

# Environmental Management System

## Manual

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## Table of Revisions

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# 1 Introduction

Assaia International AG (the organisation, or the company) is currently not certified according to ISO 14001:2015 "Environmental Management Systems" due to the size of business. The management, however, fully understands and supports the concept of standardised and documented processes and therefore is committed to obtaining ISO certificates, or a comparable documentation, in the foreseeable future.

The organisation is very well aware of its own environmental impact but also about the overall impact of Assaia's core market, the global aviation industry. In this context the organisation develops state-of-the-art IT solutions that are used by the industry to improve operations, reduce delays and aircraft emissions on the ground, as well as improve the health-and-safety of our clients' employees.

Assaia offers various software solutions as part of its ApronAI Suite where sustainability and environmental management are important value layers and help aviation stakeholders in their measures to achieve Net Zero by 2050.

ApronAI helps airports and airlines control the entire turnaround process through computer vision and innovative AI technologies. Better OTP and enhanced response on issues during the turnaround directly affects the predictability in operations, which lead to a dramatic reduction in excess gate holding time, early startup, and departure queuing. Our customers reported that a year of active usage of TurnaroundControl helped them reduce excess gate holding time by 79% which resulted in mitigating 1,462 tCO<sub>2</sub>e (SEA).

EmissionsControl and APU detection help customers monitor the timing of APU turning off and PCA connection to mitigate periods of unnecessary APU usage which is known to be the major source of CO<sub>2</sub> emissions at the apron.

With help of these solutions, our customers mitigate pollution and noise at the airport and in its neighbourhood, as well as have a precise understanding of their carbon footprint, including Scope 3 emissions which are most complex to measure due to the collaborative nature of the known measurement frameworks.

With every new product and feature, Assaia focuses on sustainability goals to provide better tooling to our customers and partners within the aviation industry in their net zero roadmaps.

The company's priority is to not only follow the best practices in environmental management systems, but also to promote sustainability values within the professional community. This document outlines the Environmental Management Manual as it is in place today at Assaia.



## 2 Identification of External Environmental Impacts

As a modern software and service provider without any production or transportation activities, Assaia's environmental impact is very limited. Nonetheless, Assaia has identified a set of external environmental impacts that occur during the organisation's normal or abnormal as well as current and planned activities and that can be influenced by the organisation.

The external environmental impacts are:

Scope 1	Technology	Assaia does not produce Scope 1 emissions. However, the usage of our systems connected to hardware that is procured by the customer. We recommend energy efficient hardware and brands with an environmental certification.
Scope 2	Operations	Energy consumption for server infrastructure, use of paper for documents, purchasing.
	Work Place	Energy consumption (e.g. electricity, heating, cooling)
Scope 3	Business Travel	A detailed travel policy has been put into action by the organization to reduce its environmental footprint.

The list of environmental impacts is, however, validated on a regular basis and updated if applicable.

## 3 Travel Policy

As an organisation with a strong global presence and clients around the world, Assaia's employees must regularly travel to client sites for activities such as, but not limited to, sales, project management, system implementation and quality and support. Whenever possible Assaia employees use remote meeting possibilities (see paragraph 5) in order to avoid business-related journeys altogether.

In order to minimise the environmental impact of the organisation's business travel activities, Assaia works with local representatives to reduce long-haul air travel as much as possible. Through the company's base in Switzerland and local representatives in various European countries, Assaia currently covers the EMEA region. Several employees are based on both coasts of the United States of America, serving customers in the Americas. Through a local partner in Singapore and Japan, the Asia-Pacific region is covered.

In addition to the local presences, Assaia developed a well-defined travel policy with the goal to minimise its environmental impact while ensuring employee well-being:



Mode of transportation	Description
Railway	Whenever possible and feasible, members of the organisation are requested to travel by train. This is also the case, where the costs compared to other modes of transport may be reasonably higher.
Car / Taxi	When the destination is at a remote location or where public transport is not/insufficiently available, members of the organisation are allowed to use cars (rental, company or private cars) or taxis for business travel purposes. Each member of the organisation is regularly reminded to look out for car-sharing opportunities where available/applicable.
Bus / Public transport	Members of the organisation are requested to use public transport whenever possible and reasonable.
Air	Air travel is the least preferred choice of transportation and should only be used when necessary due to time or distance. In case air travel is necessary, members of the organisation are requested to use direct flights without stop-overs as well as prioritise flights with modern aircraft types where these options exist (i.e. A320neo vs A320ceo).
Hotels	Members of the organisation are asked to book hotels that are reasonably close to the location of the meeting or activity that is the reason for the underlying journey. Public transport or hotel shuttle services should be used as much as possible.

The above policy is regularly validated and amended where applicable.

## 4 Purchasing

Where it is in the sphere of influence of the organisation, Assaia has established a set of criteria to purchase goods and services. These criteria are:

- Sustainability of ingredients/materials used;
- Product safety;
- Ergonomics;
- Functionality;
- Efficiency;
- Lifecycle aspects (e.g. concerning repair and maintenance);
- Minimization of packaging waste.

The goal is to find suitable goods and services that provide the best overall result when evaluated against above criteria. When possible, purchasing from B Corp companies is prioritised.

## 5 Workplaces and Remote Meetings

Assaia, from the incorporation of the company and long before the COVID-19 outbreak, is a modern employer that actively promotes home-office work and remote work. Currently 100% of our employees are working remotely. This concept allows members of the organisation to reduce their environmental impact in not travelling to and from an office location to their homes.

The company also facilitates modern communication technology to do a very large number of meetings, both internally and with clients, remotely through video-conferencing apps.

Assaia employees reside in countries in the EMEA and North America regions with developed environmental policies, providing opportunities for waste recycling and renewable energy options. The organisation encourages environmental awareness and creation of sustainable workspaces.

## 6 Energy Consumption

Assaia covers a large part of its data processing requirements through cloud-based server infrastructure. This approach results in a reduction of materials and energy used for the production, transport and operation of additional hardware. At the same time already existing infrastructure (at the provider) is utilised more effectively. In addition it allows Assaia to quickly scale its server capacity according to current requirements, thus saving energy and the emission of heat.

The cloud-based server infrastructure is hosted with the leading server providers with 100% renewable energy sources and transparent Net Zero strategies, such as Google Cloud and AWS. Assaia monitors CO2 emissions associated with its cloud-based servers and applies optimization measures in an event of anomaly.

The remaining server infrastructure, that is directly operated by Assaia, is set-up and run in a colocation data center. This set-up allows Assaia to minimize energy consumption for its own server infrastructure and use existing, and specialised, premises.

For the future Assaia will keep its focus on cloud-based server infrastructure and will only operate its own server infrastructure in cases where it is absolutely necessary and unavoidable.

## 7 Documents

As a digital enterprise, the company established a policy of reducing the use of paper for documents as much as possible. Every member of the organisation is requested to limit printing of electronic documents to an absolute minimum. Whenever reasonable



and allowed by laws and regulations, legal documents are signed by using a digital signature.

Sales and marketing materials such as, but not limited to, brochures, flyers and business cards are produced as hard-copy versions in limited quantities only. The company provides these documents preferably as soft-copy versions.

## 8 Shared values

An important part of Assaia's environmental management is to share values across the partnership community of the organisation and align with current and future customers on the importance of sustainability measures.

There are several initiatives that Assaia promotes across the professional community:

1. APU detection and monitoring as a progressive step to control CO2 emissions for aircraft ground movements;
2. Optimization of aircraft stand allocations, resulting in fewer occurrences of incoming aircraft that have to wait for the aircraft stand to become available, while running with engines in idle power (burning kerosene and emitting CO2);
3. Detection of non-adherence to Standard Operating Procedures for single-engine taxiing.

Assaia holds an inaugural user conference which involves airport and airline from global operator representatives, and Sustainability is a crucial chapter at such events.





Member Working Group  
Ramp of the Future

Finalist  
IATA IGHC Innovator Award



World Business Partner  
Airports Council International



Winner  
AAAE Airport Innovation Forum



Shortlist  
Technological Solution of the Year

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