

# ESG Report

July 2023



# About IGS

At IGS, we increase the efficiency, longevity, and reliability of mission-critical assets worldwide. We proudly maintain the most extensive and responsive global capabilities in our industry sector, having delivered successful solutions to customers in over 70 countries on six continents for over 40 years. Our relentless pursuit of high-quality, dependable solutions has positioned us as the most trusted mission-critical asset protection provider to the top energy, power and industrial companies globally. Our vision is to build the most valued surface solutions company, with the best people and customers in the world.

## The IGS Way

Our key core values of Excellence, Reliability, Respect and Innovation define “The IGS Way”. As an organization, we believe that a tenacious commitment to the IGS Way is essential for us to create a supportive, catalytic culture that promotes the alignment between our individual, collective, customer, and broader stakeholder goals. Together we are building an environment where we all work together to become the best version of ourselves while aspiring to the IGS Mission and Vision.



[Learn more about The IGS Way](#)



# Efficiency and Reliability Solutions for Mission- Critical Equipment

Our proprietary [High Velocity Thermal Spray \(HVTS®\)](#) coating systems improve the longevity, reliability, and performance of customer equipment by solving corrosion and erosion problems, often helping to “keep the lights on” in communities by improving the reliability of power distribution and minimizing the adverse environmental impact of landfilling and replacing large scale equipment. Our [Cetek®](#) ceramic coatings, [Tube Tech](#) robotic cleaning and [Hot-tek®](#) online repair and inspection services optimize the efficiency of high-temperature process equipment, minimize fuel consumption, and reduce emissions. Our [Environmental Products](#) enable customers to meet stringent environmental regulations and improve the efficiency and reliability of critical equipment with unique solid particle filtration and airflow redistribution.

- **Most significant operational capabilities in our industry sector**
- **Global infrastructure and dedicated workforce**
- **40+ years of experience executing projects in over 70 countries across 6 continents**
- **World-class, consistent safety, quality and reliability**



# ESG at IGS

Our approach to Environmental, Social and Governance (ESG) is informed by our cultural “True North”, The IGS Way. Our ESG priorities are an essential aspect of our mission and demonstrate an integral part of who we are and what we value. We are highly focused on meeting our stakeholders’ ESG interests which we identified through comprehensive interviews and leveraging ESG materiality frameworks.

Our ESG strategy is guided by the IGS ESG policy and led by a committee, made up of diverse employees and senior leaders. As we progress in our ESG journey, we will identify specific ESG goals against which we will measure our progress.

**“ESG is part of who we are as a company and defines a significant part of our mission. Long before we had ESG commitments, IGS’ core values created impact for our stakeholders. We are proud of the progress we have made and look forward to continuing our ESG journey and delivering value to our customers, employees, investors and the communities in which we live and operate.”**

**Rich Crawford,  
Chief Executive Officer, IGS**



## Our ESG Commitment:

# The IGS Mission

We make it our daily mission to contribute to a more abundant, sustainable world by providing unique efficiency and reliability solutions for mission-critical equipment in the energy and industrial sectors.

### Environmental commitment

We create a more sustainable world by delivering unique solutions for mission-critical assets that enable our customers to optimize their efficiency, reduce their emissions, maximize their equipment life to conserve natural resources, and support their transition to renewable energy.

### Social commitment

Our safety-first culture and leading HSE<sup>1</sup> program provide a consistent global approach to operating responsibly and protecting our employees and customers.

Our global and diverse organization creates a productive environment where we can be our best selves and optimally serve our customers.

We create a more abundant world by intentionally investing in and partnering with local communities where we live and work.

### Governance commitment

Our robust quality and ethical practices build trust and deliver long-term value for our employees, customers, and business partners.

1. Health, Safety, and Environment (HSE).

# ESG Highlights

Reducing our customers' emission of NO<sub>x</sub> by as much as 30%<sup>2</sup>



In 2022, IGS Environmental's products and services **reduced NO<sub>x</sub> emissions** equivalent to removing **1,166,397 gasoline powered passenger vehicles** from the road<sup>4</sup>

**54%**

Of our global workforce are People of Color (POC)<sup>5</sup>

**49%**

Of our employees are located outside of the US<sup>6</sup>

**27%**

Of IGS employees are located in developing countries

**75%**

Of career advancement is done within our organization

Reducing our customers' emission of CO<sub>2</sub> by as much as 15%<sup>3</sup>

Field technicians globally receive an average of **1,000 hours** of training in their first year

**ISO**

ISO 45001:2018 certification<sup>8</sup>



Four star safety rating with NOSA<sup>9</sup>

2. Nitrogen Oxides (NO<sub>x</sub>) are a family of poisonous, highly reactive gases. With the Cetek applications in fired heaters at hydrocarbon processing facilities the following can be achieved in existing equipment, individually customer reductions will vary. 3. Carbon dioxide (CO<sub>2</sub>) emissions with the Cetek applications in fired heaters at hydrocarbon processing facilities the following can be achieved in existing equipment, individually customer reductions will vary. 4. <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>. 5. Data as of April 2023, POC comprises all races/ethnicities that are not categorized as white/Caucasian. 6. Data as of April 2023. 7. Based on the United Nations definition of developing country using the Human Development Index (HDI) metric. 8. For our Europe and Middle East business units. 9. For our South African business unit.

# Our Environmental Impact

We contribute to a more sustainable world by providing unique solutions for mission-critical assets that enable customers to optimize their efficiency, reduce their emissions, maximize their equipment life to conserve natural resources, and support their transition to renewable energy.

## Optimizing Efficiency and Reducing Emissions

We are supporting a more sustainable world by enabling our customers to increase the efficiency of their equipment and reducing the emissions of their operations.

Cetek® Ceramic Technologies have been applied at more than 200 refining/chemical processing sites around the world. The IGS Cetek proprietary solution has been developed by pioneers and experts in the ceramic coatings and fired heater operations industry to improve and sustain the efficiency of heat transfer in these critical units. Cetek® applications in fired heaters at hydrocarbon processing facilities have achieved the following benefits:

- Emission of  $\text{NO}_x$  reduced by as much as 30%
- Emission of  $\text{CO}_2$  reduced by as much as 15%



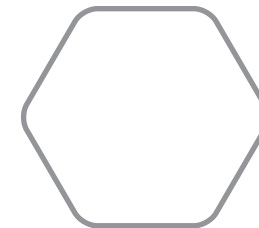
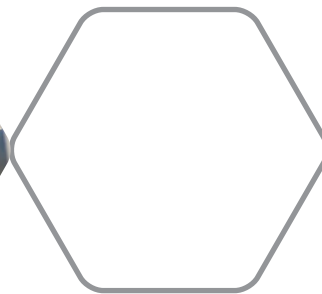


## Case Study: 14% Increase in Radiant Efficiency and Throughput after Cetek

IGS applied a Cetek high emissivity ceramic coating system to a refinery's heaters that were experiencing reduced radiant efficiency due to the scale of buildup on the heater's components. Initially, IGS predicted a 10% increase in radiant efficiency following the Cetek coating application.

A post-evaluation supplied by the refinery confirmed a 14% increase in radiant efficiency, which equals a 14% increase in throughput. This allows our client to operate their equipment more efficiently and creates broader global sustainability as less energy is lost while making the products that fuel our world.

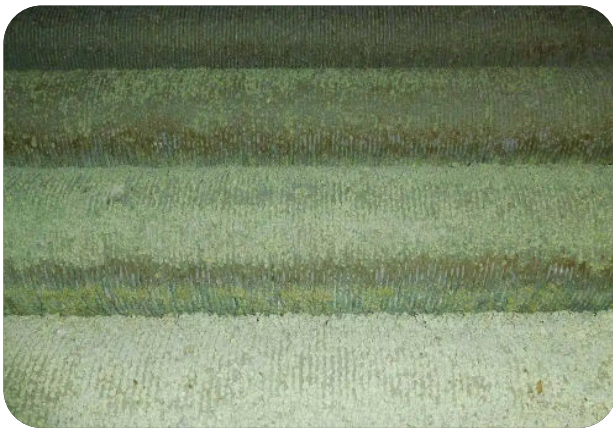
[View Case Study](#)



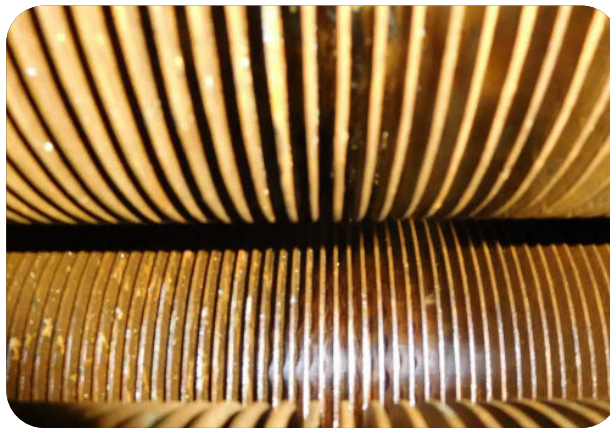


## Case Study: Tube Tech Increases Thermal Efficiency by 3% at Tüpraş Izmir Refinery in Turkey

The refinery had been experiencing reduced performance due to fouling on convection bank tubes within a steam methane reformer. Due to the inaccessible location of the tubes, the unit had not been cleaned since it came online in 1993. Tube Tech's fouling removal robot was chosen to access and remove fouling, restoring heat transfer efficiency.



*Before* cleaning the uppermost bank economiser



*After* cleaning the uppermost bank economiser

The project was successful, providing value to the customer and a positive environmental impact. The production cost of hydrogen decreased by \$24.6/t and the payback period for the project was less than 60 days. **The average flue gas temperature decreased from 278°C to 220°C.** This translates to a 3% increase in the furnace's thermal efficiency. **Steam production increased by approximately 20%, and the generated steam temperature increased by 10°C-15°C.**

[View Case Study](#)



Our Environmental products improve the reliability and efficiency, including the reduction of NO<sub>x</sub> emissions, of critical equipment with unique solid particle filtration and airflow redistribution.

SCR (Selective Catalytic Reduction) reactors are a key piece of equipment to lower NO<sub>x</sub> emissions. However, their performance can be significantly reduced due to fouling and poor flow, hindering these facilities from reliably meeting new environmental regulations. To revise and improve mitigation techniques, IGS has worked with plant owners and operators to maximize SCR safety and efficiency by utilizing the advanced technologies in the IGS toolbox: large particle ash screens, online air cannon cleaning systems, acoustic cleaning systems, CatFlow<sup>®</sup> screens, ammonia mixing/distribution systems, fine particle filtration screens, and Hot Tek<sup>™</sup> field services. In 2022 alone, IGS improvements to SCR reactors attributed to 17,589 tons of NO<sub>x</sub> emission reductions. This is equivalent to removing 1,166,397 gasoline powered passenger vehicles from the road per year.<sup>11</sup>

**1,166,397**  
Miles Driven by an  
Average Gasoline-Powered  
Passenger Vehicle



[Learn more about the impact IGS Environmental is making](#)

**IGS' Solutions Help Company Reduce 14,000 tons of CO<sub>2</sub> Emissions Per Year**

### Maximize Equipment Life to Conserve Natural Resources

The need to protect the environment is a primary driver in our investment in technologies that prolong the life of large, high-value fixed capital equipment across multiple industries. Prolonging the life of such equipment is core to our mission and contributes significantly to the reduced carbon footprint of the industries we serve that would otherwise have to replace such equipment to maintain operations.

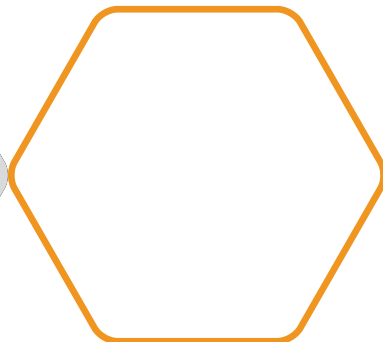
Maximizing equipment life is part of the multifaceted solutions to create a circular economy. Disposing of equipment loses all of the energy and resources that went into its production. Equipment disposal also creates waste and uses additional energy. We help customers expand the life of their equipment, which maximizes energy and resources.

11. <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results>



## Transition to Renewable Energy

[See How IGS Supports Renewables](#)



### Supporting Transition to Renewable Energy

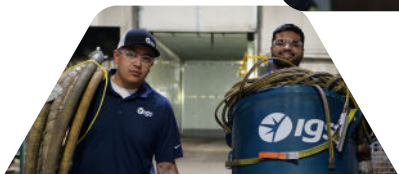
Building upon our legacy of pioneering solutions, we have leveraged our IGS Technology Solutions Center to support our customers' manufacture of renewable fuels. The production of Biodiesel and Sustainable Aviation Fuel (SAF) is an essential steppingstone to a carbon neutral future.

Current battery technology cannot be used to power most commercial aircraft or haul long distance loads due to a low energy density to weight ratio.

Biologically derived fuels present the best case alternative to fossil fuels to meet the energy needs of air transportation and rapidly bring carbon emissions in line with regional and international agreements towards a better global climate.

Biodiesel and SAF refers to fuels derived from carbon neutral or waste feedstocks. This includes vegetable oils, grease, tallow/waste fats, and solid biomass (ex. Waste wood, grass, plant waste). These raw materials are converted into biodiesel and SAF with different processes depending on the feedstock. To support the manufacture of these new sustainable fuel sources, new plants are erected. It is possible however, to repurpose existing refineries so that they can switch their traditional fossil fuel feedstock to renewable feedstocks. This cost-efficient reutilization of established facilities requires a review of the original materials of construction of equipment. Changes often need to be made to ensure safe operability with the significantly higher corrosion conditions associated with revised processing chemistry and methods.

The IGS Technology Solutions Center has expanded in-house testing capability to conduct extensive simulation and laboratory exposure studies with a variety of common renewable feedstocks. Having internal access to a full suite of simulation, exposure, testing, validation, and alloy manufacturing technologies, a dedicated team of chemical, materials, and mechanical engineers, coupled with extensive global operations, rapidly developed and deployed the material upgrades needed to several early adopter refineries – providing a rapid pathway to a new era in sustainable fuel production.



# Our Social Impact

Guided by our core values, IGS creates outsized social impact within our spheres of influence by:

- Keeping our employees and customers safe
- Engaging a diverse global workforce
- Investing in local communities

## Keeping Our Employees and Customers Safe

Our safety-first culture and leading HSE program provide a consistent global approach to operating responsibly and protecting our employees and customers. IGS' experienced safety team, in partnership with Operations and years of customer and project insights, oversees the development of our safety program, manages and implements training, and ensures compliance with all applicable laws and regulations.

Our extensive mandatory quality management and safety training program includes an average of 1000 hours of training within the first year, 200 hours in the second year, and considerable ongoing training in a multitude of safety and other disciplines in the years thereafter.



**IGS Employees  
Receive an Average  
of 1,000 Hours of  
Training Within the  
First Year**

During the performance of our projects, we encourage and foster a culture of proactive risk identification, hazard observation, and near miss reporting. Over the last several years, we have witnessed IGS personnel at all levels identify major safety hazards and utilize their Stop Work Authority (I.e., a complete stopping of all work to discuss safety risks).

We have received accolades from customers about the way our field personnel identify and communicate other contractors' safety hazards, even when they don't impact IGS; our customer feedback forms consistently rank safety as one of our most important strengths. Our ideal state that we are constantly striving towards is constant awareness amongst our employees about the importance of safety and the achievement of an Incident Free Environment.

[Our state-of-the-art laboratory and research center](#) is certified with the ISO 9001:2015 standard and our Europe and Middle East business units hold ISO 45001:2018 certifications.

We are proud to maintain a Four-Star Safety rating for our South Africa business unit with NOSA, which is the South African governing entity that administers their OSH Act. Our North American business unit has a 3-year Total Recordable Incident Rate (TRIR) average of 0.28 and holds exceptional safety and risks ratings with many of our clients in their individual contractor management systems.

**“Safe execution of work is engrained in everything we do at IGS. Our safety-first culture sets IGS apart from our peers. We are proud of our fully trained and certified in-house technicians that operate under robust HSE and QMS programs.”**

**Joel Quinteros, IGS Global HSE Director**



Our Europe and Middle East Business Units are ISO 45001:2018 Certified

Our Laboratory and Research Center is ISO 9001:2015 Certified

# Engaging a Diverse Global Workforce

Our diverse global organization creates an environment that encourages innovation, where we can all become the best version of ourselves and better serve our customers.

In 2023, we created a dedicated Engagement Specialist role to work closely with our line managers to oversee our employee engagement programs across the globe. With this investment, we are building enhanced communication programs and focused engagement initiatives that meet our employees “where they are”, recognizing that our global workforce has different needs based on where they live and work.

We are committed to giving our employees the tools, training, and experiential resources to be successful. Our HR team leads our efforts to attract, retain, and engage a diverse global workforce. Employees have access to a comprehensive compensation and benefits package. <sup>12</sup>

Through these programs we are providing opportunities for our employees to gain skills and experience that not only benefit IGS and our customers, but also the communities where we operate by increasing the number of skilled workers needed to meet the increasing demands of the global economy.

12. *Dependent on employee status and location*

# Annual Engagement Survey

82% of IGS workforce actively participates in an annual survey, consistently rating safety, teamwork, and engagement as highly important and valued aspects of the IGS culture.

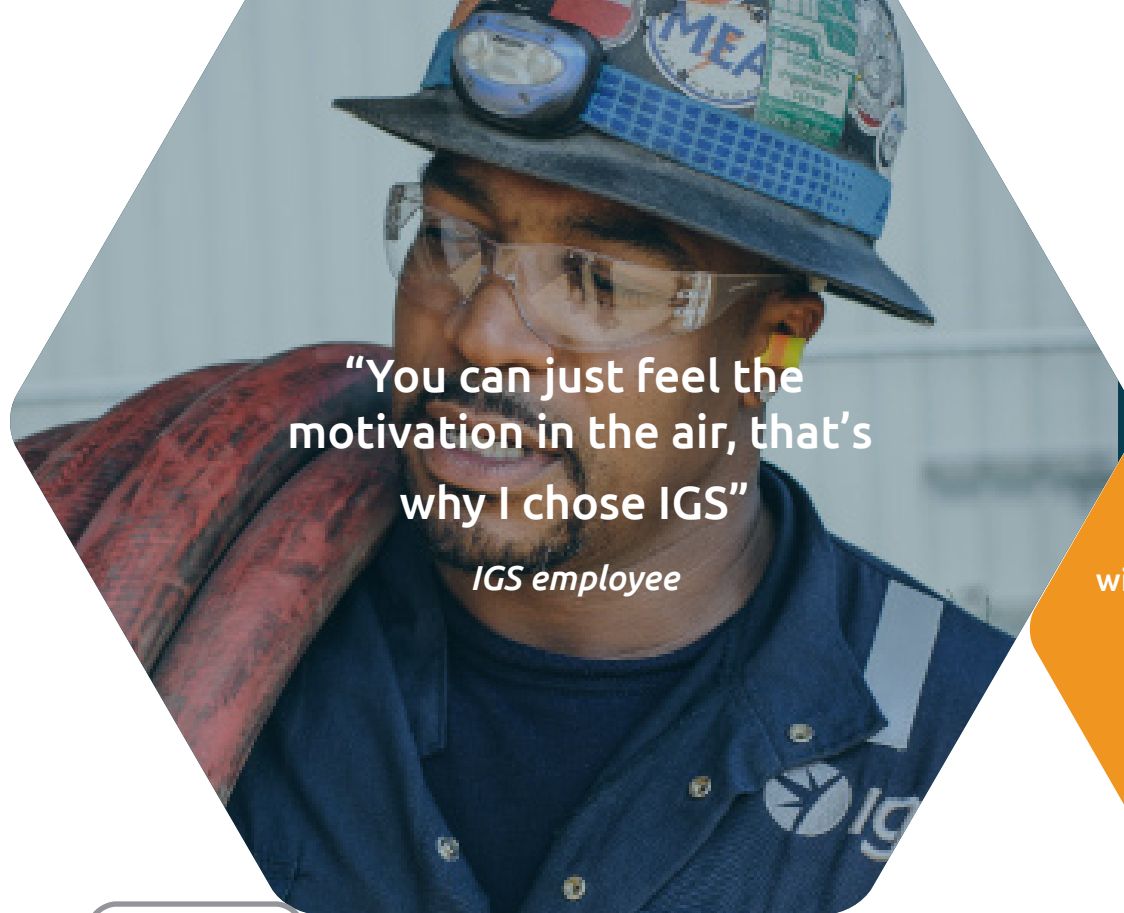


We recognize and promote the reality that talented and engaged employees are the leading way that we deliver value to our customers. We are committed to supporting our people's career journeys and invest in them through training and coaching.

75% of career advancement is done within our organization, which reflects our commitment to IGS employees.

Our global workforce of dedicated employees enables us to execute projects in over 70 countries across six continents.

**Over half of our employees are located outside the U.S., living in 22 different countries. 27% of those employees living outside the U.S. are located in developing countries<sup>13</sup>.**



**“You can just feel the motivation in the air, that’s why I chose IGS”**

*IGS employee*

**“I’m so impressed with all of the training and support I’ve received”**

*IGS employee*

**“I’m so thankful for the career progression IGS has enabled by supporting advancement, education, and promotion”**

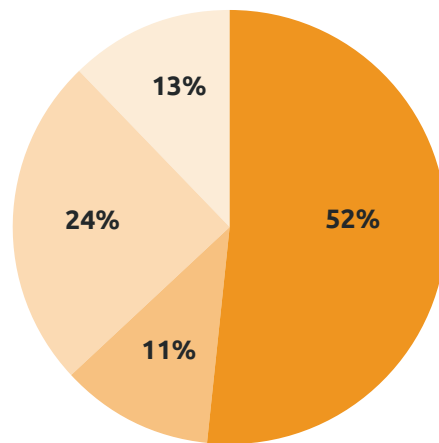
*IGS employee*

13. Data as of April 2023. Based on the United Nations definition of developing country using the Human Development Index (HDI) metric



### Employees by Region

- Americas
- Europe
- Africa
- APAC & Middle East



Recognizing the value that our diverse global workforce brings to our customers, we are committed to supporting them.

We have invested heavily in hiring support staff to assist with our Spanish speaking employees. To date we've hired three native Spanish speakers in the U.S. into Project Administrator and Safety roles. We've worked to develop regional teams in Indonesia and the Philippines, cultivating technicians and bringing people into leadership roles. In Kazakhstan, we maintain long-term relationships with local workers and translators, helping us develop and deepen our presence in the region.

At 54%, more than half of our employees are people of color<sup>14</sup>. Having a diverse workforce living across the world enables us to provide local, specialized talent to our projects.



14. Data as of April 2023, People of Color (POC) comprises all races/ethnicities that are not categorized as white/Caucasian



“IGS is proud to employ a diverse group of personnel from all over the world. The diverse nature of our workforce is an invaluable asset that has allowed us to create value and thrive in many different markets across the globe.”

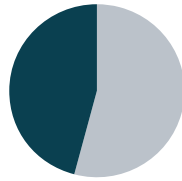
## Margie Cain, VP Human Resources

IGS Employees by Race/Ethnicity



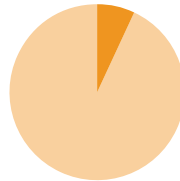
- Asian
- Black or African American
- Hispanic or Latino
- Two or more races (Not Hispanic or Latino)
- White

IGS Employees by Race/Ethnicity



- People of Colour
- Non-People of Colour

IGS Employees by Gender



- Female
- Male

In traditionally male-dominated customer bases, industries, and facilities, we recognize opportunities to attract more female employees.





## Investing in local communities.

We are committed to helping create a more abundant world by intentionally investing in and partnering with the local communities in which we live and operate.

In late 2022, IGS partnered with Homes of Hope to build homes in northern Mexico. The partnership enabled 18 experienced and new employees to travel to the project site and physically build a home for a local family in a community close to where many of our people lived. In addition to the volunteer time, IGS has provided monetary donations to support the purchase of site building materials and essential goods for the home. In the next several years, IGS leadership envisages conducting similar experiences that enable team-building and community investment utilizing our collective gifts and talents.

[Homes of Hope](#)  
[Watch the](#)  
[Video](#)



# Governance at IGS

Our robust quality and ethical practices build trust and deliver long-term value for our employees, customers, and business partners. Our core values of excellence, reliability, teamwork, and innovation guide us as a company and support our ESG work. Our values, The IGS Way, are what enables us to deliver value globally and has supported our 35+ year track record of success.

Our values are complemented by IGS' policies, procedures, and business controls. We maintain a Code of Conduct for employees and suppliers, and leverage internal specialists and external advisors to ensure compliance with all applicable laws and regulations, doing business ethically across many countries. With JFL, as our private equity partner we are able to implement industry leading governance controls. We utilize a long-term value creation focus without compromising short-term results, which helps us to set and execute "common sense" strategies that optimize business health for the benefit of our shareholders, employees, and broader stakeholders.

35+ Year  
Track Record  
of Success



# The IGS Way

## Excellence

We are passionate about success. We deliver great results for our customers and shareholders because we are the most highly motivated, hardest working, and flexible team in our industry.

We love being the best, and we play to win.

We create business and personal opportunities by solving complex problems, overcoming difficult challenges, and executing flawlessly. We invest in personal growth, always seeking ways to be the best possible version of ourselves.

## Respect and Concern for All

We care for ourselves and each other, treating each other the way we want to be treated. We make safety, health, and wellness a top priority each day. We proactively seek out ways to help each other, sharing our knowledge, and providing candid feedback to each other so that we may grow individually and as a team.

We often put the needs of the team above of our own, believing that together as a team we stand much stronger than we stand alone. We demonstrate humility by admitting our mistakes, sharing credit with each other, and giving each other the benefit of the doubt. We embrace diversity, and love that we are a part of a multicultural global team. We actively seek ways to support the development of our communities and the sustainability of our environment.

## Reliability

We value trust from our customers and each other. We realize trust is hard-earned and easily broken, and we work diligently to build greater trust every day. We plan with discipline, do what we say we'll do, take responsibility for our outcomes, and don't make excuses.

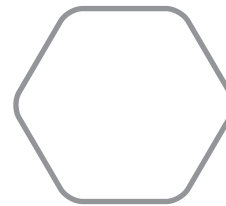
We are detail-oriented and make thoughtful, data-driven business decisions that maximize our chances of success. We believe that to whom much is given, much is expected; and we go above and beyond what is expected of us.

## Innovation

We embrace change, not only because we believe it is a key attribute of winning teams, but also because we challenge the status quo and understand that we must create ever-improving solutions to our customers' problems to continue our growth and success.

Our unrivaled expertise gained from decades spent at the front lines of developing our core technologies and capabilities has positioned us with the highest performing products and services in the industry. Our relentless pursuit of creating greater value for our customers and shareholders requires that we think out of the box and never rest on the laurels of our past achievements.





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