

## HONEYWELL, JOHNSON MATTHEY, GIDARA ENERGY AND SAMSUNG E&A FORM SAF TECHNOLOGY ALLIANCE

- *Industry leaders form groundbreaking alliance to help drive the end-to-end production of SAF from biomass and municipal waste*
- *Joint technology offering leverages proven solutions to address the global need for feedstock diversity in SAF production*
- *Integrated solutions can reduce time from feasibility study to facility startup by more than 15%, and result in a 5-10% capital cost savings<sup>1</sup>*

**CHARLOTTE, N.C., June 5, 2025** – Honeywell (NASDAQ: HON), Johnson Matthey, GIDARA Energy and SAMSUNG E&A today announced the formation of a strategic technology alliance to bring a groundbreaking end-to-end global solution to market for producing sustainable aviation fuel (SAF) from biomass and municipal solid waste. The alliance brings together a wealth of diverse expertise and capabilities to help customers streamline the entire SAF production chain—from feedstock to final product.

By collaborating, the companies plan to introduce a new joint technology offering that leverages the Fischer-Tropsch (FT) production process and aims to unlock abundant, globally available feedstock options to help meet the growing demand for SAF and support energy security. The joint approach aims to expedite project timelines and provide customers with a single point of accountability for project execution and product guarantees, ensuring communication, coordination and reliability throughout the SAF production process.

With the resources of all four companies, the integrated and modular solution is expected to reduce the time between feasibility study and facility startup by more than 15% and can reduce capital expenditures by up to 10%.<sup>1</sup>

The innovative solution the technology alliance plans to bring to market is a non-exclusive offering designed for customers wanting a full-service delivery including:

- GIDARA Energy's proficiency in gasification and syngas production for feedstock transformation.
- Johnson Matthey brings advanced catalysts and technology for syngas to fuels.
- Honeywell's process technology and digital automation solutions.
- SAMSUNG E&A's global expertise in engineering, procurement, construction and project execution management.

---

<sup>1</sup> Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open ITB and using standard industry practice upside technology integration.

# A GROUNDBREAKING ALLIANCE TO HELP DRIVE END-TO-END PRODUCTION OF SAF FROM WASTE

SOLUTION CAN REDUCE TIME FROM FEASIBILITY STUDY TO FACILITY STARTUP BY MORE THAN 15%, AND RESULT IN A 5-10% CAPITAL COST SAVINGS<sup>(1)</sup>

## GIDARA ENERGY

- GIDARA's HTW<sup>®</sup> Gasification Technology delivers a proven, reliable, and high-conversion solution for transforming waste-based feedstocks into syngas at commercial scale.
- Enables customers to access a flexible, scalable pathway for realizing the potential of waste in the production of sustainable fuels and chemicals.

## JM Johnson Matthey

- JM FT CANS<sup>™</sup> technology, codeveloped with bp, offers a scalable solution to convert syngas into FT crude and provides up to a 50% reduction<sup>(2)</sup> in CAPEX and a three-fold increase in production for the same size reactor.<sup>(2)</sup>
- JM's cutting-edge reforming and HyCOgen<sup>™</sup> technologies can boost SAF production without increasing solid feedstock demand.<sup>(3)</sup>

## Honeywell UOP

- Honeywell's FT Unicracking<sup>™</sup> process transforms FT crude from waste sources into fuel and can produce 3-5% more SAF<sup>(4)</sup> and reduce costs by up to 20% compared to other commonly used FT-hydrocracking methods.<sup>(4)</sup>
- Honeywell digital solutions help enhance operational efficiency and bankability, maximizing production uptime and minimizing risk for SAF producers.

## SAMSUNG E&A

- Delivers end-to-end integrated solutions across a wide range of technologies, enhancing competitiveness, minimizing risks.
- Serves as a single point of execution for customers.

(1) Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open FT and using standard industry practice despite technology integration.

(2) Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open FT and using standard industry practice despite technology integration.

(3) Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open FT and using standard industry practice despite technology integration.

(4) Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open FT and using standard industry practice despite technology integration.

(1) Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open FT and using standard industry practice despite technology integration.

(2) Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open FT and using standard industry practice despite technology integration.

(3) Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open FT and using standard industry practice despite technology integration.

(4) Based on theoretical schedule and cost analysis when the modularization solution is applied in the EPC stage. Schedule analysis based on industry standard benchmarks for project schedule outcomes. Cost comparison is against an open FT and using standard industry practice despite technology integration.

Over the near-term, the collaboration aims to scale the use of gasification and FT SAF production methods, while enabling biomass and municipal solid waste to be used as feedstocks. As the SAF industry faces limits of traditional feedstocks, this production method is becoming increasingly important with the International Energy Agency reporting that biofuels produced from waste and nonfood energy crops will meet more than 40% of total biofuel demand by 2030.<sup>2</sup>

### SAF Technology Alliance Member Quotes

- “The launch of our innovative end-to-end SAF alliance demonstrates the power of collaboration to address the world’s energy demands,” said **Ken West, President and CEO, Honeywell Energy and Sustainability Solutions**. “As demand for SAF increases, the technology to expand available feedstock options becomes increasingly vital. This comprehensive alliance provides refiners with a strategic approach to quickly execute their vision.”
- “The alliance targets the common challenges faced by SAF producers and offers a new way forward with greater speed and lower capital expense cost. Bringing such leading expertise together is critical in supporting our customers to reach the final investment decision on their projects and can help accelerate the deployment of SAF worldwide,” said **Maurits van Tol, CEO of Catalyst Technologies, Johnson Matthey**.
- “This alliance exemplifies what’s possible when expertise and ambition come together. By combining our forces, we are unlocking the value of waste to meet the growing demand for SAF,” said **Dr. Norbert Kamp, CEO, GIDARA Energy**. “We are not just providing a technical solution – we are helping clients and communities realize the potential of waste as a catalyst for a future supported by cleaner energy sources.”
- “At SAMSUNG E&A, we believe that delivering end-to-end SAF solutions requires more than innovation—it demands strong alliances with world-class technology providers. By integrating these advanced technologies and leveraging our proven engineering, procurement, and construction (EPC) execution excellence, we are building a resilient and scalable SAF value chain that will drive the future of sustainable aviation,” said **Hong Namkoong, President and CEO of SAMSUNG E&A**.

The new alliance builds on the strong synthetic fuel collaboration between Johnson Matthey and Honeywell to provide methanol-to-jet and FT pathway solutions.

<sup>2</sup> <https://www.iea.org/energy-system/low-emissions-fuels/biofuels#tracking>

Together, Honeywell, Johnson Matthey, GIDARA Energy and SAMSUNG E&A are committed to fostering innovation and leading the movement toward increased global energy security. For more information about this alliance, visit <https://ess.honeywell.com/us/en/saf-alliance>.

*Honeywell's [recent announcement](#) of its intention to acquire Johnson Matthey's Catalyst Technologies business segment is wholly distinct from the alliance referenced in this press release. Discussions regarding the alliance were part of ordinary course discussions between Honeywell and Johnson Matthey's Catalyst Technologies business segment.*

GIDARA Energy is a portfolio company of Ara Partners, a global private equity firm that is decarbonizing the industrial economy.

###

#### **About Honeywell**

Honeywell is an integrated operating company serving a broad range of industries and geographies around the world. Our business is aligned with three powerful megatrends – automation, the future of aviation and energy transition – underpinned by our Honeywell Accelerator operating system and Honeywell Forge IoT platform. As a trusted partner, we help organizations solve the world's toughest, most complex challenges, providing actionable solutions and innovations through our Aerospace Technologies, Industrial Automation, Building Automation and Energy and Sustainability Solutions business segments that help make the world smarter and safer as well as more secure and sustainable. For more news and information on Honeywell, please visit [www.honeywell.com/newsroom](http://www.honeywell.com/newsroom).

#### **About Johnson Matthey**

Johnson Matthey is a global leader in sustainable technologies. For over 200 years we've used advanced metals chemistry to tackle the world's biggest challenges. Many of the world's leading energy, chemicals and automotive companies depend on our technology and expertise to decarbonise, reduce harmful emissions and improve their sustainability. And now, as the world faces the challenges of climate change, energy supply and resource scarcity, we're actively providing solutions for our customers. Through inspiring science and continued innovation, we're catalysing the net zero transition for millions of people every day. For more information visit [www.matthey.com](http://www.matthey.com).

#### **About GIDARA Energy**

GIDARA Energy is a leading technology partner in the energy transition, specializing in the conversion of non-recyclable waste into sustainable fuels and circular chemicals. Utilizing its industrially proven HTW® gasification technology, GIDARA Energy delivers scalable, cost-effective solutions that address the global feedstock gap and accelerate decarbonization. With a steadfast commitment to sustainability, innovation, and collaboration, GIDARA Energy empowers industries and communities to unlock the value of waste, driving measurable impact for a cleaner, more sustainable future. For more information, please visit [www.gidara-energy.com](http://www.gidara-energy.com).

#### **About Ara Partners**

Ara Partners is a global private equity and infrastructure investment firm focused on industrial decarbonization. Founded in 2017, Ara Partners seeks to build and scale companies with significant decarbonization impact across the industrial and manufacturing, chemicals and materials, energy efficiency and green fuels, and food and agriculture sectors. The company operates from offices in Houston, Boston, Washington, D.C., and Dublin. Ara Partners closed its third private equity fund in December 2023 with over \$2.8 billion in capital commitments. As of December 31, 2024, Ara Partners had approximately \$6.2 billion of assets under management. For more information about Ara Partners, please visit [www.arapartners.com](http://www.arapartners.com).

#### **About SAMSUNG E&A**

At SAMSUNG E&A, we aim to create value based on the world's best technological competence and contribute to our clients, society, and people. SAMSUNG E&A, a total solutions provider, offers comprehensive solutions for the global energy industry, such as energy transition, oil-gas processing, refinery, petrochemical, environmental, industrial, and bio. Providing professional services across the whole project cycle ranging from professional feasibility studies to design, procurement, construction, commissioning, maintenance & operation. SAMSUNG E&A has completed more than 1,500 projects worldwide.

To prepare for ESG-based eco-friendly businesses in the future, we expanded our value chain to the business of operating green infrastructure, such as water treatment facilities and incinerators, and green solution businesses for energy optimization and carbon neutrality. To preemptively respond to changes in the global energy industry and take the lead in resolving global warming, we will provide optimal solutions based on our technologies and expertise. For more information, please visit [www.samsungena.com](http://www.samsungena.com).

**Contacts:****Honeywell:**

Melissa Volin

+1 980-502-9330

[Melissa.Volin@honeywell.com](mailto:Melissa.Volin@honeywell.com)

**Johnson Matthey:**

Sinead Keller

+44 207 269 8001

[jmp@matthey.com](mailto:jmpr@matthey.com)

**GIDARA Energy:**

Cristina Groian

+31 618645710

[c.groian@gidara-energy.com](mailto:c.groian@gidara-energy.com)

**SAMSUNG E&A:**

Jin Hartmann

+82-2-2053-4955

[Jin.Hartmann@samsung.com](mailto:Jin.Hartmann@samsung.com)