

# AES SUSTAINABILITY REPORT

2017



Preliminary version

# TABLE OF CONTENTS

About this report .....	3
ORGANIZATIONAL PROFILE.....	4
MATERIAL ASPECTS HIGHLIGHTED IN THIS REPORT .....	6
FINANCIAL EXCELLENCE .....	7
ASPECT: Economic Performance and Investment Return on Capital Allocation.....	7
OPERATIONAL EXCELLENCE.....	8
ASPECT: Availability, reliability and access to electricity.....	8
Generation .....	8
Distribution.....	10
Customer Satisfaction.....	12
Energy Storage .....	13
ASPECT: Cybersecurity.....	13
ASPECT: Disaster/Emergency Planning and Response .....	14
ENVIRONMENTAL PERFORMANCE.....	15
ASPECT: Air emissions .....	15
Direct Greenhouse Gas Emissions.....	16
Indirect GHG Emissions .....	18
ASPECT: Water .....	19
Water Withdrawal and Discharge .....	19
ASPECT: Effluents and Byproducts.....	20
Coal Combustion Products Generation & Recycling.....	20
ASPECT: Biodiversity.....	21
Stakeholder Engagement .....	22

Stakeholders .....	22
ASPECT: Impacts on education and living standards in our communities.....	25
ASPECT: Public Safety .....	26
OUR PEOPLE .....	27
ASPECT: Global Talent Management.....	28
AES Performance Excellence: Improving lives by improving the business .....	28
ASPECT: Occupational Health and Safety.....	29
Reactive and Proactive Safety Performance.....	29

## About this report

The following is a preliminary version of our 2017 Sustainability Report. Information contained in this preliminary report focus on the company's operations in 2017.

This preliminary report was prepared in accordance with the recommendations of the Sustainability Reporting Guidelines, version 4.0, of the Global Reporting Initiative (GRI Guidelines). We have chosen to prepare the report in accordance with the criteria listed under the "core" option and include responses to guidance specifically for Electric Utility Sector Disclosures. We have also responded to several aspects and disclosures listed under the "comprehensive" option.

# ORGANIZATIONAL PROFILE

The AES Corporation (NYSE: AES) is a Fortune 200 global power company founded in 1981. The company's headquarters are in Arlington, Virginia, United States (US). AES is publicly traded company, incorporated in Delaware and governed by a Board of Directors.

Our vision is to be the world's leading sustainable power company by leveraging our unique electricity platforms and the knowledge of our people to provide the energy and infrastructure solutions our customers truly need.

We are organized into five market-oriented strategic business units (SBUs). Within our five SBUs, we have two lines of business. The first business line is generation, where we own and/or operate power plants to generate and sell power to customers, such as utilities, industrial users, and other intermediaries.

The second business line is utilities, where we own and/or operate utilities to generate or purchase, distribute, transmit and sell electricity to end-user customers in the residential, commercial, industrial and governmental sectors within a defined service area. In certain circumstances, our utilities also generate and sell electricity on the wholesale market.

We are a leader in lithium-ion, battery-based energy storage, with approximately 400 MW in operation, under construction or in advanced development across seven countries.

The AES Corporation (as of December 31, 2017) (Figure 1)

- Total number of countries/operations/utilities
  - 16 countries
  - 118 generation facilities
  - 6 utilities
- Quantity of products or services provided (gross)
  - 34,905 MW CAPACITY
  - 31,536 UTILITY GWH
  - + 2 million customers
- Total number of employees 10,500
- Net revenue US \$10.5 billion
- Total assets US \$33 billion
- Beneficial Ownership
  1. The Vanguard Group, Inc. – 11%
  2. BlackRock – 9%
  3. Fidelity Management & Research Company – 6%
  4. Capital Group – 6%
  5. State Street Global Advisors (SSgA) – 5%

FIGURE 2 – MW IN OPERATION BY FUEL TYPE (INCLUDES ENERGY STORAGE)

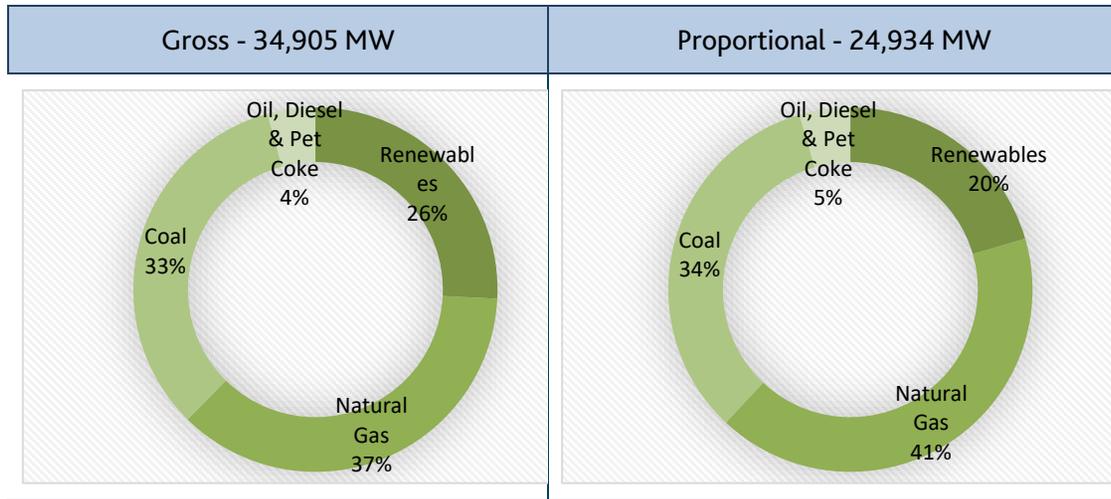
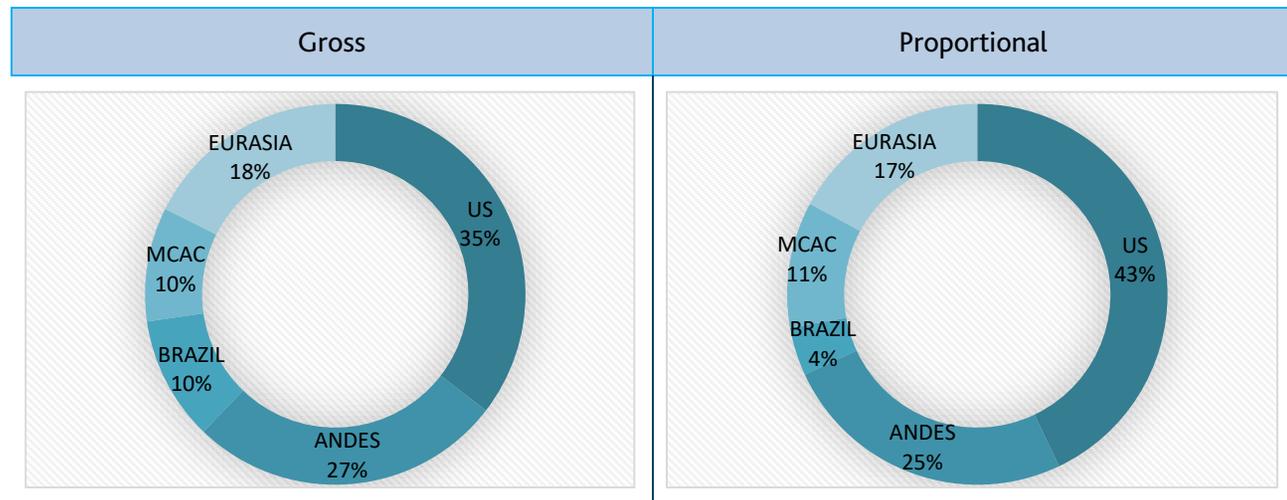


FIGURE 3 – MW IN OPERATION BY STRATEGIC BUSINESS UNIT (INCLUDES ENERGY STORAGE)



# MATERIAL ASPECTS HIGHLIGHTED IN THIS REPORT

This report is structured to present the following “material aspects” within the context of our five broad strategic initiatives.

## **FINANCIAL EXCELLENCE**

Economic Performance

Investment Return on Capital Allocation

## **OPERATIONAL EXCELLENCE**

Availability, Reliability and Access to Electricity

Cybersecurity

Disaster/Emergency Planning and Response

## **ENVIRONMENTAL PERFORMANCE**

Air Emissions

Water

Effluents and Byproducts

Biodiversity

## **STAKEHOLDER ENGAGEMENT**

Impacts on Education and Living Standards in Our Communities

Public Safety

## **OUR PEOPLE**

Global Talent Management

Occupational Health and Safety

# FINANCIAL EXCELLENCE

We manage our financial performance in line with our corporate strategy set by our CEO and Executive Leadership Team and approved by our Board of Directors. We have selected the Standard and Poor's (S&P) 500 Utilities Index as our peer group index to compare our performance.

As we strive to create long-term shareholder value by providing safe and reliable electricity related services, financial success enables us to continue to attract capital and talented people as well as to invest in new projects and innovative solutions for our customers. Our knowledge of the markets where we operate puts us in a position to take advantage of growth opportunities or quickly respond to changing conditions.

We operate our portfolio to generate capital for growth investments, create value for our shareholders, manage debt repayment, and deliver shareholder dividends. We have an investment decision-making process in place to ensure our investment opportunities align with management objectives. In alignment with this process and our overall strategy, we are focusing our growth on platform expansions in markets where we already operate and have a competitive advantage to realize attractive risk-adjusted returns.

Another important element of our governance and financial management is the anticipation, identification and management of risks. The risk identification process is integrated within the company through an Enterprise Risk Management program and risks are managed both at the corporate and SBU levels. Further details on risk management are available on our [website](#) and also our [2017 AES Annual Report and Form 10-K](#) discloses information on the different risks that could have an impact on the performance of the company.

## ASPECT: Economic Performance and Investment Return on Capital Allocation

Our overarching goal is to deliver sustainable and attractive risk-adjusted total returns to our shareholders. We finished 2017 on a strong note, achieving the upper end of our guidance range on all metrics:

- We earned Adjusted EPS of \$1.08
- Our Consolidated Free Cash Flow came in at \$1,921 million

The actions we have taken since 2011, such as cutting our costs by US\$300 million, reducing Parent debt by US\$2 billion and generating US\$5.4 billion in asset sale proceeds, have provided us with the ability to maximize returns for our shareholders through disciplined capital allocation:

- We returned US\$2,719 million to shareholders through share repurchases and a quarterly dividend
  - In 2017, we increased our quarterly dividend by 8.3%, to \$0.13 per share
- We used \$2,604 million to prepay and refinance Parent debt, including US\$341 million in 2017
- We invested \$2,198 million in new projects and acquisitions, including US\$863 million in 2017

We continued to reshape our portfolio and improve our overall risk profile. Aligned with our goal of reducing complexity, we have exited certain businesses and markets where we do not have a competitive advantage. Since 2011, we have announced or closed \$5.4 billion in equity proceeds from asset sales, decreasing the total number of countries where we have operations from 28 to 16.

We will continue to execute on our strategic objectives and seek to be the low-cost operator of assets in attractive markets, while exercising disciplined capital allocation that strengthens our credit and reduces overall volatility.

# OPERATIONAL EXCELLENCE

Our definition of operational excellence comprises not only supplying reliable, affordable electricity and ensuring our plants are available— but also managing physical and cybersecurity, disasters and emergencies, public safety and environmental performance.

Our management approach includes the establishment of a uniform system of Key Performance Indicators (KPIs) set yearly to measure how efficiently and reliably we operate our plants, meet our customers' electricity needs and manage collections.

KPIs for generation businesses include commercial availability, equivalent forced outage factor, equivalent availability factor, heat rate and days sales outstanding. Similarly, KPIs for distribution businesses include system average interruption duration, system average interruption frequency, customer satisfaction, days sales outstanding and non-technical losses. This report covers only the KPIs that are related to the identified material issues.

Operational performance, established by the Compensation Committee, is included in the Performance Incentive Plan Payouts of the base salary of Executives and all AES people. Additional information can be found in our [2018 Proxy Statement](#).

## ASPECT: Availability, reliability and access to electricity

Guaranteeing a stable supply of electricity to our customers requires that our businesses use modern technologies for power generation and delivery and monitoring system reliability. It also requires a deep understanding of our service areas and customer base. Through innovative solutions and flexibility, our businesses seek to understand, monitor and serve all our customers' needs for power.

Our generation businesses help local electric systems in the markets they operate to meet their existing and growing demand for energy, while our utility businesses deliver electricity to more than 2 million customers.

AES Dominicana owns a Liquefied Natural Gas terminal and international dock that transports the LNG to the AES Los Minas (DPP) facility. During 2017 there were no significant or material gas leakages.

### Generation

We currently own and/or operate a generation portfolio of 29,532 MW, excluding the generation capabilities of our integrated utilities. Our generation businesses sell electricity under medium- or long-term contracts or under short-term agreements in competitive markets.

Performance drivers of our generation businesses include types of electricity sales agreements, plant reliability and flexibility, fuel costs, seasonality, weather variations and economic activity, fixed-cost management, and competition. The consolidated performance of our generation portfolio in terms of commercial availability in 2017 compared to previous year remained flat.

In the countries where our businesses are located, governments and other authorities perform studies to anticipate energy needs and address projected long-term electricity demand.

**TABLE 1 – COMMERCIAL AVAILABILITY BY ENERGY SOURCE, 2014-2017**

Commercial Availability <sup>1</sup>	2014	2015	2016	2017	2017 target
<b>AES Total</b>	<b>90.50%</b>	<b>89.85%</b>	<b>94.35%</b>	<b>94.66%</b>	<b>94.94%</b>
Coal	83.51%	85.13%	92.56%	92.74%	
Gas	95.31%	94.15%	94.1%	95.47	
Hydro	97.0%	99.41%	99.85%	98.13	
Oil	95.47%	100%			
Wind <sup>2</sup>	95.65%	95.12%	92.79%	90.19	

To meet growing demand, our businesses can develop and construct new generation facilities. Our priority for development is platform expansion opportunities, where we can add on to our existing facilities in key markets where we have a competitive advantage. Also, for our utility business, new plants may be built or existing plants retrofitted in response to customer needs or to comply with regulatory developments.

In 2017 we acquired or advanced the development of more than 2.3 GW of renewable generation in three markets:

- United States - In partnership with Alberta Investment Management Corporation (AIMCo), we acquired sPower, the largest independent solar developer in the United States, with 1.3 GW of solar and wind in operation and another 10 GW in development.
- Brazil - AES Tietê acquired 686 megawatts of long-term contracted wind and solar generation.
- Mexico - we acquired the 306 megawatt Mesa La Paz wind development project.

We broke ground on the 1,284 MW combined cycle gas repowering at our Southland plant in California in the United States making progress on our 4.4 GW of capacity under construction. During the year we completed 279 MW of new solar, natural gas and energy storage capacity in the United States and the Dominican Republic. Since 2011, we have brought on-line 5,333 MW of new projects and by 2020 we will be adding 8.3 GW of new capacity increasing our total installed capacity by 25%.

<sup>1</sup> Commercial Availability: Actual variable margin, as a percentage of potential variable margin if the unit had been available at full capacity during outages.

<sup>2</sup> Commercial Availability of a wind farm is determined using a different methodology and is not included in the AES total.

**TABLE 2 – MEGAWATTS UNDER CONSTRUCTION BY THE END OF 2017**

Country	Power Plant	Fuel	Gross MW
Chile	Alto Maipo	Hydro	531
India	OPGC 2	Coal	1,320
	Delhi ES	Energy Storage	10
El Salvador	Bósforo	Solar	30
Panama	AES Colón	Natural Gas	380
Philippines	Masinloc 2	Coal	335
United States	Eagle Valley CCGT	Gas	671
	Distributed PV - Commercial	Solar	27
	Lawai	Solar/Energy Storage	48
	Southland Repowering	Gas	1284
	Alamitos Energy Center	Energy Storage	100

We believe the integration of renewables and energy storage is the key to accelerating a cleaner energy future. This is one of the most promising opportunities in our industry and our businesses are leading the way. Global demand for energy storage is expected to grow ten-fold in five years, reaching at least 28 GW of installed capacity by 2022.

### Distribution

AES operates seven utility businesses that distribute electricity to 9.4 million people in Brazil, El Salvador and the United States. Our two utilities in the United States also include generation capacity totaling 5,737 MW. Our utility businesses have a variety of structures, ranging from integrated utility to pure transmission and distribution businesses. Generally, these businesses sell electricity directly to end-users—such as homes and businesses—and bill customers directly.

In November 2017, Eletropaulo converted its preferred shares into ordinary shares and transitioned the listing of those shares into the Novo Mercado, which is a listing segment of the Brazilian stock exchange with the highest standards of corporate governance. Upon conversion of the

preferred shares into ordinary shares, AES no longer controlled Eletropaulo and accounted for its ownership interest as an equity method investment.

Over the past 20 years AES Eletropaulo made significant accomplishments in terms of modernizing the company, and improving technology, customer service and public safety. The sale of AES Eletropaulo represents the final chapter of our strategic decision to exit from the distribution business in Brazil. We are now focused on growing the renewable business at AES Tietê and bringing new technologies, such as energy storage, digitalization and drone applications, to the Brazilian electric sector.

**TABLE 3 – LENGTH OF DISTRIBUTION AND TRANSMISSION LINES (BY SBU AND COUNTRY)**

Profile by SBU	Country/ Business	Transmission Lines (Km) (High Voltage)		Distribution Lines (Km) (Low Voltage)	
		OVERHEAD	UNDERGROUND	OVERHEAD	UNDERGROUND
United States	IPL	1,394	-	11,474	9101
	DPL	2,974	6	16,879	6,006
	<i>TOTAL US</i>	4,368	6	28,353	15,107
Andes	Chile	1,520	-	-	-
MCAC	El Salvador	-	-	37,899	92
<b>Total AES</b>		<b>7,479</b>	<b>208</b>	<b>66,252</b>	<b>15,199</b>

The reliability of our distribution networks is tracked by the average number and duration of system interruptions per customer and is consolidated based on ownership-adjusted EBITDA:

- the system average interruption duration index (SAIDI) represents the total hours of interruption the average customer experiences annually,
- the system average interruption frequency index (SAIFI) represents the average number of interruptions the average customer experiences annually.

As showed in Table 4 and Table 5, the performance in the reliability KPIs remained flat compared to last year.

**TABLE 4 – SYSTEM AVERAGE INTERRUPTION DURATION INDEX (SAIDI), 2014-2017**

Business	2014	2015	2016	2017	2017 Target
<b>Actual AES</b>	<b>3.06</b>	<b>2.54</b>	<b>2.71</b>	<b>2.74</b>	<b>3.00</b>
AES El Salvador	19.38	14.91	17.42	15.47	
Dayton Power & Light (DP&L)	1.82	1.75	1.45	1.69	
IPL	0.95	0.81	1.03	0.99	

**TABLE 5 - SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI), 2014-2017**

Business	2014	2015	2016	2017	2017 Target
<b>Actual AES</b>	<b>1.75</b>	<b>1.66</b>	<b>1.65</b>	<b>1.64</b>	<b>1.86</b>
AES El Salvador	5.93	5.71	6.22	5.51	
Dayton Power & Light (DP&L)	0.92	0.92	0.76	0.82	
IPL	0.71	0.66	0.74	0.86	

### Customer Satisfaction

As one of five KPIs for utility businesses that impacts annual compensation of business leaders, AES sets annual targets for customer satisfaction.(percentage of customers satisfied/greatly satisfied).

AES utilities participate in national and/or regional third-party surveys. These include CIER (Regional Energy Integration Commission) for our El Salvadoran utilities, and Power & Associates for IPL and DP&L. The surveys' statistically significant representative samples cover our distribution businesses complete 2 million customer base. The results are used to calculate the overall customer satisfaction index.

The results shown in Table 6 represent residential retail and commercial results from all AES distribution business. The 2017 satisfaction index was impacted due to external variables outside the control of the company in businesses in El Salvador. Such external factors resulted in an increase of the energy bill to customers and since they occurred right before the completion of the customer satisfaction surveys, negatively

impacted the results: 1) Reduction of the subsidy to electric power by the Ministry of Economy and 2) Increase in the price of the generation (cost translated to customers).

**TABLE 6- AES CONSOLIDATED CUSTOMER SATISFACTION FOR DISTRIBUTION BUSINESSES, 2013-2016**

	2014	2015	2016	2017	2017 Target
<b>% of customer satisfaction</b>	87.9	87.3	90.2	86.3	87.5

### Energy Storage

The grid-connected energy storage sector is expected to expand from a total installed capacity of three gigawatts (GW) at the end of 2016 to 28 GW by 2022 according to IHS Markit, which is equivalent to the power used by 18.6 million households. By incorporating energy storage across the electric power network, utilities and communities around the world will optimize their infrastructure investments, increase network flexibility and resiliency, and accelerate cost-effective integration of renewable electricity generation.

Over the past ten years, AES has become a global leader in utility-scale, battery-based energy storage. Today AES' Advancion platform is present in seven countries with more than 200 MW of energy storage deployed, including the largest installed system of its kind in the world.

During 2017, we brought online 20 megawatts of new battery-based energy storage arrays at two sites in the Dominican Republic. The two 10 MW arrays are the first of their kind in Central America and the Caribbean.

Also, in July 2017, Siemens and AES announced their agreement to form a new global energy storage technology and services company under the name Fluence. The joint venture will bring together AES' ten years of industry-defining experience deploying energy storage with over a century of Siemens' energy technology leadership and its global sales presence in more than 160 countries.

Combining the proven AES Advancion and Siemens Siestorage energy storage platforms with expanded services, we expect Fluence will deliver energy storage solutions and services to a broad group of customers, from commercial and industrial companies to utilities and power developers around the globe.

### ASPECT: Cybersecurity

In 2013, AES initiated a strategy to create a Global Cybersecurity program. Over the years, this strategy has evolved to include an operating model, governance, mandatory cybersecurity guidelines, training, awareness, shared technologies and intelligence that we employ to guide our global program across our diverse businesses.

We regularly communicate this strategy with the corporate leadership, the Board of Directors and our global cybersecurity team through monthly cybersecurity council meetings. Additionally, as part of our global strategy, we self-assess compliance with our stated guidelines and cooperate with our Corporate Internal Audit function to audit compliance. Similarly, the businesses conduct external penetration tests to assess

the sustainability of the data system and plants. The Global Cyber Security Program is organized into four core areas, with an underlying training, awareness and messaging component (see Figure 4 below).



FIGURE 4 - CYBERSECURITY PROGRAM COMPONENTS

## ASPECT: Disaster/Emergency Planning and Response

AES businesses face possible risks and scenarios that can disrupt operations and the service they provide. Safe, fast and effective power restoration following emergency events is essential to the reliability of electric power generation and distribution systems.

As a provider of essential services, our businesses have diverse programs in place to ensure our operations are prepared to manage unusual disruptions. The goal is to keep our business and operations running effectively, safely and securely.

Our management approach includes a set of emergency preparedness standards describing requirements for the development, review and implementation of Business Continuity Plans (BCP) at each AES location. These plans also consider local regulations and include preparedness for: operational emergencies; off-site emergencies that will have a significant impact on operations or staff; physical security measures, including evacuation of our employees in case of unrest; and emergencies involving nature, e.g., severe weather, floods, earthquakes, tsunamis, etc.

Our Safety Management System and the Global Safety Standard on Emergency Preparedness describes minimum requirements for emergency preparedness plans that address the risk associated with operational activities, man-made emergencies, natural disasters and anticipated industry hazards. Also, the Safety Standard require for emergency response drills and training to our people. In addition, when necessary, our businesses establish an educational program with the local communities.

Stakeholder collaboration and engagement is also an important part of our safety and recovery the plans. Our procedures include clear and frequent communications and collaboration with customers, neighboring communities, the media, contractors and government officials. To create awareness with key stakeholders, businesses also can share information with surrounding communities about safety and how to act during an emergency, bad weather conditions, or spill overs, among others.

# ENVIRONMENTAL PERFORMANCE

We develop energy solutions in an environmentally responsible manner. Through impact evaluations, technological innovation, and implementation of appropriate environmental controls, we seek to select not only an environmentally compliant but also an environmentally sound energy solution for each market we serve.

We monitor our business activities under our Environmental Management System (EMS) Framework which builds on the [AES' Environmental Policy principles](#) that are applicable to all our operating businesses and construction projects. The EMS, is based on industry best practices and is consistent with the principles of the ISO 14001 standard.

The EMS is comprised of environmental management and technical standards that cover topics such as general environmental requirements and prohibitions, PCB (polychlorinated biphenyl) management, hazardous waste and chemicals management, biodiversity protection, spill prevention and control, and contractor environmental management. In some cases, the requirements of these standards are more stringent than local environmental regulatory requirements.

While all our operating businesses and construction projects adhere to our EMS framework, more than 80 percent of the AES workforce is located in businesses that have voluntarily certified their EMS to the ISO 14001 international standard.

During 2017, none of the businesses we operate paid significant fines<sup>3</sup> or penalties related to the environment or ecological issues.

AES used the services of Lloyd's Register Quality Assurance Inc. (LRQA) to verify and conduct a limited assurance for 2013-2017 of AES businesses':

- Air emissions data;
- Water withdrawal and discharge data; and
- Coal combustion product (CCP) generation and recycle/reuse data.

In addition to third-party verification, we use an internal AES quality assurance/quality control (QA/QC) process to validate reporting every year.

All the data included in the environmental performance indicators covers all business where AES has operational control.

## ASPECT: Air emissions

Many factors influence emissions, including generation diversity and efficiency, demand for electricity, weather, fuel availability and prices, and emission controls deployed. Depending on the fuels used to generate power, these air emissions may consist of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), mercury (Hg), as well as greenhouse gases such as carbon dioxide (CO<sub>2</sub>) and trace emissions of methane (CH<sub>4</sub>) and nitrous dioxide (N<sub>2</sub>O).

---

<sup>3</sup> Significance is determined by a threshold and this only refers to fines that were equal to or less than US\$10,000 USD.

All air emissions (direct and indirect) are consolidated using an equity share approach and are voluntarily disclosed via this preliminary Report, the Annual and Sustainability Reports, CDP Climate Change program and other means of communication.

### Direct Greenhouse Gas Emissions

We follow the principles and requirements of the GHG Protocol's Corporate Accounting and Reporting Standard. Our GHG emissions inventory includes all GHGs covered by the Kyoto Protocol, except for PFCs and NF<sub>3</sub>, since these are not used in our operations.

The following greenhouse gas emissions in CO<sub>2</sub> equivalent (CO<sub>2</sub>e) result primarily from the following sources:

- Major fuel-fired power generation stationary sources (e.g., boilers, gas turbines, reciprocating engines), used for power generation;
- Non-power generation sources, such as smaller fuel-fired sources (e.g., emergency generators, space heating, portable equipment), vehicles, and releases of CH<sub>4</sub>, SF<sub>6</sub> and HFC-based gases.

Complete details related to our inventory and methodology can be found on the CDP website.

**TABLE 7 – DIRECT GHG EMISSIONS (SCOPE 1), 2014 – 2017**

		2014	2015	2016	2017	2017 target
<b>Total direct GHG Emissions (Scope 1)<sup>4</sup></b>		<b>79,630</b>	<b>70,339</b>	<b>70,273</b>	<b>63,497</b>	<b>79,987</b>
<i>Power Generation</i>						
CO <sub>2</sub>	Thousand MT	79,363	70,105	69,981	63,053	
CH <sub>4</sub>		30	26	26	186	
N <sub>2</sub> O		238	208	204	210	
<i>Other Sources</i>						
CO <sub>2</sub>		42	43	42	29	
SF <sub>6</sub> , HFCs and CH <sub>4</sub>		50	18	19	19	

<sup>4</sup> Equity adjusted values.

### *Direct SO<sub>2</sub>, NO<sub>x</sub>, and Other Emissions*

The data in Table 8 refers to SO<sub>2</sub>, NO<sub>x</sub> and mercury emissions resulting from our businesses' major fuel combustion units during the last four years. Air emissions data related to mercury primarily consists of emissions from coal-fired electric power generation units. For 2014-2017, the reported values include mercury emissions from all our global coal- and petroleum coke-fired power plants and have been externally verified.

**TABLE 8 – METRIC TONNES OF SO<sub>2</sub>, NO<sub>x</sub>, PM AND MERCURY EMISSIONS, 2013 - 2017<sup>5</sup>**

	2014	2015	2016	2017	2017 Target
<b>NO<sub>x</sub></b>	81,802	70,106	68,561	57,094	83,130
<b>SO<sub>2</sub></b>	235,505	142,186	111,305	97,186	235,505
<b>PM</b>	8,880	8,577	7,602	5,766	8,880
<b>Mercury</b>	0.73	0.56	0.42	0.59	0.73

### *Emissions from biologically-sequestered carbon*

AES' 2017 CO<sub>2</sub> emissions from biologically sequestered carbon include emissions from our landfill gas (Nejapa, El Salvador, MCAC SBU) and biomass (Laja, Chile, Andes SBU) burning power plants. In 2016 and 2017 some of our businesses used E85 fuel for their vehicles, which represented a small fraction of the overall CO<sub>2</sub> emissions from biologically sequestered carbon. These emissions are not included in the table above.

**TABLE 9 - CO<sub>2</sub> EMISSIONS FROM BIOLOGICALLY SEQUESTERED CARBON, 2014 – 2017**

Biogenic CO <sub>2</sub> Emissions (Equity Adjusted)	2014	2015	2016	2017
	THOUSANDS METRIC TONNES			
<b>Biomass</b>	82	69	63	71
<b>Landfill Gas</b>	22	32	24	26
<b>TOTAL</b>	<b>104</b>	<b>101</b>	<b>88</b>	<b>97</b>

<sup>5</sup> Equity adjusted values.

## Indirect GHG Emissions

AES global Scope 2 GHG emission tracking process includes:

- Electricity purchased from non-AES generated sources for a business's own use;
- Transmission and distribution losses of non-AES generated electricity sold to end users of AES distribution companies;
- Sales to customers by our distribution businesses (Scope 3);
- Business air travel for our global operations (Scope 3).

**TABLE 10 – INDIRECT GHG EMISSIONS (SCOPE 2 AND 3), 2014 - 2017**

	2014	2015	2016	2017	2017 target
	THOUSAND METRIC TONNES CO <sub>2</sub> e				
<b>Electricity-Related Indirect Emissions (Scope 2*), Equity Adjusted</b>					
<b>Location Based Method</b>	290	367.8	306	226	367.8
<b>Market Based Method</b>	290	368.1	309	230	368.1
<b>Other Indirect Emissions (Scope 3*), Equity Adjusted</b>					
<b>Emissions due to Sale of Electricity to End Users</b>	5,853	6,238	5,864	15,421	
<b>Emissions due to Business Air Travel*</b>	1.4	3.2	1.8	1.0	

A portion of the electricity we generate is used for “station service” (or own use), so in many cases, it is not necessary to purchase energy from the market. Exceptions to this general rule of thumb include periods of outages, when electricity is purchased from the market to support our energy needs.

Additionally, our transmission and distribution (T&D) businesses purchase electricity for their own use either from the grid or from AES-owned power plants. In the case of purchases from the grid, a certain degree of double counting may be present due to the fact that our portfolio consists of both generation and T&D businesses.

## ASPECT: Water

On an annual basis, our individual facilities may use from only a few hundred cubic meters of water (like wind generation sites) to more than 700 million cubic meters of water (such as in a large thermal power plant).

The water is predominantly used for the steam cooling process at our thermal plants. As part of the process, a small portion of the water evaporates while most of it is returned to the water source body. Water use is also key to our hydroelectric power plants, since water flowing through turbines is used to generate electricity. However, these waters are immediately returned to the environment at similar or higher quality as raw water extracted.

### Water Withdrawal and Discharge

AES follows GRI guidance on reporting water withdrawal and discharge data. Our water inventories include:

- Cooling water, including those from once-through and recirculating cooling water systems:
- Process water;
- Potable/drinking water (with the exception of bottled water).

Water used for generation of electricity at our hydroelectric power plants, as well as water evaporation from cooling towers in our closed-circuit cooling systems, domestic sewage, rainwater and storm water effluents is not included in our water inventory.

Because of the once-through cooling systems on many of our coal-fired plants, almost 99 percent of the water is returned to the source and available for other uses.

Water withdrawal and discharge data is consolidated using an operational control approach.

TABLE 11 – WATER WITHDRAWAL AND DISCHARGE, 2014 - 2017

	UNIT	2014	2015	2016	2017	2017 target
<b>Total water withdrawn</b>	<i>Million Cubic Meters</i>	<b>6,553</b>	<b>6,393</b>	<b>7,512</b>	<b>6,618</b>	<b>7,512</b>
Surface		6,503	6,324	7,491	6582	
Municipal		6	5	4	7	
Groundwater		44	64	18	29	
<b>Total water returned to the source (at similar or higher quality as raw water extracted)</b>		<b>6,219</b>	<b>6,135</b>	<b>7,386</b>	<b>5,570</b>	

## ASPECT: Effluents and Byproducts

Fossil fuel-fired generation plants may produce coal combustion byproducts (CCBs), solid wastes (e.g., small quantity hazardous waste, municipal waste), cooling water discharges and other wastewater effluents.

With the exception of coal combustion products (CCPs), the byproduct streams from electric power generation, transmission and distribution businesses consist of small mass and volumetric quantities, and may include municipal solid wastes, construction and demolition debris, and hazardous and special byproducts such as PCBs, solvents, used oils, herbicides, etc. Specific

### Coal Combustion Products Generation & Recycling

CCRs are materials formed when coal is burned to generate electricity, and include bottom ash, fly ash, synthetic gypsum (also referred to as flue gas desulfurization (FGD) gypsum), FGD solids and cenospheres.

TABLE 12 - CCPs GENERATION AND RECYCLING/REUSE, 2014-2017<sup>6</sup>

	2014	2015	2016	2017	2016 TARGET	2017 target
CCPs generated (metric tonnes)	7,507,371	9,550,936	9,024,417	8,879,824	10,016,088	9,550,936
CCPs recycled/reused (%)	38.5	33.9	31.9	38.2	34	38.5

Coal combustion generation and recycle/reuse data above is consolidated using an operational control approach.

The increase in CCP generation rates in 2015 and 2016 was driven by (1) the addition of new controls systems (FGD) at Norgener (Chile, Andes SBU) and at Ventanas (Chile, Andes SBU), and 2) the commissioning of a new power plant Mong Duong 2 (Vietnam, Asia SBU) in the second half of 2015.

<sup>6</sup> The values in the table are not equity adjusted.

## ASPECT: Biodiversity

Protecting and encouraging biodiversity helps boost ecosystems and keep them healthy for all life forms to thrive. AES' operations associated with generation and transmission and distribution of electricity, as well as construction of various scale projects will inevitably lead to interactions with various ecosystems, populations and species. It is therefore one of our focus areas in environmental management.

Our approach to managing biodiversity impacts at our operating and construction sites is built upon three major principles outlined in our Environmental Policy and embedded in our EMS' AES Biodiversity Assessment & Protection Standard:

- **Risk and impact assessment** through analysis of our activities, their potential impacts, and necessary control measures.;
- **Mitigation and control** through implementation of monitoring programs and plans, engineering and other controls, and habitat restoration and protection; and
- **Communication and awareness** through collaboration with local scientific communities and other stakeholders, internal and external training and education, etc.

Our approach has the objective of ensuring that all AES businesses identify, assess, document and take proper mitigation action on biodiversity matters to avoid or, if avoidance is not possible, to minimize negative biodiversity impacts and to promote positive biodiversity impacts.

Each business and construction project demonstrates adherence to our environmental management principles, as well as compliance with local and national regulatory requirements, by developing biodiversity protection programs and plans, and addressing biodiversity risks in four major areas: awareness campaigns, site clean-ups, reforestation activities and habitat protection and restoration.

Due to their specificity, biodiversity risks for construction projects are assessed and mitigated during the pre-construction permitting and environmental impact assessment phases using methodologies that consider various alternatives and establish corrective measures to avoid, mitigate or offset possible impacts on ecosystems and biodiversity. Usually, information on the environmental impact assessments for our projects under development or construction are made publicly available on dedicated webpages either by the businesses or the regulatory bodies.

**TABLE 13 – LINKS TO THE PUBLIC WEBSITES CONTAINING EIA/AIA RESULTS**

Major Construction Project	Country	Link to the public website containing EIA/SIA results
Alto Maipo	Chile	<a href="http://seia.sea.gob.cl/expediente/ficha/fichaPrincipal.php?modo=ficha&amp;id_expediente=2933044">http://seia.sea.gob.cl/expediente/ficha/fichaPrincipal.php?modo=ficha&amp;id_expediente=2933044</a>
OPGC 2	India	<a href="http://www.moef.nic.in/www.opgc.co.in">www.moef.nic.in/www.opgc.co.in</a>
Colón	Panama	<a href="http://www.miambiente.gob.pa/index.php/en/">http://www.miambiente.gob.pa/index.php/en/</a>
Masinloc 2	Philippines	The Environmental Performance Report and Management Plan (EPRMP) is not available in digital format, but is available for local communities at the Department of Environment & Natural Resources (DENR) Central Office (Quezon City) and at DENR Pampanga

# STAKEHOLDER ENGAGEMENT

At AES, Stakeholder Engagement refers to the process of developing strong, proactive, long-term and consistent relationships with key stakeholders of the company. This is integrated into the company's global strategy as we recognize that it is not just a critical part for sustainability, but also important for our businesses' success and their licenses to operate.

Because AES businesses engage with diverse stakeholders across the globe, having a common engagement approach is key. Since 2014, we have internal guidelines for Global Stakeholder Engagement. The guidelines, developed based on the AA1000 Stakeholder Engagement Standard, highlight the key elements of our engagement strategy and outline steps to ensure our relationships are successful and long-lasting. The content covers topics from identifying and prioritizing stakeholders, to deciding on the appropriate engagement methodology, to performing risk assessments.

In addition, as part of our management approach, we use a customized platform to better anticipate and prepare for stakeholder risks, map stakeholders and effectively manage each stakeholder engagement strategy. We identify key stakeholders based on the unique characteristics of each market and country where our operations are located. This identification is determined based on position or favorability, level of influence, level of involvement, and level of interest or concern.

## Stakeholders

Our stakeholders include a wide variety of individuals, organizations, governments, communities and other market players. Customers, employees, suppliers, lenders and investors are also stakeholder groups with whom we want to maintain solid relationships.

We work to structure interactive stakeholder engagement activities so we can receive effective feedback. Table 14 below summarizes our current stakeholder groups and provides examples of engagement methods, issues discussed and how those issues are usually addressed. The examples provided are typical, but may not apply to all of our businesses.

At the corporate level, key relationships (such as heads of state, investors, government policy makers, trade associations, government officials, ambassadors and international institutions) are managed through dedicated people at our headquarters. The highest senior leaders at a country level are directly responsible for overseeing Stakeholder Engagement at the local level with the support of functional area leads.

**TABLE 14 - MAIN STAKEHOLDERS**

AES Stakeholders	Engagement	Key Issues	How Issues are Addressed
<b>Suppliers</b>	<ul style="list-style-type: none"> <li>• We promote suppliers’ success through clear policies, procedures, terms and conditions</li> <li>• It is important to ensure our suppliers are aligned with our values and have standards as high as ours</li> </ul>	<ul style="list-style-type: none"> <li>• Direct contact between vendors and AES’ supply chain buyers and sourcing specialists</li> <li>• Supplier performance score cards</li> <li>• Published policies and guidelines, such as safety requirements, environmental guiding principles and supplier diversity objectives</li> </ul>	<ul style="list-style-type: none"> <li>• Centralized management of key supply chain categories, such as fuel sourcing</li> <li>• Develop and communicate safety, environmental, and diversity guidelines to existing and prospective suppliers</li> </ul>
<b>Investors</b>	<p>We regularly communicate with our investors via:</p> <ul style="list-style-type: none"> <li>• Quarterly earnings presentations</li> <li>• Investor Relations website</li> <li>• Investor calls</li> <li>• Rating Agency discussions</li> <li>• Investor and public forum events</li> <li>• Annual shareholder meeting</li> <li>• Annual and corporate social responsibility reports</li> <li>• Proxy communications</li> <li>• Traditional and social media</li> </ul>	<ul style="list-style-type: none"> <li>• Strategy and growth plans</li> <li>• Company management</li> <li>• Return on investment</li> <li>• Capital allocation</li> <li>• Governance</li> <li>• Financial performance and liquidity</li> <li>• Shareholder returns, including dividends</li> <li>• Risk management</li> <li>• Environmental performance</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain a healthy balance sheet and sufficient liquidity</li> <li>• Ensure that investors are provided timely information on key issues</li> <li>• Corporate reorganization to streamline the business for profitability</li> </ul>
<b>Customers</b>	<p>We are invested in understanding our customers’ perspectives and addressing their concerns via:</p> <ul style="list-style-type: none"> <li>• Customized energy management solutions</li> <li>• Wholesale and retail power and gas market participation</li> <li>• Internet-based feedback interface</li> <li>• Customer satisfaction surveys</li> <li>• 24/7 customer call centers</li> <li>• Publications and reports</li> <li>• Energy efficiency and demand response programs</li> <li>• Residential customer education programs</li> <li>• Sustainable energy solutions</li> <li>• Traditional and social media</li> <li>• Participation in public events</li> </ul>	<ul style="list-style-type: none"> <li>• Managing energy use with new technologies</li> <li>• Reliability and quality of service</li> <li>• Lowering energy costs</li> <li>• Using cleaner energy sources, including renewables</li> <li>• More efficient energy use</li> <li>• Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Provide information and energy management tools via our websites</li> <li>• Peak demand management programs</li> <li>• Conduct advanced metering and dynamic pricing pilots</li> <li>• Deploy on-site renewable energy systems for commercial customers</li> <li>• Conduct energy efficiency audits and building retrofits, and provide incentives for numerous energy efficiency measures</li> <li>• Provide risk management services for wholesale and retail customers</li> </ul>

AES Stakeholders	Engagement	Key Issues	How Issues are Addressed
<b>Governments</b>	<p>We communicate with local, state and federal government officials via:</p> <ul style="list-style-type: none"> <li>• Meetings with elected officials in communities surrounding power plants and utility infrastructure</li> <li>• Power plant tours</li> <li>• Emergency planning exercises conducted with local/state agencies</li> <li>• Policy white papers, testimony and briefings</li> <li>• Regulatory proceedings and rate cases</li> <li>• FERC and NERC reporting</li> <li>• Reporting in compliance with national and local requirements across the globe</li> </ul>	<ul style="list-style-type: none"> <li>• Reliability</li> <li>• Security, affordability and sustainability of electricity supply</li> <li>• Energy market structure and regulation</li> <li>• Job creation</li> <li>• Environmental compliance</li> <li>• Federal policies</li> <li>• Financial/OTC derivatives</li> <li>• Safety</li> <li>• Fuel diversity and balanced energy matrix</li> </ul>	<ul style="list-style-type: none"> <li>• Investment in new technologies to keep long-term electricity supply reliable, affordable and sustainable</li> <li>• Engage in discussions with federal governments, partnership groups and EPA about environmental performance and policy</li> <li>• Engage directly on financial reform legislation, GHG policy, clean energy standards and federal loan guarantees</li> </ul>
<b>Industry Observers</b>	<p>We engage in dialogue with NGOs and other industry observers around the world through:</p> <ul style="list-style-type: none"> <li>• Industry organizations, conferences and direct dialogue</li> <li>• Participation in advisory councils, business alliances of NGOs</li> <li>• Collaboration with NGOs in facilitating policy making dialogues</li> <li>• Website</li> <li>• Traditional and social media</li> </ul>	<ul style="list-style-type: none"> <li>• Employment</li> <li>• Business development</li> <li>• Infrastructure</li> <li>• Trends in the sector</li> <li>• Environmental performance and policies</li> <li>• Job creation</li> <li>• Safety</li> <li>• Skilled work force development</li> </ul>	<ul style="list-style-type: none"> <li>• Engage in NGO-sponsored dialogues on energy and environmental policy topics, including GHG policy, clean energy standard and renewable energy incentives</li> <li>• Participate in events as experts in the field to discuss trends in the sector</li> </ul>
<b>Community</b>	<p>We invest in, support and ensure dialogue with the communities where we operate via:</p> <ul style="list-style-type: none"> <li>• Periodic community meetings in communities surrounding our facilities</li> <li>• Career fairs</li> <li>• Volunteer projects and social sustainable programs</li> <li>• Participation in community events</li> <li>• Website</li> <li>• Traditional and social media</li> </ul>	<ul style="list-style-type: none"> <li>• Employment of local talent</li> <li>• Business development in local communities</li> <li>• Infrastructure</li> <li>• Environmental performance and policies</li> <li>• Job creation</li> <li>• Safety</li> <li>• Skilled work force development</li> <li>• Social benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Updates on key issues and projects and feedback mechanisms on website</li> <li>• Skilled workforce development programs with industry and labor stakeholders at community educational locations</li> <li>• Social sustainable programs</li> <li>• Education on safe, adequate and efficient use of energy</li> </ul>

AES Stakeholders	Engagement	Key Issues	How Issues are Addressed
<b>AES People</b>	We engage through a variety of different channels: <ul style="list-style-type: none"> <li>• Company intranet</li> <li>• Multi-lingual update communications from company executives</li> <li>• Electronic newsletters</li> <li>• Employee Helpline</li> <li>• Yearly performance reviews</li> <li>• Online courses, classroom training and college degree programs</li> <li>• Leadership and employee development opportunities</li> <li>• Employee surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace safety</li> <li>• Career opportunities</li> <li>• Diversity and inclusion</li> <li>• Salary and benefits</li> <li>• Company strategy and leadership</li> <li>• Positive corporate image</li> </ul>	<ul style="list-style-type: none"> <li>• Promote two-way communications</li> <li>• Increase feedback mechanisms</li> <li>• Increase involvement in company related activities</li> </ul>

### ASPECT: Impacts on education and living standards in our communities

AES businesses have implemented varying levels of engagement with local communities. Whether entering a new location or operating at an existing facility, we are focused on programs that can make a community stronger economically, socially or environmentally, through impact assessments and development programs.

AES has internal company-wide guidelines for developing Sustainable Corporate Social Responsibility Programs. The guidelines are suitable to different local contexts and provide tools for AES businesses to develop and implement sustainable social responsibility programs that are beneficial for our core business and the sustainable development of the communities in which the company operates.

We encourage our businesses to custom-tailor community engagement programs to ensure the most effective and beneficial local contribution. Additionally, we encourage AES people to get involved in volunteering programs and community activities such as reforestation, education and training, clean ups, among others.

Where practical, our team involves stakeholders in the planning, implementation and evaluation of community programs. AES businesses also engage in partnerships with various stakeholders to maximize the benefits of the programs and make a long-term, positive impact for the communities.

Every year, AES businesses develop over 100 community-oriented investment programs in the areas of infrastructure, education, culture, environment, safety, health and social welfare. Some of these programs improve education and living standards, and include access to electricity and basic services, vocational training and employment opportunities for young people, and safety education, among others.

During 2017, around 54 percent of community-related activities, programs, donations and sponsorships were in the areas of education, social welfare and safety. Also, around 24 percent of the money allocated to community-related activities, programs, donations and sponsorships were for infrastructure projects while 26% was allocated to educational programs.

## ASPECT: Public Safety

The infrastructure necessary to conduct our operations is located in the communities our businesses serve. Because contact with this infrastructure can be dangerous, AES businesses take preventive steps via the design of our facilities such as installing security fencing around the sites or locating live electrical systems away from easy public access.

We track public injury and public fatality cases, which are investigated by local AES businesses. Based on the results, mitigation measures are implemented as needed.

In 2017 we experienced a total of 27 public fatal incidents due to individual members of the public coming into contact with our businesses' distribution infrastructure in the countries of Brazil and El Salvador (note this number does not include traffic incidents involving AES' businesses infrastructure, such as power poles, which are not tracked and over which we have no control).

**TABLE 15 – PUBLIC FATAL INCIDENTS, 2014-2017**

Fatal Incident Cases	2014	2015	2016	2017
General Public	30	21	27	26

The cases reported in Table 15 include electric transmission and distribution businesses we had management control over during the last four years but we might have exited during this period. For example, the values for 2017 include incidents from Brazil, where since November 2017 we did not have management control over the distribution businesses.

## OUR PEOPLE

AES people contribute to fueling quality of life around the world by creating the energy solutions that will meet tomorrow's needs. We work on projects with global impact – from improving processes to applying innovative solutions to critical issues – in teams that combine people with diverse specialties, perspectives and cultures.

We recognize that our people are our greatest asset, and they set the foundation of our ability to achieve our strategic objectives. The success we have achieved would not be possible without the leadership, diversity, skills and knowledge that our people bring to the work they do.

As of December 31, 2017, 49 percent of our 10,534 permanent full-time people were covered by collective bargaining agreements and 21% of managerial positions are held by women.

Our workforce is comprised of individuals from diverse backgrounds, cultures and disciplines. We do not view diversity simply as a responsibility to be met, a policy to implement, benefits to offer or a program to run. With presence in 16 countries we leverage our diversity and integrate it into how we work and how we compete to win in the global marketplace.

**TABLE 16 - 2017 AES PEOPLE DEMOGRAPHICS BY STRATEGIC BUSINESS UNIT (SBU)**

Strategic Business Unit	Permanent - Full time Employees		Total operational and construction contractors
	Female	Male	
Andes	370	1776	7,165
Brazil	425	772	1,417
Eurasia	291	1239	13438
MCAC	319	1639	5,199
US	715	2648	2,675
Corporate	108	232	46
Total	2228	8306	29,940

## ASPECT: Global Talent Management

We know we need to have the right people in the right place at the right time to meet the company's commitments and sustain our success. Our global talent management strategy considers the full life-cycle of an AES person with a framework that enables us to help people reach their potential at AES:

- We understand the business needs for a particular position, the value and contribution the position will add and the skills, attributes and experiences needed
- We identify top talent by first leveraging existing AES people and then external talent if needed.
- Once the appropriate candidate is identified and on-boarded, we focus on long-term engagement.

In 2017, the average hours of training per person was 39 hours. We use three primary mechanisms to help our people reach their potential, as well as challenge and enhance their personal growth:

1. Formal learning, which comes from our ACE Academy for Talent Development;
2. Assessment and career planning, which includes a development planning, objective-setting and feedback; and
3. Experience and exposure to new career development opportunities.

### AES Performance Excellence: Improving lives by improving the business

AES businesses around the world use the AES Performance Excellence (APEX) program. APEX employs cutting-edge and time-tested continuous improvement tools and methodologies such as Lean, Six Sigma and PDCA (Plan Do Check Act).

Our industry is undergoing rapid transformation, and APEX is an essential tool in driving it forward. Through APEX, AES provides participants with disciplined tools, methodologies and approaches to critical business issues; collaboration and knowledge sharing; and learning and people development opportunities, all of which deliver improved performance, reduced costs, increased revenue and engaged people.

The solutions we develop come in many forms that make our business better—from protecting the safety of our people and our contractors, to running our operations and better serving our customers. APEX projects deliver real improvement in how we work, and real impact for our business, creating significant profits and savings over time – in total, more than US\$1 billion in benefits since the program started 12 years ago.

More than 66 percent of our people have been trained to use APEX methodology and tools. In 2017 we exceeded our target of executing more than 200 projects using APEX, which represented over US\$40 million in benefits. Through APEX, more than 4,000 ideas have become sustainable solutions.

## ASPECT: Occupational Health and Safety

We always put safety first—for our people, contractors and communities. That’s why our work to identify and assess occupational safety risks is never done.

AES has established a Safety Management System (SMS), which is built on the OHSAS 18001 Occupational Health and Safety Management System model. The foundation of our SMS is comprised of [AES Safety Beliefs and Safety Principles](#) established to continuously reinforce the importance of safety.

The SMS covers 18 functional elements in the areas of leadership, structure, and processes and actions. The SMS also includes specific operational and construction safety standards that are based on global electric utility best practices.

The company has established a 0 fatality for AES people and contractors as a corporate goal. Also, there is a target for LTI rates, which was set to be below the U.S. utility industry top quartile benchmark LTI rates. As part of the Safety Management, other metrics are also considered such as Monthly safety walk targets, near misses reported, and Monthly safety meeting attendance

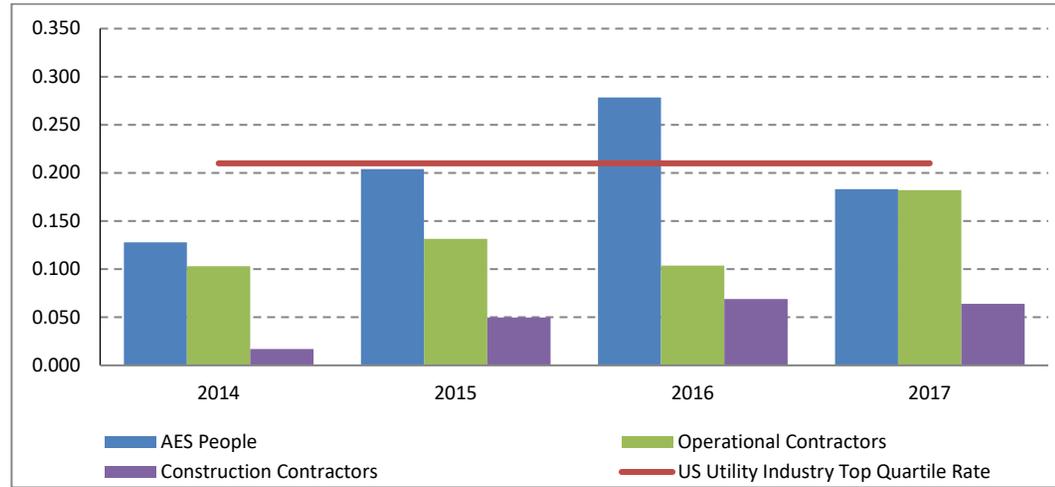
### Reactive and Proactive Safety Performance

Learning from our experiences in a challenging 2016, we established six key actions to help us strengthen the safety of our workplaces. These actions led to positive safety results in 2017 with zero fatalities for AES people and a 35% decrease in Lost Time Incident (LTI) cases. In 2018, we’ll continue working towards creating and sustaining an incident free workplace.

**TABLE 17 – OCCUPATIONAL FATALITY CASES, 2014-2017**

Occupational Fatalities	2014	2015	2016	2017
AES People	0	1	3	0
Contractors	1	1	5	2

AES businesses calculate LTI rates for their employees and contractors based on OSHA standards, so they are comparable across any industry or group. The standard is based on 200,000 labor hours, which equates to 100 workers who work 40 hours per week and 50 weeks per year.



**FIGURE 5 - LOST TIME INCIDENT RATE FOR AES PEOPLE AND CONTRACTORS, 2014-2017<sup>7</sup>**

We also have established proactive initiatives to identify actual and potential risks and hazards through quality safety walks, safety inspections, and internal and external audits to address them before an incident occurs. By identifying near miss events and workplace hazards, including those having a potential to lead to a serious incident (SIP events), AES businesses seek opportunities for incident prevention through knowledge sharing across all locations.

**TABLE 18 – PROACTIVE SAFETY INDICATORS, 2014-2017**

Proactive Safety Indicator	2014	2015	2016	2017
<b>Safety Walks</b>	109,241	104,294	101,289	94,952
<b>Workplace Hazards</b>	71,573	75,602	93,005	63,106

<sup>7</sup> 2014-2017 LTI rates for AES people and contractors have been verified by Lloyd’s Register Quality Assurance Inc. (LRQA), which conducted a limited assurance of our LTI rate data and results.

## Index of Figures

The AES Corporation (as of December 31, 2017) (Figure 1) .....	4
Figure 2 – MW in operation by fuel type (includes Energy Storage).....	5
Figure 3 – MW in operation by Strategic Business Unit (includes Energy Storage).....	5
Figure 5 - Cybersecurity Program components .....	14
Figure 6 - LOST TIME INCIDENT RATE FOR AES PEOPLE AND CONTRACTORS, 2014-2017 .....	30

## Index of tables

Table 1 – Commercial Availability by Energy Source, 2014-2017 .....	9
Table 3 – Megawatts Under Construction by the end of 2017 .....	10
Table 4 – Length of Distribution and Transmission Lines (by SBU and Country) .....	11
Table 5 – System Average Interruption Duration Index (SAIDI), 2014-2017 .....	12
Table 6 - System Average Interruption Frequency Index (SAIFI), 2014-2017 .....	12
Table 7- AES Consolidated Customer Satisfaction for Distribution Businesses, 2013-2016 .....	13
Table 8 – Direct GHG Emissions (Scope 1), 2014 – 2017 .....	16
Table 9 – Metric Tonnes of SO <sub>2</sub> , NO <sub>x</sub> , PM and Mercury Emissions, 2013 - 2017.....	17
Table 11 - CO <sub>2</sub> Emissions from Biologically Sequestered Carbon, 2014 – 2017.....	17
Table 11 – Indirect GHG Emissions (Scope 2 and 3), 2014 - 2017 .....	18
Table 12 – Water Withdrawal And Discharge, 2014 - 2017.....	19
Table 13 - CCPs Generation and Recycling/Reuse, 2014-2017.....	20
Table 14 – Links to the Public Websites containing EIA/AIA Results.....	21
Table 15 - Main Stakeholders.....	23
Table 16 – Public Fatal Incidents, 2014-2017 .....	26
Table 18 – Occupational Fatality Cases, 2014-2017 .....	29
Table 19 – Proactive Safety Indicators, 2014-2017 .....	30