, 17 sites

**JK Cement Ltd.**, Chittorgarh, Rajasthan

**L&T MHPS Turbine Generators Pvt. Ltd**, Surat, Gujarat

**Raymond Limited**, Vapi, Gujarat

### Indonesia

**Hilton\***, 5 sites

**PT Pupuk Kalimantan Timur (PUPUK KALTIM)**, Bontang, East Kalimantan

**PT. Cheil Jedang Indonesia**, Pasuruan, East Java

**PT. Pembangkitan Jawa-Bali Paiton**, Probolinggo, East Java

**PT PJB Gresik Power Plant**, Gresik, East Java

### Ireland

**Allied Irish Bank**, Dublin, Leinster

**An Garda Síochána**, Dublin, Leinster; Tipperary, Munster

**Dublin City University**, Dublin, Leinster

**Google\***, Dublin, Leinster

**Hilton\***, 6 sites

### Israel

**Hilton\***, 3 sites

### Italy

**Hilton\***, 22 sites

**Municipality of Sovizzo**, Sovizzo, Vicenza

### Jamaica

**Hilton\***, 3 sites

### Japan

**Hilton\***, 14 sites

### Jordan

**Hilton\***, 3 sites

### Kazakhstan

**Hilton\***, 2 sites

### Kenya

**Hilton\***, 1 site

### Kuwait

**Hilton\***, 1 site

### Lebanon

**Hilton\***, 2 sites

### Luxembourg

**Hilton\***, 1 site

### Malaysia

**Hilton\***, 9 sites

### Maldives

**Hilton\***, 1 site

### Malta

**Hilton\***, 1 site

### Mauritius

**Hilton\***, 1 site

### Mexico

**Hilton\***, 56 sites

### Montenegro

**Hilton\***, 1 site

### Morocco

**Hilton\***, 2 sites

### Myanmar

**Hilton\***, 3 sites

### Namibia

**Hilton\***, 1 site

### Netherlands

**Hilton\***, 12 sites

### New Caledonia

**Hilton\***, 1 site

### New Zealand

**Hilton\***, 5 sites

### Nicaragua

**Hilton\***, 1 site

### Nigeria

**Hilton\***, 1 site

### Oman

**Hilton\***, 1 site

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## 2018 Participating Organizations, by Country/Economy (continued)

### Panama

**Hilton\***, 5 sites

### Peru

**Hilton\***, 5 sites

### Philippines

**Hilton\***, 1 site

### Poland

**Hilton\***, 16 sites

### Portugal

**Hilton\***, 3 sites

### Qatar

**Hilton\***, 3 sites

### Republic of Korea

**Hilton\***, 5 sites

**Kangwon Land**, Jeongsun-kun, Gangwon

**LG Display**, Gumi, Gyeongsangbuk-do; Paju, Gyeonggi

**LG Electronics Inc., Cheongju Plant**, Cheongju-si, North Chungcheong

**LG Electronics Inc., Gasan R&D Campus**, Seoul, Gyeonggi

**LG Electronics Inc., LG Digital Park**, Pyeongtaek-si, Gyeonggi

**LG Innotek Co., Ltd.**, Gumi, Gyeongsangbuk-do

**Sungshin Cement Co., Ltd.**, Danyang-Gun, North Chungcheong

### Republic of Macedonia

**Makstil AD**, Skopje, Skopje Statistical Region

**Vardar Dolomit Doel**, Gostivar, Polog Statistical Region

### Romania

**Hilton\***, 9 sites

### Russia

**Hilton\***, 25 sites

**PJSC "Magnitogorsk Iron & Steel Works" (PJSC "MMK")**, Magnitogorsk, Chelyabinsk Oblast

**Zhilkomservice**, Naberezhnye Chelny, Republic of Tatarstan

### Saudi Arabia

**Hilton\***, 10 sites

### Seychelles

**Hilton\***, 3 sites

### Singapore

**Google\***, Singapore

**Hilton\***, 3 sites

### Slovakia

**Hilton\***, 2 sites

### South Africa

**Hilton\***, 5 sites

### Spain

**Hilton\***, 12 sites

### Sri Lanka

**Hilton\***, 2 sites

**MAS KREEDA Intimo**, Biyagama, Western Province

### Sweden

**Hilton\***, 1 site

### Switzerland

**Hilton\***, 2 sites

### Taiwan

**Google\***, Changhua County, Taiwan Province

### Tanzania

**Hilton\***, 3 sites

### Thailand

**Hilton\***, 10 sites

### Trinidad and Tobago

**Hilton\***, 1 site

### Turkey

**Hilton\***, 57 sites

### Ukraine

**Hilton\***, 1 site

### United Arab Emirates

**Abu Dhabi City Municipality**, Abu Dhabi, Emirate of Abu Dhabi

**Dubai Municipality**, Dubai, Emirate of Dubai

**Hilton\***, 22 sites

**Roads and Transport Authority Dubai (RTA)**, Dubai, Emirate of Dubai

### United Kingdom

**Hilton\***, 141 sites

### United States of America

**Google\***, Berkeley County, South Carolina; Council Bluffs, Iowa; Douglas County, Georgia; Lenoir, North Carolina; Mayes County, Oklahoma; Mountain View, California; The Dalles, Oregon

**Hilton\***, 4,307 sites

**JW Marriott**, Washington, D.C.

**Nissan North America, Inc.**, Canton, Mississippi; Decherd, Tennessee; Smyrna, Tennessee

### Uruguay

**Hilton\***, 3 sites

### Venezuela

**Hilton\***, 2 sites

### Vietnam

**Hilton\***, 2 sites

Clean Energy Ministerial

## Energy Management Working Group (EMWG)

[www.cleanenergyministerial.org/initiative-clean-energy-ministerial/energy-management-working-group](http://www.cleanenergyministerial.org/initiative-clean-energy-ministerial/energy-management-working-group)