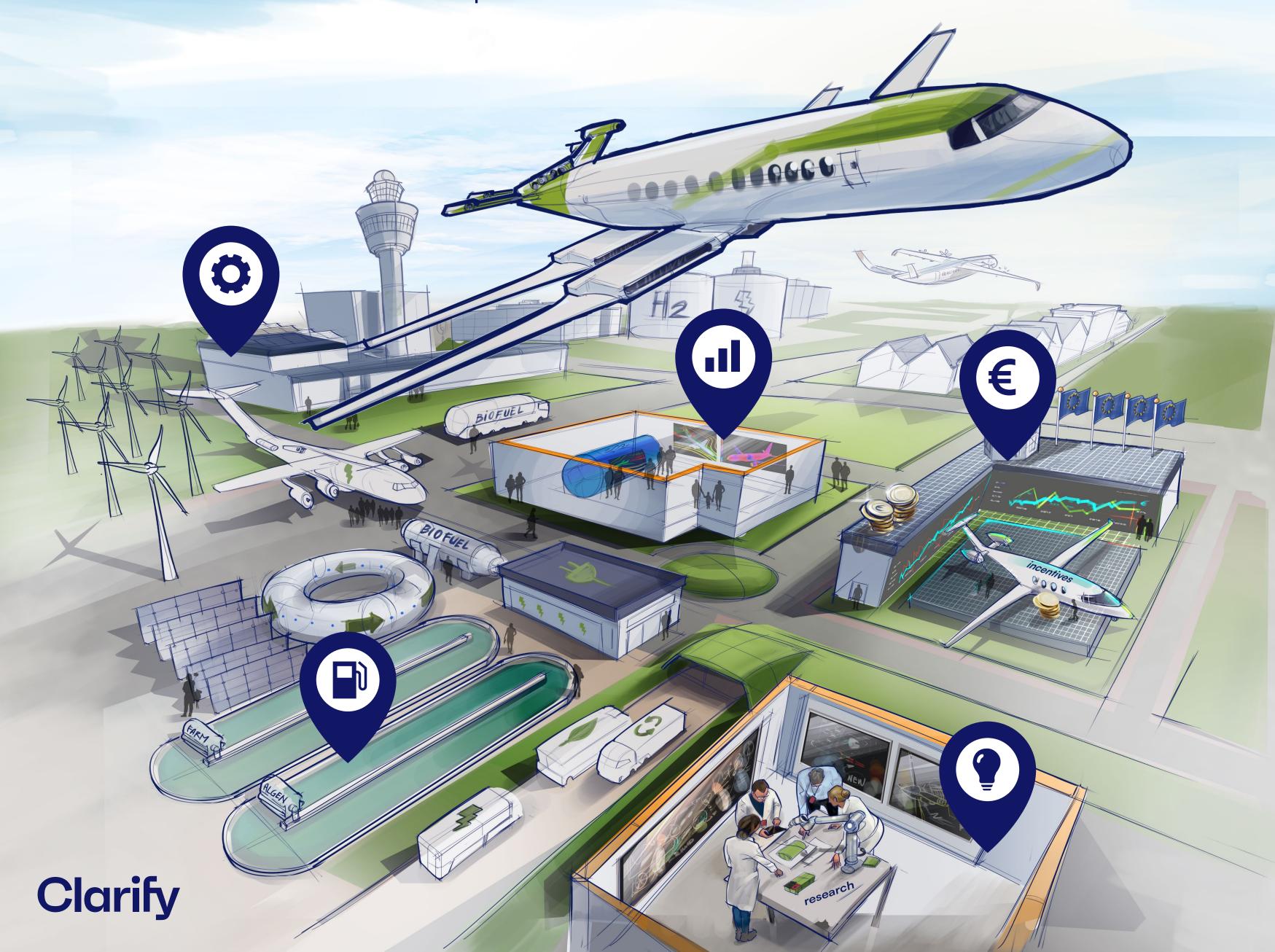
Journey towards a more sustainable aviation sector

An overview of crucial developments to reduce CO₂ emissions in aviation





Operations and infrastructure

- Energy-efficient buildings with smart insulation and controls.
- Use solar and wind power for sustainable energy.
- Implement eco-friendly airport ground transportation.
- Enhance airport waste management and recycling.
- Optimise flight routes and altitudes, reducing emissions.
- Sustainable catering, using degradable or reusable equipment.



Sustainable fuels

- Encourage hydrogen fuel development.
- Support renewable and synthetic fuel production.
- Promote sustainable biofuel and hydrogen adoption.
- Development of more energy dense battery technology.
- Set aviation fuel sustainability certification standards worldwide.



Optimising existing technologies

- Improve aircraft efficiency (lighter materials & aerodynamics).
- Adopt continuous descent approach and optimized climbs.
- Use real-time weather data for flight planning.
- Research more efficient engine technologies.



Worldwide economic measures

- Implement a CO₂ tax to encourage low-emission practices.
- Incentivize to retire older, less efficient aircraft.
- Financially support green technologies and innovations.
- Enforce strict environmental regulations in aviation.
- Stimulate sustainable aviation fuel market growth.



New technologies

- Develop electric aircraft for short distances.
- Foster hybrid airplane research and production.
- Explore alternative aircraft designs and propulsion systems.
- Integrate AI and machine learning for flight efficiency.
- 3D-printed aircraft components for weight reduction.