ENERGY-AS -A-SERVICE (EAAS):

Monitor, Manage, Optimize, and Monetize.

Infosys®
Navigate your next

Pioneering Sustainable Airports: Harnessing AI-First Technology for Energy Efficiency

Airports contribute significantly to the aviation industry's carbon footprint through energy-intensive operations. With net-zero targets set for 2050, outdated systems present challenges for energy efficiency. AI-powered solutions address these by optimizing energy use, detecting faults, and enhancing efficiency across HVAC systems, which account for 70% of energy consumption in terminals. Combined with renewable energy investments and electric ground support equipment, these digital tools enable airports to decarbonize effectively. Infosys Energy-as-a-Service (EaaS) offers a comprehensive approach to manage, optimize, and monetize energy consumption, leading the way toward a sustainable future.

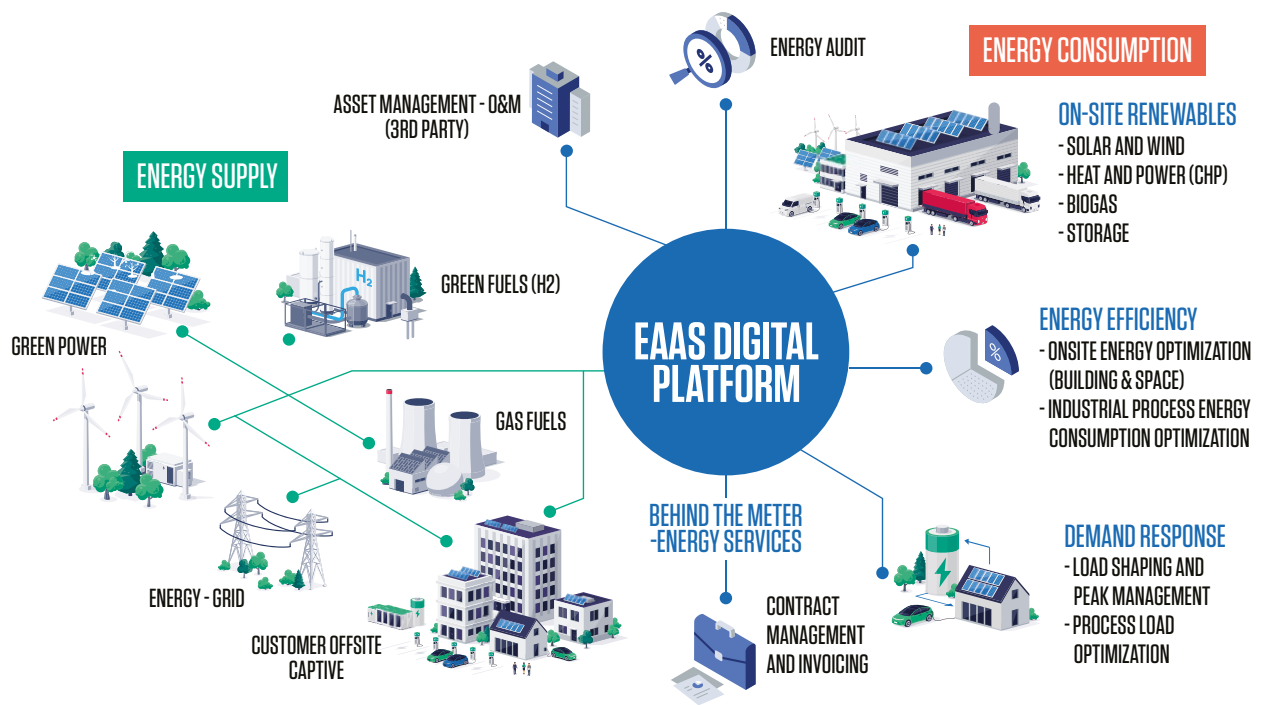## Adding Wings to Net Zero Aspirations

Infosys, a global leader in digital services and consulting, is committed to sustainability, achieving Carbon Neutrality 30 years ahead of the Paris Agreement goals and earning the UN Global Climate Action Award. Leveraging nearly four decades of expertise, Infosys partners with clients across 46 countries to drive digital transformation. By combining advanced energy management solutions with cutting-edge digital technologies, Infosys is reshaping airport operations. Our solutions accelerate decarbonization and unlock new opportunities, paving the way for a sustainable future in aviation.

Smarter Energy Solutions for Airports

Infosys Energy-as-a-Service offers airports an integrated, end-to-end solution for energy management, enabling cost savings, decarbonization, and supply reliability. By digitizing the entire energy value chain—from multiple generation sources to consumption optimization and asset performance—airports can achieve increased efficiency and predictability. The service includes green energy options such as solar, wind, biogas, and custom solutions like power purchase agreements (PPA) or offsite captive generation, tailored to your needs. Designed to extend asset life and ensure seamless operations, Infosys EaaS empowers airports to take control of their energy future.

ENERGY AUDIT

ENERGY CONSUMPTION

ASSET MANAGEMENT - O&M
(3RD PARTY)

ENERGY SUPPLY

ON-SITE RENEWABLES
- SOLAR AND WIND
- HEAT AND POWER (CHP)
- BIOGAS
- STORAGE

GREEN FUELS (H2)

GREEN POWER

EAAS DIGITAL PLATFORM

ENERGY EFFICIENCY
- ONSITE ENERGY OPTIMIZATION (BUILDING & SPACE)
- INDUSTRIAL PROCESS ENERGY CONSUMPTION OPTIMIZATION

GAS FUELS

ENERGY - GRID

BEHIND THE METER
-ENERGY SERVICES

DEMAND RESPONSE
- LOAD SHAPING AND PEAK MANAGEMENT
- PROCESS LOAD OPTIMIZATION

CUSTOMER OFFSITE CAPTIVE

CONTRACT MANAGEMENT AND INVOICING

Elevate Your Airport's Energy Performance with EaaS

Comprehensive Energy Dashboard

Gain real-time insights into energy usage, costs, and carbon footprints with our all-in-one dashboard. Make data-driven decisions and track energy supply sources for complete digital energy management.

Asset Energy Efficiency

Optimize energy consumption with AI and real-time equipment data. Enhance operational efficiency, reduce waste, and achieve significant energy savings to support sustainable, cost-effective operations.

Peak Demand Management

Control energy costs using predictive analytics and smart recommendations. Shift non-essential activities like cargo processing to off-peak hours, reducing energy bills during peak demand periods.

Energy Supply Optimization

Leverage spot-market price fluctuations to lower energy costs. Analyze supply sources for flexible energy trading, creating a cost-effective energy management strategy.

On-Site Renewables & Clean Mobility

Deploy solar panels and EV charging stations to integrate green solutions. Promote sustainability with renewable energy and clean mobility initiatives for airport ground vehicles and logistics fleets.

PPA Management

Streamline your energy contracts with a comprehensive performance overview. Track energy slots and manage your green energy mix with automated billing reconciliation.

Driving Sustainability and Savings at a Leading German Cargo Airport

One of Europe's top 10 cargo airports, Germany's busiest passenger and cargo hub, is setting a benchmark in sustainability with its goal of achieving climate neutrality by 2045. To optimize the airport's energy and technical systems, data on hourly energy usage across assets like boilers, chillers, and CHPs was analyzed with EaaS to generate actionable insights. This approach led to ~30% in annual cost savings. Through EaaS solutions, the airport was able to make strides toward its sustainability goals by optimizing CHP operations, enhancing boiler and chiller efficiency, leveraging energy market flexibility for savings, and adopting advanced thermal and electrical energy storage technologies.

Soaring to Sustainable Horizons with Energy-as -a-Service

EaaS platform provides airports with integrated green energy solutions that enhance sustainability and operational efficiency. By leveraging IoT and AI-based modeling, we deliver actionable insights to improve energy usage and asset efficiency. The platform enables a **25-30%** reduction in energy consumption, a **5-10%** boost in energy generation, and a **50-70%** decrease in CO2 emissions. With proven success in key markets, our tailored solutions help airports achieve measurable results in cost savings, sustainability, and operational excellence, paving the way for greener airports.

Key Benefits:

Integrated Energy Management: Manage energy assets efficiently for sustainability and cost savings.

Optimized Energy Sourcing: Cost-effective energy procurement tailored for airport operations.

Reduced Energy Consumption: Use AI to optimize energy usage and lower emissions.

Operational and Asset Efficiency: Extend infrastructure lifespan with intelligent monitoring and maintenance.

Green Energy Mix: Increase renewable energy use for decarbonization and certifications.

Ready to take your airport operations to the next level of sustainability and efficiency? Contact us today to learn how Infosys Energy as a Service can help you achieve energy transition now.

For more information, contact askus@infosys.com

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