

100% SAF

**What about airport
infrastructure?**

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Top player in the European airport industry



22,2 million passengers
2019: 26 million Passengers



220 destination
86 countries



701 K tonnes of cargo



85,000 jobs
direct & indirect



72 airlines
3 home carriers:
Brussels Airlines, DHL, TUI



335 companies



Data: 2023

Fuel infrastructure at BRU

How it is today...



- BRU is fed by the NATO pipeline system (mass balance principle)
 - Infrastructure is owned by BAC, but operated by third party (M&O agreement)
 - Hydrant system or fuel truck to fill the airplanes
- ➔ Every party can supply fuel (incl. blended SAF) when eligibility requirements are met!

Fuel infrastructure at BRU

Fuel infrastructure is airport specific, however....

Topic	BRU	AIA	BUD	TLS
Fed by...	Pipeline (several entries) Truck	Pipeline (several suppliers) Truck	Pipeline (one refinery) Railway	Truck (several suppliers)
Storage system	Big fuel farm	Medium fuel farm	Small fuel farm	Small fuel farm
Off-airport ownership	Third party	Multi suppliers	One supplier	Multi suppliers
Airport system	Hydrant system Fuel truck	Hydrant system	Fuel truck	Fuel truck
On-airport ownership	Airport	Third party	One supplier	Airport

One similarity → only fuels compliant to jet A1 properties are permitted (ASTM 1655)

100% SAF at an airport?

100% SAF vs blended and Drop-in vs non-drop-in fuel

SBC (100% SAF)

does not contain aromatics (different density, lubricity and composition)
is not compatible with aircraft fuel system (engine)
has more non-CO₂ benefits (f.e. contrails)

- Blend to meet composition and requirements (standards)
- Blend = SBC + conventional aviation fuel (jet A1)

Today a blend will always be a drop-in fuel

100% SAF at an airport?

Drop-in vs non-drop-in fuel

Topic	Drop-in	Non-Drop-in
Composition	Fully formulated Jet A1	Subset of Jet A1
Fleet applicability	Fleet wide fuel	Designated aircraft/engines only
Infrastructure	Handled, stored, used like Jet A1	New, separate supply chain needed
Example	Blended SAF, jet A1	100% SAF (incl. e-fuels), H2, electric

New product/fuel and new infrastructure has a BIG IMPACT

New regulations, procedures, safety & security measurements

Space and location required (masterplanning)

New (fuel) supply chains

High investments/budget required

100% SAF at an airport?

Temporarily transition

- Immediately all-in → not feasible → feasibility studies on masterplanning needed
- Temporarily transition:
 - align with timeline: when sufficient demand to foresee temporarily measurements (risk mitigation)
 - different possibilities:
 - to fuel the airplane (f.e.: transport by bowsers)
 - to store fuel (separate storage tank)
- Start small → pilot testing to get familiar with new products and way of working!

100% SAF at an airport?

Conclusion

- An airport will always try to serve EVERY aircraft fuel system, without any limitation. However is every fuel system (blended SAF, 100% SAF, eSAF, H2, electric) achievable?
- **Masterplanning** will play key role in the adaption of airport infrastructure → feasibility studies/research needed!
- The 'oldest' aircraft fuel system on the airport will decide
→ Decision making by the airport on fuel availability?
→ **Temporarily transition**
- **Technological evolution:** 100% SAF with aromatics to match CAF composition & aircraft fuel system



Let's get in touch!

