GE @Rio 2016 Olympic Games

*As a Worldwide Partner, GE supports the Olympic Games with **digital industrial technology** that delivers **critical infrastructure** and **peak performance** for host cities, athletes and spectators across the world.*

We work closely with host countries, cities and Organizing Committees to provide infrastructure solutions for Olympic Games venues including power, water treatment, and lighting. We also supply hospitals and the Olympic Games Polyclinic with the latest diagnostic imaging technologies as well as data and record management to help doctors treat and track athletes for peak performance.

GE's Olympic Games partnership was launched in January 2005 and continues through the Tokyo 2020 Olympic Games. We are a Worldwide Partner of the Rio 2016 Olympic Games in Brazil, the PyeongChang 2018 Winter Games in South Korea and the Tokyo 2020 Olympic Games in Japan. We are also a proud partner of the Rio 2016 Paralympic Games.

> *"We are committed to working with the IOC and the local Organising Committees to deliver world-class infrastructure solutions and a sustainable legacy to future generations."*
>
> **Jeff Immelt,**
> **GE Chairman & CEO**

GE and Rio 2016

For Rio 2016, GE is involved in over 160 infrastructure projects that will bring the Games to life for athletes, spectators and viewers worldwide.

Our leading edge technology is in every venue. We are providing a variety of critical services from lighting the fields of play and critical venues including the famous Maracanã Stadium for the Opening Ceremony of the Olympic Games, ensuring power connectivity and continuity for the International Broadcast Center, which will provide live coverage of the Games on-site and for billions of spectators around the world.

Lighting the Games

Current, powered by GE will supply 190,000 lighting features in an area totaling 4.3 million square meters, the equivalent of 1,068 official football pitches. Half of these projects will be completed with energy-saving LEDs, with a potential saving to the city of at least 50% in electricity.

Monitoring & Scanning the Athletes

GE equips sports physicians and the Olympic Games Polyclinic with advanced medical imaging technologies including a wide range of digital imaging equipment such as MRIs, X-Ray and Ultrasound machines. In 2016, for the first time, all athletes at the Games will have access to Electronic Medical Records (EMR) powered by GE to further enable more efficient care. This equipment allows medical practitioners and trainers to determine an earlier and more accurate diagnosis and recovery plan for today's Olympians.

Providing Energy Connections

GE will supply the entire electrical distribution system to be installed in the International Broadcast Center. All the energy that fuels the Center's operation will pass through its system. GE will also provide over 3,000 Uninterrupted Power Supply (UPS) units, commonly called "no breaks" to provide energy security for the Rio 2016 Olympic Games and broadcast the event to approximately five billion people globally.

Digital Performance Management

For the first time, GE is also using its digital industrial technology to improve athlete's performance. GE developed a real-time training performance data and analysis software program for the Brazilian Canoe/Kayak Federation to strengthen the teams' medal prospects.

GE providing critical infrastructure for Rio

In Rio de Janeiro, GE is also enabling enhancements and improvements to local services and utilities particularly in the supply of critical power and water solutions to support the staging of the Games.

More power for the capital of sport

The arrival of over half a million tourists will greatly increase the demand for electricity in Rio de Janeiro during the Olympic Games. This influx will require flexibility and operational stability in the generating grid. In large part, this role will be played by thermal plants in municipalities around the city, such as the Baixada Fluminense Thermal Power Plant in the city of Seropédica.

Opened in February 2014, the Baixada Fluminense Thermal Power Plant uses GE turbines in a combined cycle, which ensures greater energy efficiency for the system. Two natural gas turbines (7FA.04) and a gas turbine (D11) are responsible for generating up to 530 megawatts of power. This is enough to supply a city of up to 1.7 million people.

Electrical grid stability

GE has also helped support the larger infrastructure needs of Rio through more affordable, reliable, accessible and sustainable energy solutions – all in preparation for the Games. Our gas engines (J420) have been installed and are now operating to support electrical grid stability in the Nova Iguacu Shopping Mall and Barao de Tefe commercial building, and our water membrane solutions are helping to reuse waste water for air conditioning in the Shopping Via Parque Mall in Barra. These technologies will not only be used daily during the Games to help offset energy usage at the Olympic Games venues, but they will be pivotal in the city's energy stability plans for years to come.

GE legacy gift to Rio de Janeiro

As part of GE's commitment to the Games and their host cities, our legacy gifts to Rio de Janeiro include better, more efficient lighting for critical public spaces including Flamengo Park, Rio's largest public park and the venue for sailing and cycling events at the Rio 2016 Olympic Games and the Lapa area, a central and historical district. Our LED floodlighting and roadway fixtures with telemanagement technology will decrease power consumption with between 50-78% energy savings, will save Rio City Hall maintenance expenditure, increase the sense of security and improve lighting quality for the enjoyment and benefit of Rio's inhabitants and visitors.

In addition to this lighting gift, GE is transforming the technology at Souza Aguiar Hospital based in the city of Rio de Janeiro. Souza Aguiar Hospital delivers care to a largely underserved population in Rio, operating the second largest emergency center in Latin America. Here they treat an average of 7,500 patients performing 600 surgeries per month. To improve the efficiency, number of surgeries and patient safety through lower radiation dosage, GE will replace the dated installed base of surgery/diagnostic imaging equipment with more advanced technology and provide radiology imaging systems (PACS) for the renovated Radiology clinic. This equipment will mean more patients can be treated faster with a potential increase in surgeries performed of 30%.

GE and future of the Olympic Games

We are looking forward to the PyeongChang 2018 Olympic Winter Games and beyond to the Tokyo 2020 Olympic Games, where we are already working with the Organizing Committees and Governments to support critical infrastructure and deliver peak performance with digital industrial technology solutions at Games time.

GE's official product and service categories include:

- Energy Generation Systems
- Electricity Distribution Systems
- Healthcare: Diagnostic Imaging, Monitoring and Electronic Medical Records Technology
- Lighting Fixtures and Systems
- Aircraft Engines
- Rail Transportation Systems
- Transportation Management and Equipment
- Water Treatment Facilities and Services
- Oil & Gas Equipment