

2024 ICAO REGIONAL SEMINAR ON ENVIRONMENT

In collaboration with



NACC & SAM Regions

20 to 21, August 2024

Asunción, Paraguay



ICAO

ENVIRONMENT



ACT SAF

CORSIA



TRANSFORMING THE FUTURE

THE ROLE OF TECHNOLOGY LICENSORS IN AVIATION DECARBONIZATION

PANEL: FINANCING FOR AVIATION DECARBONIZATION PROJECTS

ANDRE DEFAVERI

HONEYWELL ESS – ENERGY & SUSTAINABILITY SOLUTIONS

DIRECTOR – SALES & NEW BUSINESS DEVELOPMENT LATIN AMERICA

ASUNCIÓN

PARAGUAY – AUGUST 2024





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Honeywell
UOP

ACT SAF

2050

CORSIA

FORWARD LOOKING STATEMENTS

This presentation contains certain statements that may be deemed "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical fact, that address activities, events or developments that we or our management intends, expects, projects, believes or anticipates will or may occur in the future are forward-looking statements. Such statements are based upon certain assumptions and assessments made by our management in light of their experience and their perception of historical trends, current economic and industry conditions, expected future developments and other factors they believe to be appropriate. The forward-looking statements included in this presentation are also subject to a number of material risks and uncertainties, including but not limited to economic, competitive, governmental, technological, COVID-19 public health factors or impacts of the Russia-Ukraine conflict affecting our operations, markets, products, services and prices. Such forward-looking statements are not guarantees of future performance, and actual results, and other developments, including the potential impact of the COVID-19 pandemic, the Russia-Ukraine conflict, and business decisions may differ from those envisaged by such forward-looking statements. Any forward-looking plans described herein are not final and may be modified or abandoned at any time. We identify the principal risks and uncertainties that affect our performance in our Form 10-K and other filings with the Securities and Exchange Commission.



HONEYWELL OVERVIEW

NASDAQ: HON | ~715 sites | ~97,000 employees | Charlotte, NC headquarters | Fortune 500 | 2023 Revenue: ~\$37 B



AEROSPACE TECHNOLOGIES

Our products and services are used on virtually every commercial, defense, and space aircraft. We build aircraft engines, cockpit and cabin electronics, wireless connectivity systems and mechanical components. Our hardware and software solutions create more fuel-efficient aircraft, more direct and on-time flights and safer skies.



BUILDING AUTOMATION

Commercial building owners and operators depend on our operational technology hardware, software and analytics to help create safer and more efficient and productive facilities. Our solutions and services are used in more than 10 million buildings worldwide.



ENERGY & SUSTAINABILITY SOLUTIONS

We help solve tough sustainability and energy transition challenges across our end markets that help reduce emissions and deliver innovative sustainable solutions while seizing new opportunities to deliver outstanding value to our clients and shareholders.



INDUSTRIAL AUTOMATION

We provide solutions to support our customers to help deliver results with enhanced productivity and safety standards. Our innovation powers process solutions, asset performance management, cybersecurity, and warehouse and retail automation.

HONEYWELL CONNECTED ENTERPRISE

We empower those who make, move and operate critical resources to grow responsibly. Our flagship Honeywell Forge solutions drive business outcomes around performance, efficiency, cybersecurity and safety by uniting data across assets, people and processes. We leverage the latest technologies and persona-focused design to help uncover hidden insights, increase productivity and enhance the user experience from the shopfloor to the top floor.

Shaping the Future Across Industries

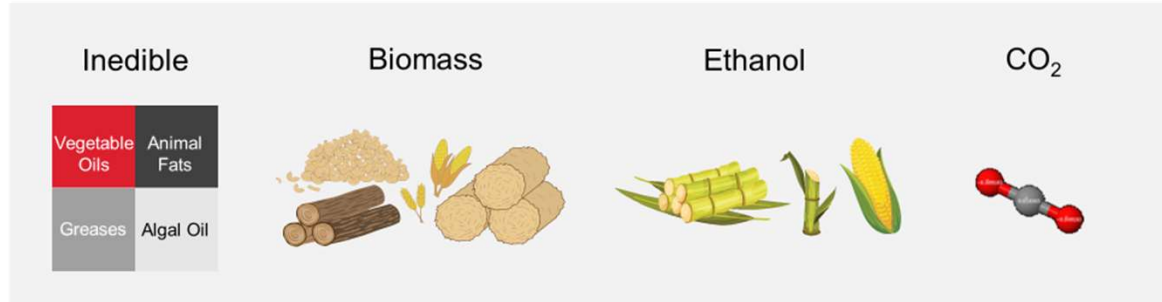
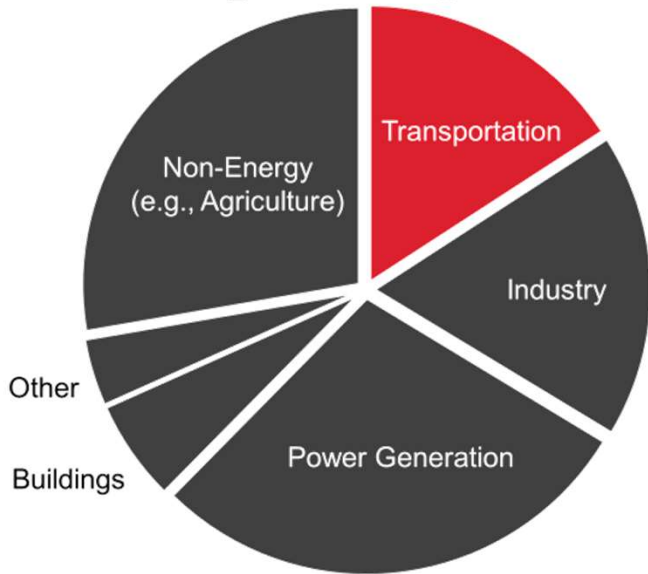


HONEYWELL UOP IS DECARBONIZING TRANSPORTATION

THE CHALLENGE

HONEYWELL'S RESPONSE

CO₂ Share by Sector¹



- **HON Solutions:** Renewable Diesel, Sustainable Aviation Fuel (SAF), eFuels
- Up to 90% Lower GHG vs. Fossil Fuels
- Enabled by HON Digital Solutions (Experion, Unisim, APC, APM, OTS)



500k BPD Licensed; 100M tons/year CO₂ savings potential

¹Source: International Energy Agency



HIGHLIGHTING THE IMPORTANCE OF FINANCING AND INVESTMENT FOR DECARBONIZATION PROJECTS IN AVIATION

Synergies Between the Paris Agreement and CORSIA

- **Complementary Goals:** While the Paris Agreement addresses global climate goals and the reduction of greenhouse gases broadly, CORSIA specifically targets the aviation sector's contribution to these goals.
- **Sector-Specific Measures:** CORSIA represents a sector-specific initiative that complements the overarching targets of the Paris Agreement, focusing on reducing emissions in the aviation industry, one of the fastest-growing sources of greenhouse gases

The Role of Sustainable Aviation

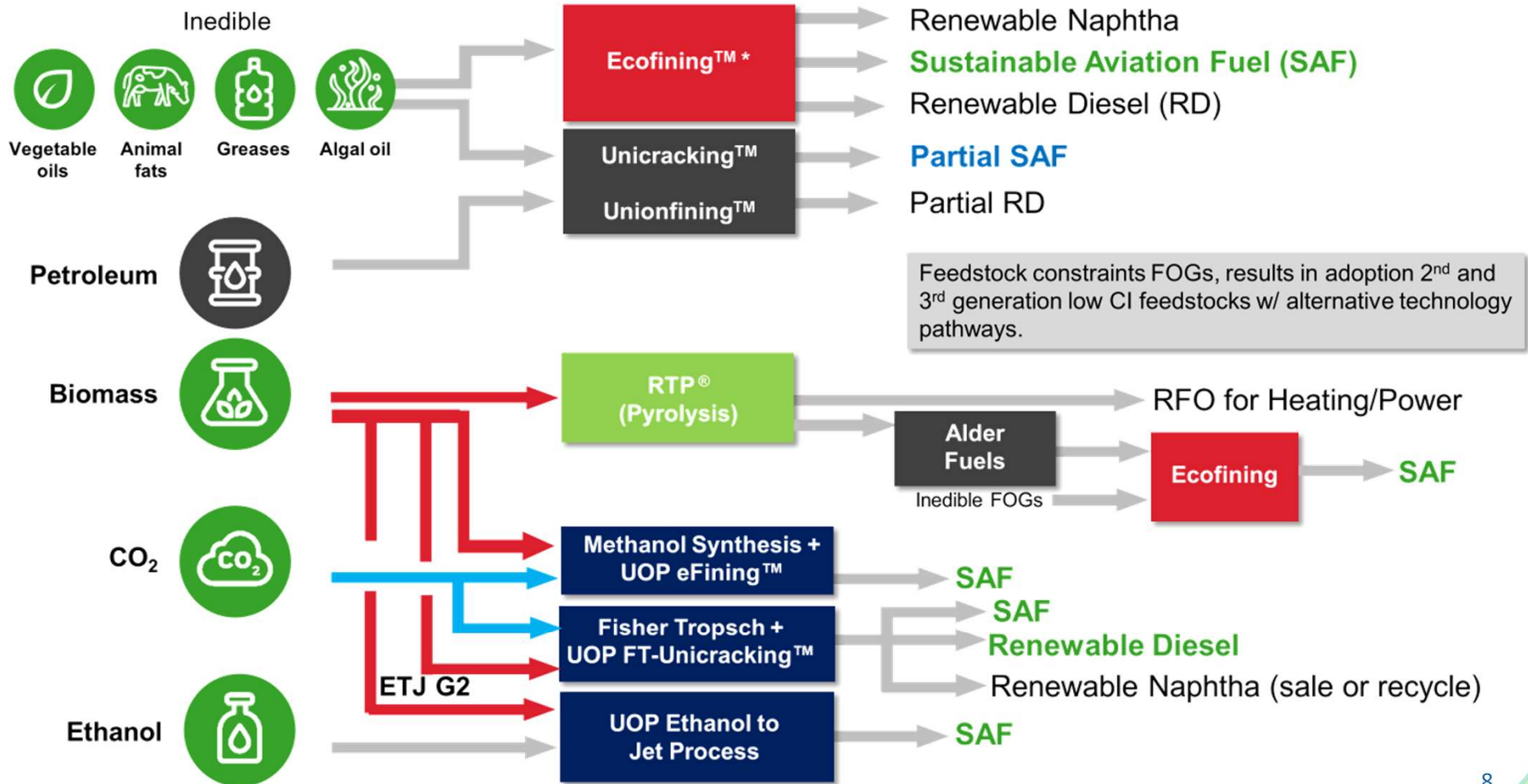
- **Key Solution:** SAF represents a crucial component of aviation's decarbonization strategy. SAF can reduce lifecycle carbon emissions by up to 80% compared to conventional jet fuels.
- **Current Limitations:** While SAF has the potential to significantly cut emissions, its production and deployment are still in early stages, largely due to high costs and limited supply.

HIGHLIGHTING THE IMPORTANCE OF FINANCING AND INVESTMENT FOR DECARBONIZATION PROJECTS IN AVIATION

Financial Challenges Faced by SAF Projects

- **High Initial Costs:** Substantial initial capital required for developing SAF production facilities and technologies.
- **Market Uncertainty:** Uncertainty in the market, including certified feedstock supply, lack of regulations/legal uncertainty, fluctuating and forecasted fuel prices, and the need for stable, long-term demand to justify investments.
- **Infrastructure Needs:** Investments to support SAF production and distribution, such as refineries and transportation systems.

HONEYWELL UOP TECHNOLOGY PATHWAYS SAF



* Ecofining technology produces renewable diesel, SAF, and other renewable products from biogenic feed sources. The technology was developed and commercialized jointly by UOP in collaboration with ENI

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THE ROLE OF TECHNOLOGY LICENSORS

1. MAXIMIZE SAF YIELD

Optimized feedstock efficiency by achieving the highest possible SAF yield from each unit of feedstock.

2. COST-EFFECTIVE SOLUTIONS

Reduced Equipment & Capital Costs: Streamline processes to lower equipment count and capital expenses, enhancing project viability.

3. SUSTAINABLE PRODUCTION

Lower Energy & CO₂ Emissions: Ensure the entire SAF production chain is sustainable, with CO₂ emissions significantly lower than conventional fossil fuels.

4. CERTIFICATION READY

ASTM D7566 Compliance: Develop a clear path to achieve ASTM fuel certification, a crucial milestone for methanol-derived SAF projects.

5. MINIMIZE TECHNICAL RISK

High Technical Readiness: Integrate advanced technologies with proven maturity levels to minimize technical risks in CO₂ to jet fuel conversion.



OPPORTUNITIES FOR FINANCING AND INVESTMENT

1. Project Financing (Equity/Debt Financing)

- Equity investment from venture capitalists, private equity firms, or strategic investors interested in SAF.
- Bank loans, bonds, or other forms of debt instruments specifically designed for SAF projects.

2. Development Finance Institutions (DFIs)

- Investments from entities like the World Bank or regional development banks aimed at advancing SAF technology in emerging markets.

3. Corporate Partnerships

- Long-term supply agreements where airlines invest in SAF production to secure a stable fuel supply and meet their sustainability targets.

4. Tax Credits and Incentives

- Tax relief and tax exemption, or deductions for capital investments in SAF infrastructure.
- Tax credits for producing SAF, reduced fuel taxes

HONEYWELL UOP KEY MESSAGES



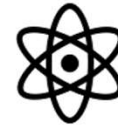
PROVEN TRACK RECORD OF SUCCESS OVER THE LAST 100 YEARS

- 100+ years of experience developing technologies for the world's largest energy companies
- 4,900+ patents in force, 1,400+ since 2019
- 1800 Modular engineering implementations and 300 active connected digital engagements



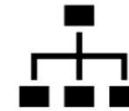
INDUSTRY LEADING COMMERCIALIZATION AND SCALE UP CAPABILITIES

- 150 pilot and semi-works plants in 8 sites globally
- 2,000 scientists and engineers on staff
- Driving sustainability solutions and decarbonization at an unprecedented scale



TECHNOLOGY PORTFOLIO THAT CAN ADDRESS ~70% OF THE WORLD'S CO₂

- Applying proven technologies, optimized for sustainability and decarbonization
- Pioneer and leading position in **Sustainable Aviation Fuel technology**
- Key technologies for both **Blue and Green Hydrogen**
- Leading supplier of both solvents and adsorbents for **CO₂ capture**



BACKED BY OUR FORTRESS BALANCE SHEET

- Honeywell financial strength
 - Fitch = A
 - Moody's = A2
 - S&P = A
- Strong Guarantees Surrounding Performance Metrics
- Warranties on both engineering and equipment supplied
- Honeywell UOP mitigates obsolescence risk

Built to address the megatrend of the energy transition

Thank You

