



# 2021 ESG REPORT EXECUTIVE SUMMARY

DIVERSIFICATION | DECARBONIZATION | DIGITIZATION  
*A NEW ERA FOR GROWTH*



*Experience in Motion*

# BUILDING A BETTER TOMORROW

With a legacy that dates back over 230 years, Flowserve manufactures and services fluid motion control solutions for the world's toughest, most critical applications. We're committed to more than just delivering innovative technologies and superior service – we are inspired by our purpose to make the world better for everyone.

Our purpose is what drives us to invest in and develop our ESG principles and priorities at Flowserve because we recognize that positively impacting current and future environmental, social and governance issues is an endeavor that benefits everyone. Whether it's creating safer workplaces for our employees, promoting diverse leadership and development of our people, supporting our communities through Flowserve Cares or deploying sustainable solutions to address climate change, our commitment to ESG continues to inform our 3D strategy. We believe our 3D strategy will not only enhance our ESG efforts but will also allow Flowserve to play a critical role in supporting our customers build a better tomorrow.



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– Scott Rowe  
President and CEO

## ABOUT FLOWSERVE

Flowserve is a world leading manufacturer and aftermarket service provider of comprehensive flow control systems. Driven by our purpose, we are committed to building a more sustainable future to make the world better for everyone.



**Associates:**  
**15,000+**



**Countries:**  
**50+**



**Facilities:**  
**209**



**Customers:**  
**10,000+**



**Sales/Operating  
Income:**  
**\$3.5B/ \$270.8M**

# ESG IN 3D

Our commitment to ESG informs our 3D Strategy: Diversification, Decarbonization and Digitization. By enabling the 3Ds, we will not only enhance our ESG efforts but will also play a critical role in supporting our customers build a better tomorrow.

## OUR CUSTOMERS

## OUR ORGANIZATION



### DIVERSIFICATION

We will **diversify end markets, industries and regions** to create a more balanced portfolio as we continue supporting our core customers and markets

We will **invest in innovation and R&D** to grow our products, solutions and services in diversified end markets, industries and regions



### DECARBONIZATION

We will **support our current and future customers in reaching their carbon reduction goals** today and through the energy transition

We will decarbonize our own operations to **reduce our operating carbon intensity by 40% by 2030**



### DIGITIZATION

We will **digitize our customers' journey, experience and solutions**

We will leverage **technology and data to improve internal operations** and optimize customer experience

# OUR ESG APPROACH

As we work to make a more sustainable future, we remain focused on operating with the highest integrity consistent with our core values.

We advance our ESG program around three important themes: Valuing People, Protecting the Planet and Promoting Operational Excellence. These themes set the tone for managing all environmental, social and governance issues - both to manage business risk and capitalize on growth opportunities.



# OUR ENVIRONMENTAL PROGRESS

As part of our commitment to sustainability, Flowserve targets to reduce Scope 1 and Scope 2 carbon intensity 40% by 2030, using 2015 as a baseline year.

## IN 2021...



Continued progress to achieve  
**57%**  
of our 2030 GHG reduction goal



Combined energy-use down  
**7%**



**46**  
energy efficiency projects completed



**19%**  
reduction in water use since 2017



**74%**  
of discarded waste materials were recycled, incinerated or burned for fuel value

# THE COLLECTIVE ENERGY AND IDEAS OF OUR PEOPLE HAVE SET US APART FOR MORE THAN 230 YEARS.

From producing clean drinking water to powering cities, our purpose drives us to make the world better.

We pride ourselves on a culture of inclusion driven by the different ideas, perspectives, and experiences of 15,000+ associates across 50+ countries. Our diversity of thought, background and experience is a powerful catalyst for success.



## WORLD'S TOP FEMALE FRIENDLY COMPANIES

In 2021, Flowserve was recognized by Forbes as #13 on the list of World's Top Female Friendly Companies. Women represent 45% of our current Executive Leadership team and the number of women in positions of senior leadership (Vice President level) increased 40% year-over-year. We are proud to celebrate the tremendous positive impact the insights, experiences and leadership of our female associates have on achieving our purpose and strengthening Flowserve for the future.



## NEWSWEEK MOST RESPONSIBLE COMPANIES

For the third year in a row, Flowserve was named one of Newsweek's Most Responsible Companies in America. Our passion for continuous improvement drives us to further integrate ESG into Flowserve's strategy and bolster ESG principles among our people, products and partnerships to deliver outstanding results.



## IN 2021...



**9**  
high-potential  
leaders completed  
the Black Leadership  
Academy led by  
McKinsey & Company



**Over 15,000**  
Spirit of Flowserve  
awards distributed  
to celebrate and  
recognize associates  
who exemplify our  
Values & Behaviors



**Over 2,000**  
People Leaders  
participated in  
Leadership in Motion  
development program



**More than 19,500**  
hours of professional  
training across  
950+ unique  
learning experiences  
offered by Flowserve



**2,000+**  
hours volunteered  
through  
Flowserve Cares

# OPERATIONAL EXCELLENCE

## TARGET ZERO PROGRAM

A key pillar to our ESG approach at Flowserve is Promoting Operational Excellence. By promoting strong leadership and governance, we invest in our operations to drive efficient business execution and innovation. As part of this effort, our TargetZero program drives alignment across five operational excellence targets: zero accidents, defects, delays, emissions and waste. We believe that TargetZero not only mobilizes a key aspect of our ESG strategy but also serves to enhance our customer experience.



## ZERO ACCIDENTS

Zero accidents calls us to embrace our safety rules to create a workplace free of incidents and injuries. We are committed to promoting safety culture throughout our operations and amongst all of our business partners to empower our organization to think safe and prevent injuries.

## ZERO DEFECTS

Our customers and other partners depend on us to design, manufacture and deliver products and services that are safe, reliable and free of defects. At Flowserve, quality underscores our innovation, and our goal of zero defects strengthens our commitment to delivering outstanding products and services to our customers.

## ZERO DELAYS

Timely delivery of our products and services is imperative in critical applications. Zero delays outlines our initiative to reduce lead times and enhance our materials management as to improve on-time delivery to those who depend on us.

## ZERO EMISSIONS

As part of our pledge to Protecting Our Planet, we are focused on investing in our operations to increase energy efficiency, reduce our carbon footprint and deploy sustainable solutions to address climate change. Through targeted energy efficiency programs and renewable energy project investments, we are committed to taking action to significantly offset our greenhouse gas emissions.

## ZERO WASTE

As part of our Global Operational Excellence group, the Continuous Improvement team is committed to educating, empowering and enabling Lean methodologies such as Six Sigma throughout the enterprise to establish safe, efficient and effective work areas to eliminate waste.

# ENERGY TRANSITION & OUR PATH FORWARD

Just as we have for more than 230 years, Flowserve will continue to innovate to address today's needs and enable the future of flow control by focusing its solutions for improved sustainability with optimum form, fit and function to reduce the movement of man, material and machine.

As our customers work to meet their sustainability goals, shift to cleaner forms of energy and reduce their carbon emissions, we are uniquely positioned to support our customers through this transition today and into the future.

At Flowserve, our approach to energy transition begins and ends with our purpose: to make the world better for everyone. The way that we operationalize this is through our strategic enablers of Diversification, Decarbonization and Digitization.



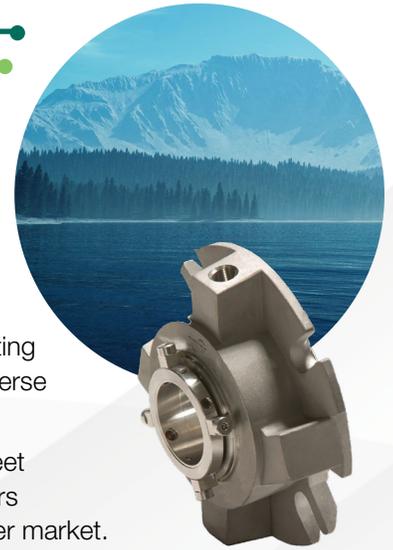


## DIVERSIFY

### ISC2-PX-61 NSF/ANSI/CAN 61 CERTIFIED MECHANICAL SEAL

In 2021, we launched the ISC2-PX-61 certified mechanical seal. The ISC2 mechanical seal family does more to protect the natural environment than any other standard cartridge seal. Single seals have capable throttle bushings to protect against leaks. Pressurized dual seals provide zero process emissions. The outboard seal of dual seals can handle full operating conditions if the inboard seal were to fail. All seal faces are dual balanced for normal and reverse pressure operation.

NSF certifications cover all wetted components and demonstrate how ISC2-PX-61 seals meet regulatory requirements for drinking water quality – giving municipalities and water consumers confidence in safe seal selection and operation and expanding Flowserve’s reach in the water market.



## DECARBONIZE

### MFD FORGED OVERHUNG NUCLEAR PUMP

Flowserve introduced the MFD forged endsuction pump to ensure superior reliability and drive greater efficiencies in nuclear power generation applications. Its compact yet robust design is capable of withstanding seismic events, thermal shock, high nozzle loads and a radioactive environment. Flowserve engineered the MFD pump to minimize cast and welded components, thus reducing the associated quality issues and scheduling delays. The pump also is designed to handle various types of fluids, including those containing particulates. Moreover, its simplified design with standardized parts provides the flexibility needed to cost-effectively make upgrades or retrofits due to future changes in service conditions or system modifications. In addition, the MFD pump complies with RCC-M, PED Directive 97/23/EC and ASME Section III standards.

With its ability to drive increased energy efficiency, the MFD pump can reduce emissions and lower lifecycle costs from a standardized, best-in-class power end that increases interchangeability while reducing inventory of critical spare parts.



## DIGITIZE

### REDRAVEN

In 2021, we launched our complete industrial Internet of Things (IoT) service suite, RedRaven, for pumps and valves. RedRaven gives our customers the data, tools and insights to monitor and optimize flow control equipment performance and proactively identify and address issues before they cause downtime and disruptions.

RedRaven soars above the competition with Flowserve’s dedicated remote monitoring facility, which is staffed by a team of technical specialists to identify problems, help companies on how to fix issues, and support them throughout their entire IoT journey.

RedRaven can also help customers run equipment at peak performance. This means operators are able to improve equipment efficiency and productivity, ultimately lowering their associated carbon emissions to better meet their sustainability goals.



# SPOTLIGHT STORIES



## BIO DIESEL CAPACITY EXPANSION

- Flowserve provided pumps and seals to more than double the processing capacity of a renewable diesel facility in the state of Washington, U.S.
- Accelerated engineering and approval schedules drove earlier plant start-up, faster payback and overall reduced CO<sub>2</sub> emissions

## BIO DIESEL REFINERY CONVERSION

- Flowserve collaborated with one of our largest U.S. customers to convert a petroleum refinery to a bio diesel facility with high flow control efficiency
- We provided recommendations as to how to best modify existing pumps to optimize efficiency, reliability and performance
- Each of the pumps was upgraded to meet the proposed hydraulic performance conditions to save the equivalent of 11,000 Tons CO<sub>2</sub> per year in gas fired electrical power generation



## SOLAR PANEL FILM TECHNOLOGY

- Flowserve developed vacuum pump technology to support solar panel thin film production for one of the world's largest producers of thin film photovoltaic modules
- We provided equipment for new facilities in the U.S. and India to increase productivity and optimize production
- The annual production of these modules exceeds 11 gigawatts – enough energy to power over 8 million homes in the U.S.

## FLARE GAS RECOVERY

- Flowserve selected as sole supplier of flare gas recovery systems for five U.S. Gulf coast petrochemical facilities
- Once operating, each year toxic volatile organic compounds, VOCs, in the air will be reduced by over 5,600 tons and air toxins, like benzene, will be reduced by nearly 500 tons
- With a focus on flare reduction, greenhouse gas emissions, air quality, and waste and wastewater management, Flowserve is enabling customers to reduce their carbon footprint



## ABOUT THIS REPORT

Unless otherwise specifically stated, this report covers Flowserve's performance in 2021. This report, which speaks only as of its date, is not comprehensive, and for that reason, this report should be read in conjunction with our 2021 Annual Report on Form 10-K and our 2022 Proxy Statement, which can be found at <https://ir.flowserve.com>.

The goals and projects described in this report are aspirational; as such, no guarantees or promises are made that these goals and projects will be met or successfully executed. Furthermore, data, statistics, and metrics included in this report are non-audited estimates, not prepared in accordance with generally accepted accounting principles (GAAP), continue to evolve and may be based on assumptions believed to be reasonable at the time of preparation, but should not be considered guarantees or subject to future revision. This report uses certain terms including those that GRI or others refer to as "material" to reflect the issues or priorities of Flowserve and its stakeholders. Used in this context, however, these terms are distinct from, and should not be confused with, the terms "material" and "materiality" as defined by or construed in accordance with securities, or other, laws or as used in the context of financial statements and reporting.

The information covered in this report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding our ESG goals and strategies and related business and stakeholder impacts. These statements can be identified by words such as "future," "anticipate," "believe," "estimate," "expect," "intend," "plan," "aim," "strategy," "goal," "commit," "target," "objective," "predict," "will," "would," "could," "can," "may," and similar terms. These statements involve risks and uncertainties, and actual results may differ materially from any future results expressed or implied by the forward-looking statements. More information on risks, uncertainties, and other potential factors that could affect our business and performance is included in our filings with the SEC, including in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of Flowserve's most recently filed periodic reports on Form 10-K and Form 10-Q and subsequent filings. The forward-looking statements in our report are made as of the date first published, unless otherwise indicated, and we undertake no obligation to update these forward-looking statements to reflect subsequent events or circumstances.