

Internship Report

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Koen Pouw
Intern for Strategy & Sustainability

Rotterdam The Hague Airport

Contacts

Degree: BSc. Global Responsibility & Leadership
Name student: Koen Pouw
Student number: s4027566
Address: Lange Marktstraat 461, 8911AD Leeuwarden
Phone number: +31683545008
E-mail address: k.j.pouw@student.rug.nl

Internship organisation: Rotterdam The Hague Airport
External supervisor: Michelle Samson
E-mail external supervisor: Michelle.Samson@rtha.com

Internal supervisor: Prof. Dr. J.A. Beaulieu
E-mail internal supervisor: j.a.beaulieu@rug.nl

Preface and acknowledgements

Had the COVID-19 pandemic not happened, I would have just come back from my exchange semester in New Zealand. However, despite the disappointment of not being able to spend a semester abroad, it did open new doors and opportunities. Looking back on the past half year, my expectations of doing an internship have been exceeded on all levels and it has been the best decision I have made while studying at University College Fryslân.

Throughout my studies, I have lacked practical experience and I did not have a clear idea of what the professional world looked like outside university. Therefore, even before starting my studies, I have always found the ability to gain practical experience essential to my academic career and personal development. With this in mind, and the fact I had to look for alternatives after my exchange got cancelled, I decided to actively look for internship opportunities in the field of sustainable energy transition, sustainable development, and mobility. Though these were my main points of focus, any experience I could obtain relating to governance and policy making would have been a fantastic supplement to my internship experience. This eventually got me to Rotterdam The Hague Airport, where I worked as an intern for Strategy & Sustainability.

Having studied most aspects of environmental sustainability during my time at University College Fryslân, doing an internship in the aviation industry, a fossil-fuel driven industry, might not have seemed like a very logical step to take. My main goal of doing an internship was to gain hands-on experience relating to sustainability in the professional field. Therefore, I decided that doing an internship at Rotterdam The Hague Airport would be the best opportunity for me to take a step outside the bubble I had been in for the two years before my internship. This was the ultimate chance for me to learn about the functioning of a global industry that is so important to people all over the world, and to explore how sustainability is being addressed and improved within the industry. Over the past months, I have been given the opportunity to actively be involved in the sustainability efforts of Rotterdam The Hague Airport as well as its expressions of strategic interests. This has allowed me to learn about sustainability in the corporate and mobility sector as well as the position of Rotterdam The Hague Airport in a field of tension characterised by a variety of actors within local and national society.

I would like to thank Michelle Samson for being an outstanding supervisor during my internship at Rotterdam The Hague Airport. Her willingness, eagerness, and patience to introduce me to the world of aviation and sustainability has allowed me to make the utmost of my time as an intern. For that I am extremely appreciative. I would also like to thank Prof. Dr. Anne Beaulieu for her willingness to guide me academically throughout my internship.

This internship experience has inspired me in many ways and fuelled me with energy to continue learning about sustainability, and ultimately to contribute to a more sustainable planet. As I reflect on my experiences interning at Rotterdam The Hague Airport, I hope the following sections of this internship report radiate my feelings of enthusiasm and gratitude for having had this incredible experience.

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Introduction

The internship was hosted by Rotterdam The Hague Airport (RTHA). RTHA is classified as a regional airport of national significance and part of the Royal Schiphol Group. Other Dutch airports that are also part of the Royal Schiphol Group are Amsterdam Airport Schiphol, Eindhoven Airport and Lelystad Airport (Royal Schiphol Group, n.d.-a). I interned at the department of Strategy, Sustainability and Innovation and assisted the sustainability manager of RTHA, Michelle Samson, who also acted as my internship supervisor. Achieving the sustainability targets of the airport is her main responsibility and she closely collaborates with various departments to do so. Because in the end, sustainability is a challenge the entire organisation is faced with, and therefore requires cross-departmental collaboration.

My main assignment for my internship was to assist with sustainability projects and reporting at the airport primarily relating to the energy transition, the circularity of waste and resource flows and sustainability promotion targeted at passengers. I was also involved in the process of creating a widely supported multistakeholder proposal for a new Airport Decree (i.e. Luchthavenbesluit). In sum, I got to work in the field of sustainability which closely links to my Responsible Planet major, and I was involved in one of the key strategic endeavours of RTHA, which ties in with my Politics side track and interest in governance.

After spending almost half a year at Rotterdam The Hague Airport, I have learned more about how sustainability is dealt with in a practical setting, allowing me to deepen my understanding and be exposed to perspectives on sustainability that had been unfamiliar to me before doing my internship. A dynamic environment such as RTHA has been a very interesting case and has shown me many different aspects of sustainability, ranging from energy and waste flows to local communities and aviation itself. Throughout my experience I have also been introduced to the political and governmental actors relevant to RTHA and (inter)national policy initiatives to increase the sustainability of the aviation industry. Working in a corporate organisation like RTHA has also improved my professional skills, such as interacting with colleagues in meetings, presenting myself as a professional individual, as well as improving my IT skills working with e.g. Microsoft Excel.

Description of the internship organisation

Rotterdam The Hague Airport: now and in the past

In October 2021, Rotterdam The Hague Airport celebrated its 65 year anniversary. It was operationalized in October 1956, years after Waalhaven Airport (close to where Rotterdam The Hague Airport is currently located) was bombed in the Second World War. The then named Zestienhoven Airport was located in a polder between the cities of Rotterdam and The Hague. Since the 1990s, the airport specialises in regularly scheduled flights to European destinations as well as in business aviation. Since 2010, the airport got its new name: Rotterdam The Hague Airport (Rotterdam The Hague Airport, n.d.).

Rotterdam The Hague Airport largely hosts commercial air traffic with a variety of airlines operating flights targeted at leisure and business passengers. RTHA now services around two million passengers (pre-COVID) per year and is the third largest airport of the Netherlands. In addition, RTHA acts as an important airport for business passengers, with a relatively large portion of flights operated by business jets. Lastly, RTHA hosts general aviation (non-commercial flights) as well as medical and police aviation.

It also acts as an alternate airport for Amsterdam Airport Schiphol, meaning that airplanes that are unable to land in Amsterdam (due to e.g. weather circumstances, emergencies, etc.) can be diverted to RTHA. It also acts as an emergency airport, able to provide emergency assistance when needed (e.g. in case of evacuation). Furthermore, RTHA is also a governmental airport, meaning that it services flights for government purposes. All in all, Rotterdam The Hague airport is a regional airport of national significance and is also classified as such by the Dutch government.

At the core of RTHA's operations are its mission and vision. The mission is to connect people, companies, and innovations in the interest of the region. It's vision is, consequently, to be the pride of the region and to provide the ultimate passenger experience. RTHA envisions itself as a connecting player through innovations in the field of entrepreneurship, education, and sustainability. In other words, RTHA does not value aviation as a single entity – it is used as a means to add value to the region by acting as an employer, educator, innovator, connector, business partner, and sees itself as a vital part of the business climate of the Randstad (Rotterdam The Hague Airport, n.d.).

Rotterdam The Hague Airport is part of the Royal Schiphol Group – a network of regional, national and international airports. Other airports connected to the Royal Schiphol Group are Amsterdam Airport Schiphol, Eindhoven Airport, Lelystad Airport, Aéroports de Paris, Brisbane Airport, Hobart Airport, JFK New York (Terminal 4), St. Maarten Airport, and Aruba Airport (Royal Schiphol Group, n.d.-b). RTHA is closely connected to its mother airport, Amsterdam Airport Schiphol, and acts as a testing ground for innovation (Rotterdam The Hague Airport, n.d.).

Sustainability strategy

Royal Schiphol Group (RSG) wants to exploit the most sustainable airports in the world. Rotterdam The Hague Airport gladly ties in with that vision and has the ambition to “go beyond zero” to add value to society and the local community by connecting the world. Rotterdam The Hague Airport has created a Sustainability Strategy for (mostly) its own operations, from which a roadmap has been designed with specific actions, priorities, and timelines. The visual below summarises the Sustainability Strategy of RTHA.



Figure 1. Sustainability strategy of Rotterdam The Hague Airport.

RTHA's Strategy can

Sustainability be perceived

as a two-dimensional framework with a horizontal and vertical axis and includes four specific themes. These themes, being Energy Positive, Circular Economy, Sustainable Aviation, and Communities, are at the core of the Sustainability Strategy. The themes on the vertical axis, Sustainable Aviation and Communities, are related to transitioning towards a more sustainable aviation industry, reducing environmental and community impacts caused by aviation, and continuous community engagement. The themes on the horizontal axis, Energy Positive and Circular Economy, are related to emission free airport operations and circularity of materials and waste flows.

	Energy Positive	Circular Economy	Sustainable Aviation	Communities*
↓ 2030 target	Zero emission airport	Zero waste airport	2030 emissions = 2005 level	Balanced relationship with direct community
↓ 2050 target	Energy positive	Circular airport	Zero emission aviation	Comfortable living environment

Table 1. Sustainability targets per theme.

*Targets for the Communities theme are rather ongoing targets as opposed to end goals.

RTHA has the most influence on the themes of Energy Positive and Circular Economy – these themes are directly linked to RTHA's own operations as an airport. However, the most positive impacts can likely be made in the themes of Sustainable Aviation and Communities – though these themes are mostly beyond the circle of influence of RTHA. Nevertheless, RTHA wishes to be a part of the transition towards more sustainable aviation, and therefore considers its own operations to be part of this process.

Examples of sustainability efforts

Rotterdam The Hague Airport values each sustainability theme equally, though its influence on each theme differs. However, across all themes, RTHA is putting in effort to make progress and meet the sustainability targets. Below are some example projects that have been or are currently being executed for each theme.

Energy Positive

- Building of a 14MWp solar park with around 37.000 solar panels along the runway. This solar park will generate as much as three times the electricity needed by the RTHA. The remaining electricity will be used in the region to contribute to the regional energy transition.
- Electrification of ground service equipment, such as ground power units.
- Phasing out of gas in airport buildings.
- Optimizing energy use in airport buildings.
- Electrification of airport and partner vehicles.
- Roll out of 100% biodiesel usage for heavy vehicles for which there are no electric alternatives yet.

- Airport Carbon Accreditation (ACA) Certificate Level 4+. RTHA has the highest ACA certificate issued by Airport Council International Europe (ACI Europe) and has set an auditable trajectory to reduce carbon emissions in the coming years.

Circular Economy

- Usage of sustainable and (partly) circular building materials for renovations.
- Principles such as urban mining and design-for-disassembly are applied to new building and renovation projects.
- New passenger terminal built with sustainable materials.





Sustainable Aviation

- Rotterdam The Hague Airport collaborates with aviation company Zero Avia to exploit the first commercial hydrogen flight between Rotterdam The Hague Airport and London City Airport.
- Stimulation of Sustainable Aviation Fuels (SAF: biofuels and synthetic fuels) to trigger the demand for SAFs on the market. SAFs have considerably lower emissions than fossil kerosene. RTHA is investing in the production of synthetic kerosene and offers passengers the possibility to buy SAF for their flight in collaboration with SkyNRG and CHOOOSE.
- Development of a sustainable passenger journey with which RTHA actively communicates about sustainability to passengers and offers passengers possibilities to make sustainable choices during their journey at RTHA.
- Co-founding of Rotterdam The Hague Innovation Airport (RHIA Foundation) with the municipality of Rotterdam. The RHIA foundation is a network of industry partners that innovate to accelerate the transition towards a more sustainable aviation industry (Rotterdam The Hague Innovation Airport Foundation, n.d.).

Communities

- RTHA works with local governments to explore methods to reduce noise hinderance and emissions of ultrafine particles and nitrogen.
- RTHA closely works with a multitude of stakeholders, ranging from national, provincial, and municipal governments to airlines, NGOs, and local citizens to create a preferred scenario for a new Airport Decree (voorkeursscenario Luchthavenbesluit). An Airport Decree determines issues such as the length and location of the runway, what type of air traffic is allowed at the airport, and the parameters used to set the boundaries for airport exploitation (e.g. air traffic movements, noise levels, etc.) (Luchthavenbesluit, n.d.).

The Sustainability Strategy of Rotterdam The Hague Airport covers a selected number of UN Sustainable Development Goals. These SDGs have been selected by RTHA with regards to relevance and level of influence based on the airport's operations and act as the main focus for sustainability of the airport. The table below briefly explains how RTHA aims to contribute to these SDGs.

UN SDGs and RTHA's contribution			
 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>RTHA aims to create inclusive direct and indirect job opportunities relating to the airport as well as creating a healthy business climate.</p>	 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>RTHA actively works towards circularity of material and waste flows to reduce exploitation of finite resources.</p>
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>RTHA takes on an active role with industry partners to make the aviation industry more sustainable.</p>	 <p>13 CLIMATE ACTION</p>	<p>RTHA is transitioning towards cleaner sources of energy (e.g. solar and wind) and cleaner fuels to reduce fossil fuel emissions.</p>

 <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>RTHA works with partners to create a healthy living and working environment, e.g. by stimulating clean mobility and reducing emissions.</p>	 <p>17 PARTNERSHIPS FOR THE GOALS</p>	<p>RTHA collaborates with its business partners and stakeholders to accelerate and strengthen its contribution to the SDGs.</p>
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Table 2. Contributions of Rotterdam The Hague Airport to the UN SDGs.

Organisational structure and workforce

Rotterdam The Hague Airport is a relatively small organisation, despite it being part of Royal Schiphol Group. In total, there are 110 employees of which 20% is made up of interns (Rotterdam The Hague Airport, 2020). There are four main departments, consisting of Commerce, Assets & Projects, Airport Operations, and Finance & Strategy. Each main department has subdepartments as can be seen in the organogram below. As an intern for Strategy & Sustainability, I worked at the Finance & Strategy department, at the subdepartment of Strategy, Sustainability & Innovation.

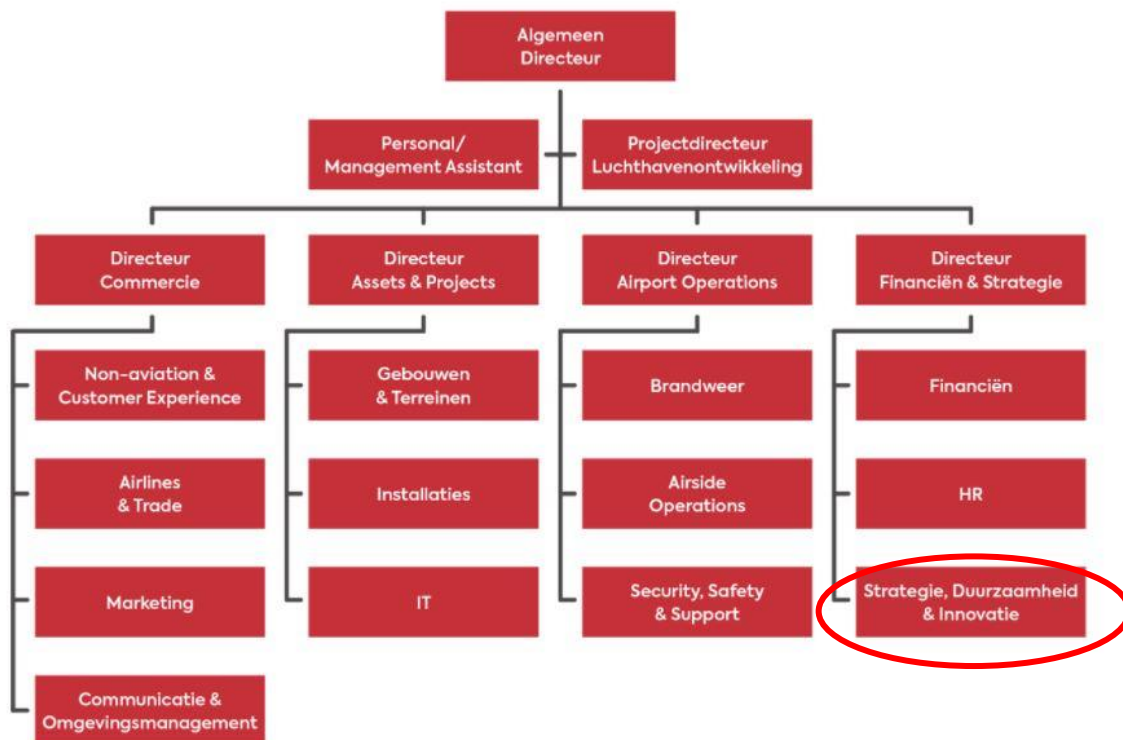


Figure 2. Organogram of Rotterdam The Hague Airport.

Internship description

As an intern for Strategy & Sustainability, I was mainly involved with sustainability-related projects at the airport. However, due to my interest in politics and governance, I was also given the opportunity to follow the process of creating a preferred scenario for a new Airport Decree. I did not actively contribute to the process itself, but I did join meetings and conversations – it was mostly a learning experience for me.

The main assignment for my internship was to assist with implementing projects as part of the Sustainability Strategy and Roadmap and to help with reporting about progress relating to RTHA's sustainability efforts to Amsterdam Airport Schiphol, the mother organisation of RTHA. I mainly contributed to projects in the themes of Energy Positive, Sustainable Aviation, and Circular Economy.

Within my main assignment, there were many tasks that were assigned to me or projects I was involved in. The main task that I focussed on for the most part during my internship is the carbon accounting for 2021, which is needed for Airport Carbon Accreditation (ACA) Certificate. Last year, Rotterdam The Hague Airport was certified with the highest certificate: Level 4+. This certification is awarded based on the sustainability and carbon mitigation efforts of the airport, and RTHA has committed itself to a trajectory to reduce carbon emissions in the coming years. Things that are considered in the ACA carbon accounting method are, for example, electricity and gas use, airport vehicle fuel use, waste, kerosene fuelling, traffic and mobility movements, among others. Every three years, the carbon accounting is audited – meaning that data and documentation need to be accurate and complete. This certification fits in to the theme of Energy Positive, with the goal of reducing carbon emissions to zero.

As a first step, I was asked to map the traffic movements of airport partners. In the years prior to 2021, no detailed research had been done on how employees of commercial and operational partners of the airport travel to work, meaning: what transport modality did they use (e.g. internal combustion car, electric car, public transport, etc.) and how many kilometres do they travel per year? Considering that this data is an important part of emissions not directly caused by RTHA's operations but that is in fact included in RTHA's carbon accounting (Scope 3 emissions), it is important to have a precise idea of this data. Therefore, I took on the task to gather this data. I spent around two months reaching out to a large number of airport partners, such as the security service, ground handling service, retail and restaurant services, but also all commercial organisations located on the airport grounds and contractors and delivery services. In total, I contacted approximately thirty to forty organizations. I started out with sending out emails to briefly explain what the sustainability targets of RTHA are and why we needed their data. I then invited them to one of three sessions in which my supervisor Michelle and I explained why this research is important to RTHA, and to explain what exactly was expected from the partners (Appendix A). After these sessions, I sent out a template the partners could use to provide their data. During the process, I was often in contact by phone and email to provide any clarifications or remind the partners to send their data. I found that gathering data from contractors and delivery services was significantly more complex than other partners. This was mainly due to the irregular nature of their traffic movements, making it difficult to get a precise overview of all traffic movements to RTHA. Therefore, gathering data from contractors and delivery services was more of a case-by-case effort.

Overall, it was a very time-consuming task, but I learned a lot about the role of mobility in RTHA's carbon accounting and how companies in the field cope with traffic registration and data. In the end, the total response was too little to account the data as a detailed research, but it acts as a solid basis to make a well-informed estimation of total traffic movements. New legislation regarding traffic data registration will likely help in creating a better overview, causing the total carbon accounting of RTHA to be even more accurate and representative in the coming years.

After setting up the data collection process with airport partners, I was asked to do the entire ACA carbon accounting together with another colleague. My role was to support my colleague in data gathering and organisation. However, I soon found out that in order for this process to go smoothly, I needed to take a bit more control and keep a clear overview of progress. This resulted in me chairing weekly meetings with my colleague to check in on what data we still needed and what department or external source we needed to collect it from. Though this was not the initial approach for the carbon accounting for 2021, it did teach me a lot about the different elements of airport carbon accounting and the internal organisation between the various departments. Due to the importance of clear documentation and justification of the data (so that auditors can easily refer back to how data was gathered), I spent a relatively large portion of my time organising data in Microsoft Excel. Examples are organising and calculating totals of electricity and gas data as well as vehicle fuel and kerosene data. Most importantly, it has taught me the different components of what makes up a carbon footprint of an airport, which also gave me insights into where the most significant improvements in carbon reduction could be realized and how that relates to the Sustainability Strategy of Rotterdam The Hague Airport.

Another project I have been actively involved in is called Fly on SAF and can be seen as fitting into the theme of Sustainable Aviation. This is an initiative in collaboration with SkyNRG and CHOOOSE. SkyNRG is a Dutch company specialised in Sustainable Aviation Fuel production and distribution to airlines around the world (SkyNRG, n.d.). CHOOOSE is a Norwegian company offering digital platforms to help accelerate the implementation of climate solutions (CHOOOSE, n.d.). With the Fly on SAF initiative, passengers can buy Sustainable Aviation Fuel¹ for their flight according to the book & claim-system, meaning that bought fuel is not used for the actual flight of the passenger, but tanked close to one of the production sites in the world (same system as green electricity). At first I was quite sceptical of this Fly on SAF initiative, due to the potential of some people justifying their excessive travel behaviour by buying sustainable aviation fuel. In other words, I was not convinced how this innovative could make a real positive impact on making aviation more sustainable. However, I soon learned from my supervisor Michelle that Sustainable Aviation Fuel is a feasible short- to mid-term solution to reduce carbon emissions in aviation. In order to increase the portion of SAF used by airlines, there needs to be a market demand. Imaginably, SAF is more expensive than fossil kerosene. This Fly on SAF initiative helps bridging the gap between the price of fossil kerosene and SAF, leading to a larger demand (and therefore supply) of SAF. It also leads to passengers having the option to contribute to making aviation more sustainable, because they are in fact willing to do their part once they are presented with trusted solutions. This leads me to the next project I was involved in.

In collaboration with the department of Commerce, I was involved in developing a sustainable passenger journey. Providing the ultimate passenger experience is very important to RTHA. However, RTHA believes that making passengers aware of sustainability and offering them sustainable choices helps in the transition towards sustainable aviation. Therefore, RTHA is developing a sustainable passenger journey. In my role as intern, I helped brainstorming about possible ideas to offer sustainable options to the passenger at different touchpoints; from their home to checking-in their flight to boarding the plane. This was a learning experience for me in that it gave me insights into the world of passenger/customer experience and commerce, and it showed me how to combine the two with sustainability.

Moreover, I helped with the sustainability reporting towards Amsterdam Airport Schiphol. Each quarter of the year, RTHA reports on progress made on the four themes of the Sustainability Strategy. This entails checking in with the different departments on the various sub actions of the sustainability Roadmap and assessing whether they are on schedule. This helps in keeping the overview of all activities relating to sustainability, ranging from the building of the solar park to the amount of gas connections disconnected. At the end of 2021, I made a year overview of the sustainability progress made in 2021.

Besides the projects and activities I was involved in as described above, there were often times ad hoc tasks and other actions I was involved in. Examples are helping the communications department with creating sustainability content, for example for the Fly on SAF initiative, the sustainability webpage, as well as COP26 (Appendix C and D). This has shown me that communicating about sustainability requires a lot of attention and care in order to tell the right story and avoid greenwashing. I also made a presentation about what to do with the remaining electricity that will be produced by the solar park that was to be presented to the board of directors. Furthermore, I was asked to take minutes during meetings of the board of directors and during the director and manager teams meeting. I also helped with an ISO audit to ensure all went well and attended meetings with a start-up company and a local environmental initiative. In addition, I was involved in meetings about creating sustainability criteria in commercial contracts with airport partners. Every month, I also attended the monthly Corporate Responsibility meetings with the Dutch airports of Royal Schiphol Group. It was always very interesting to learn about the most recent developments regarding sustainability at the different airports. I also visited the Rotterdam The Hague Innovation Airport Foundation from time to time to learn about their actions, future innovations and partnerships. Moreover, I was involved in seeking ways to improve data on waste flows, but my role was limited due to the need

¹ Find the Fly on SAF tool here: <https://www.rotterdamthehagueairport.nl/luchthaven-en-ik/organisatie/duurzaamheid/flyonsaf/>

for a new waste contract which is handled by a different department. I also did some fact-finding regarding the sustainability of batteries of electric vehicles and solar panels – an issue RTHA might need to adopt in its Sustainability Strategy (Appendix D). I also researched the political actors and stakeholders in the region that are relevant to RTHA in light of the Airport Decree process. Lastly, I attended two conferences; one conference was about new policies regarding corporate travelling at a number of large Dutch corporations (Anders Reizen coalition) and the other conference was the Aviation Management Conference organized by students of Amsterdam University of Applied Sciences – at which I got the opportunity to talk about the future of employment in the aviation industry (Appendix B).

Internship evaluation

After interning more than 560 hours at Rotterdam The Hague Airport, I look back with great satisfaction, fulfilment, and pride. For my internship, I have set myself a number of personal goals I wished to accomplish. I think I have managed to achieve most of them to a large extent. In this section, I will reflect more on my personal goals and how my experiences at RTHA relate to my time studying Global Responsibility & Leadership.

Reflection on personal goals

1. Learn about sustainability and how it is dealt with in a practical setting such as at Rotterdam The Hague Airport.

Throughout my internship, I have followed along closely with my supervisor, who is the sustainability manager at RTHA. This has allowed me to explore the many different elements of sustainability according to the Sustainability Strategy and Roadmap. Not only have I learned about the different elements of sustainability itself, I have also gotten to understand the different parts of the aviation industry as a whole and the potential mitigation impacts that could be made within the industry. Examples are the actual flying itself, but also the ground handling processes (e.g. baggage handling, airplane power supply, airplane taxiing, passenger transportation between the terminal and the airplane), and airport processes within the terminal (energy use, material and waste handling). Improving sustainability in the aviation industry goes beyond the mere reduction of airplane emissions – it is a challenge that starts from the moment the passenger is on their way to the airport until they reach their destination. Taking on multiple approaches is, therefore, most productive in order to have a holistic understanding of the different ways sustainability could be improved throughout the entire industry. Of course, technical solutions contribute to a large extent to the transition towards more sustainable aviation, with emerging technologies such as Sustainable Aviation Fuels and new airplane technologies, such as hydrogen and electric powered airplanes, as well as aerodynamic innovations. In addition, commercial stimulators and incentives play an important role as well, ranging from sustainability criteria in commercial contracts of retail and food-and-beverage partners to incentives for passengers to make more sustainable choices (e.g. priority boarding when buying Sustainable Aviation Fuel) to airport fees for airlines (e.g. airline with lower-emission fleet pays fewer airport fees). Regulatory means are also ways to increase the sustainability of aviation, for example by improving air space management to optimize flying routes and landing and take-off cycles so that airplanes fly as efficiently as possible. Besides the efforts of the aviation industry itself to become more sustainable, governmental regulation could play an important role as well. Especially governmental stimulation of, for example, the global market of Sustainable Aviation Fuel would help enormously in reducing carbon emissions on the short term. I have learned that such measures – measures that productively and actively help the aviation industry to transition towards a higher level of sustainability – are likely to be most

effective. Sustainability awareness and behavioural stimulations could also play an important role in the transition towards sustainable aviation. In this regard, stimulating passengers to make sustainable choices during their travels could not only already make a direct impact, it could also raise awareness about the larger picture of sustainability in aviation – allowing passengers to take responsible and sustainable choices (e.g. taking public transport to travel to the airport, buying Sustainable Aviation Fuel, being conscious of the reason they travel and their travel behaviour in general, etc.). In other words, sustainability in the aviation industry needs to be handled using a holistic approach with a broad, simultaneous focus on the many different opportunities to transition towards more sustainable aviation.

2. Challenge my own views on sustainability and allow myself to be open to other perspectives.

While looking for potential internships, I had never thought of doing an internship at an airport – mainly due to the societal discourse about the aviation industry and its negative sustainability reputation. However, when offered the opportunity, I was very enthusiastic about taking on the challenge and step outside of my comfort zone. This required me to be open-minded in order to understand the different ways in which the aviation industry is already dealing with sustainability. I did sometimes find myself in situations in which I questioned whether I was perhaps too caught up in the world of aviation, potentially neglecting my own values and views, but allowing myself to be open to unfamiliar views on sustainability has taught me to take on a solution-based approach to explore new opportunities – as opposed to only seeing potential negative aspects and remaining inside that train of thought. Overall, this experience has taught me that it is best to seek sustainability opportunities, ones that are even commercially viable, big and small – instead of letting the complexity of the challenge be dominant, leading to no improvement or actions at all.

3. Understand how an airport such as RTHA interacts with stakeholders.

Rotterdam The Hague Airport is directly involved with the region, in that it serves regional passengers, corporations, governments, and society as a whole (e.g. by facilitating air emergency services). However, some groups such as local citizens living in the direct surroundings of the airport may experience hinderance by air traffic. Therefore, it is important to remain in contact with the local community to ensure a balanced living environment. As RTHA connects the region of Rotterdam and The Hague with other parts of Europe, there are many stakeholders. Having observed the process of creating a preferred scenario for a new Airport Decree, I have gained valuable insights into the relationships and dynamics between RTHA and its stakeholders.

4. Understand the role of (international) institutions, legislation, and initiatives in the aviation industry and the role of governments in RTHA's operations.

Throughout my internship I have been introduced to numerous institutions related to the international aviation industry, such as the United Nations International Civil Aviation Organisation (ICAO) and Airports Council International (ACI). ICAO facilitates global aviation policies and standards on behalf of its representative UN Member States, though it holds no legal authority (ICAO, n.d.). ACI is a an international membership organization representing (mostly) European airports and works closely with the European Union and ICAO (ACI Europe, n.d.). In addition, I have learned about the Chicago Convention, an international treaty signed in 1944 by 50+ nations that established set principles for peaceful global aviation and led to the formation of ICAO, which oversees the convention (ICAO, n.d.). However, due to the nature of my work at RTHA, I have not engaged with these matters in detail. Furthermore, I have been introduced to initiatives especially relating to sustainability, such as the Duurzame Luchtvaarttafel (a coalition created by and consisting of Dutch industry partners who have agreed on sustainability targets to reduce carbon emissions to zero; Duurzame Luchtvaarttafel, n.d.) and the Smart and Sustainable action plan (an action plan codeveloped by Dutch industry partners to transition towards more sustainable aviation; Air Transport Netherlands, 2018). In terms of governance, I have learned what the role is of the national government, for example the Ministry of Infrastructure and Water Management as RTHA's operational authority, as well as provincial and municipal governments in the region. Especially observing the process regarding a new Airport Decree has been very interesting and allowed me to understand the different dynamics between these governments and RTHA. It has shown me the roles of these governments relating to, for example, permits, regulations, and authorizations.

5. Improve my social and digital skills in professional settings.

This internship was the first time I had worked in a professional corporate organisation. Throughout my internship, I have attended many meetings and had many interactions with colleagues. Looking back on my time as an intern, I

think I gained valuable skills that enabled me to effectively express myself as a professional individual. By taking minutes during meetings with the board of directors, I have both improved my minute-taking skills and learned how board of directors' meetings work. Furthermore, I have worked a lot with Microsoft PowerPoint and Excel during my internship. Before my internship, I had not worked with Microsoft Excel a lot yet, so working with data for, for example, carbon accounting, has made me quite confident operating Excel. I now see it as a useful tool I will likely use in the rest of my career.

6. Use my internship experience to help myself in choosing the next steps in my education.

Having gained such a large amount of practical experience during my internship, I have learned many things I would have probably not been able to learn as much in university. Learning in such a practical setting has been a refreshing and inspiring experience and has triggered new interests I would like to explore in the future. My interests in mobility and sustainability have been boosted, especially due to the exciting dynamics of working at an airport. Business strategy is also a topic that I have found increasingly interesting, it is something I had no experience with before my internship. These topics – sustainable mobility, business strategy, as well as governance – are topics I would like to further explore throughout the rest of my studies in my bachelor's and future master's degree.

My internship experience relating to the Global Responsibility & Leadership program

The courses I have completed until now have proven very useful throughout my internship, especially courses from the Energy side track. They have given me a broad understanding of sustainability and the sustainable energy transition, which I have managed to deepen after having completed my internship. One thing that stands out to me personally, is that within the professional industry, sustainability is still talked about following the efficiency narrative and not so much as a part of social practice. However, as I have explained, sustainability in the aviation industry is increasingly being perceived as a holistic, multi-faceted challenge that requires a broad, solution-based, and interdisciplinary approach. This fits very well with my education in the Global Responsibility & Leadership programme. Therefore, I hope to have effectively contributed to the development of sustainability projects and efforts at Rotterdam The Hague Airport, and to have been of support to my supervisor Michelle Samson.

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Appendices

The following appendices are documents I have created or contributed to during my internship at Rotterdam The Hague Airport.



Mobiliteitscijfers van RTHA partners

17



Airport Carbon Accreditation



- Airport Carbon Accreditation is een wereldwijd programma dat het koolstofbeheer van luchthavens onafhankelijk beoordeelt en erkent op basis van de inspanningen om CO₂-uitstoot te verminderen. RTHA is gecertificeerd met het allerhoogste niveau: Level 4+.
- De CO₂-voetafdruk kan verdeeld worden in Scope 1, Scope 2 en Scope 3. CO₂-uitstoot door directe activiteiten van RTHA zijn verwerkt in Scope 1 en 2. CO₂-uitstoot door andere bronnen gerelateerd aan activiteiten van RTHA zijn verwerkt in Scope 3.
- De landzijdige mobiliteit is een onderdeel van de CO₂-uitstoot behorende tot Scope 3. Het woon-werkverkeer van de partners van RTHA hoort hier ook bij.
- RTHA heeft de doelstelling om in 2045 net-zero te opereren, waarbij CO₂-uitstoot behorende tot Scope 3 een grote rol speelt. Elke 3 jaar vindt er een audit plaats om te controleren of RTHA goed op weg is om deze doelstelling te behalen.

18

Carbon management



Rotterdam The Hague Airport is world's first to achieve carbon accreditation straight in at new highest level

08 July 2021

Rotterdam The Hague Airport (RTHA) in the Netherlands has achieved Level 4+ 'Transition' of Airport Carbon Accreditation, the only global carbon standard for airports. The successful first-time accreditation at the highest level of the renowned CO2 reduction programme is a worldwide first and a testament to RTHA's exceptional carbon management strategy, fully aligned with global climate goals.

Attaining Level 4+ represents a step change in the carbon management of an airport, requiring setup of a long-term goal and strategy oriented towards absolute emissions reductions, including an emissions trajectory and interim milestones. RTHA's actions to realise tangible CO2 emissions reductions of its own emissions are now aligned with the Paris Agreement (global warming limited to below 2°C and ideally 1.5°C). The airport has also included broader emissions in its carbon footprint that include all the significant operational sources on- and off-site. Furthermore, it has demonstrated evidence of actively engaging and leading its stakeholders towards delivering emissions reductions.

Amongst other activities, the airport's actions include investment in 100% renewable energy powering their terminal and buildings, on-site solar power generation and a new contract for airport vehicles in 2021 with stringent sustainability requirements. The foundation Rotterdam The Hague Innovation Airport (RHIA) is also working with authorities, business and knowledge institutes to stimulate and trial innovations. Finally, the airport has compensated for residual emissions with CDM GOLD STANDARD credits which will provide clean sustainable electricity to local grid in rural India.



Benodigde data

- Woon-werkverkeer van alle partners van RTHA, te verstaan bedrijven met een relatie met RTHA of die panden huren van RTHA.
- Data van het operationele jaar 2021. Dit is de periode van 1-11-2020 tot en met 31-10-2021.
- Vervoersmiddelen kunnen als volgt gecategoriseerd worden:
 - Auto
 - Openbaar vervoer
 - Fiets
 - Motor
- De gereisde kilometers per vervoersmiddel kunnen bij elkaar opgeteld worden. Persoonlijke gegevens worden hierdoor beschermd en zijn onherleidbaar. Er wordt daardoor voldaan aan de AVG privacywetgeving.



Traffic Type	Vehicle Type	Total Distance of all vehicles During Entire Year	Unit
Airport Operator Staff Vehicle	Car		veh-km
	Light Duty Vehicle/SUV/truck/van		veh-km
	Motorcycle		veh-km
Tenant Staff Vehicle	Car		veh-km
	Light Duty Vehicle/SUV/truck/van		veh-km
Visitor	Car		veh-km
	Delivery Trucks/Vans		veh-km
	Motorcycle		veh-km
Public	Passenger Car/Taxi		veh-km
	Passenger Light Duty Vehicles		veh-km
	Passenger Motorcycle		veh-km
	Shuttle Bus (<20 seats)		veh-km
	Bus (>20 seats)		veh-km
	Train / Line Haul / Intercity		veh-km
	Schepen/Metro/light Rail/Railcars Ferry (maritime vessel)		vessel-km

For all road vehicles, estimate percentage of different fuel types:				
Fuel Type	Cars	Light Duty Vehicles	Hotel Shared Shuttles	Commuter Bus
Gasoline				
Diesel				
Natural Gas				
Gasoline Hybrid				
Electric cars	0.00%	0.00%	0.00%	0.00%
	< 100% totaal	< 100% totaal	< 100% totaal	< 100% totaal



02

Future Employment in Aviation

19



Sustainable transition

- Need for decarbonisation of the economy and transition towards sustainable planet to benefit the future
- EU targets: EU climate neutral in 2050, emissions in 2030 55% lower
- Interplay between all actors in aviation industry is needed for sustainable transition
- Aviation is a global industry

20

Integral solutions



- Change makers need to understand the complexity and connectedness of the challenges at hand
- United Nations Sustainable Development Goals
- Connect UN SDGs to corporate practices
- Need for flexibility and cross-collaboration between actors in the entire aviation industry

21



Future workforce

- Millennials and Gen Z people take on a value-driven approach to their career
- Interested in topics such as sustainability and climate change
- Aviation industry needs people who are willing to address challenges and take on an integral, solution-based approach

22



RTHA stimuleert nieuw initiatief met duurzame luchtvaartbrandstof

27 oktober 2021

Pionier op het gebied van duurzame luchtvaartbrandstof SkyNRG kondigt een nauwe samenwerking aan met het Noorse klimaattechnologiebedrijf CHOOOSE om de CO₂-uitstoot van vliegen te verminderen. De organisaties lanceren een oplossing waarbij reizigers duurzamer kunnen vliegen door fossiele brandstof te vervangen door duurzame luchtvaartbrandstof (in het Engels: SAF – Sustainable Aviation Fuel). De oplossing heet dan ook "Fly on SAF".

Het werkt zo. Reizigers die een ticket boeken bij een organisatie die de oplossing aanbiedt, kunnen de CO₂-voetafdruk van hun vlucht gemakkelijk verlagen door fossiele brandstof te vervangen door SAF. SAF wordt gemaakt van duurzame materialen, zoals gebruikt frituurvet en landbouwafval, wat zorgt voor een CO₂ uitstoot die 80% lager is in vergelijking met fossiele brandstoffen. SkyNRG en CHOOOSE hebben Fly on SAF speciaal ontworpen voor luchtvaartmaatschappijen en reisorganisaties en willen hiermee bijdragen aan een duurzamere klantervaring voor hun passagiers.

Ook Rotterdam The Hague Airport heeft toegezegd Fly on SAF te gaan inzetten, samen met de buitenlandse luchthavens Heathrow Airport en Stuttgart Airport.

"Verduurzaming van groot belang"

Volgens adviseur Strategie en Duurzaamheid van Rotterdam The Hague Airport Michelle Samson, stimuleert de regionale luchthaven de Fly on SAF oplossing maar wat graag. "Voor ons is verduurzaming van de luchtvaart van groot belang. En binnen de visie van de Schiphol Group past de oplossing naadloos bij de wens om tot de meest duurzame luchthavens in de wereld te behoren. Als sector zijn we in transitie om CO₂-emissies te reduceren en SAF is hierin de meest effectieve maatregel op korte termijn. SAF speelt dus een cruciale rol in de transitie naar duurzame luchtvaart." Volgens Samson is de markt van duurzame luchtvaartbrandstoffen nu nog niet groot genoeg om overal ter wereld fossiele brandstoffen te vervangen met een duurzamer alternatief. "Daarom willen we als luchthaven graag meewerken om deze markt te ontwikkelen. We willen duurzame luchtvaartbrandstof op grotere schaal mogelijk maken. Hierdoor kunnen meer reizigers in de toekomst hun CO₂-voetafdruk verlagen". Tegelijkertijd wordt de markt voor SAF versterkt. Dat is een goed begin voor een duurzamere toekomst."

SkyNRG is optimistisch over de aankondiging van Fly On SAF. Managing Director Theye Veen van SkyNRG: "Fly on SAF is het resultaat van een succesvolle partnership die demonstreert hoe samenwerking innovatie kan ondersteunen. Ons doel is de manier waarop de wereld vliegt te veranderen en klimaatactie voor iedereen toegankelijk te maken. We moeten binnen de reisbranche samenwerken om het bewustzijn en de adoptie van duurzamere manieren van reizen te verhogen. Daarom nodigen we de branche uit om mee te doen en onze collectieve impact te vergroten."

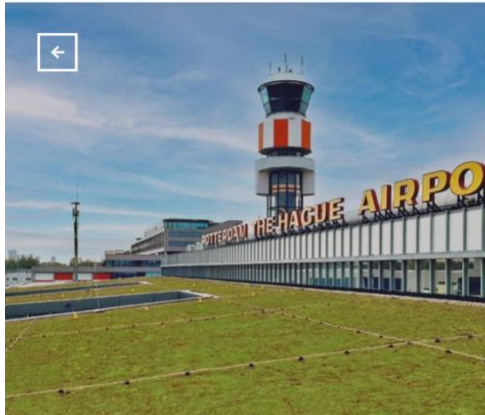
CO₂ reductie claimen

Het Fly on SAF programma werkt volgens het "Book & Claim" - principe. Het is een veelgebruikt systeem waarbij de SAF niet daadwerkelijk wordt geleverd aan het vliegtuig van de persoon die heeft bijgedragen aan de aankoop, maar wordt geleverd aan het brandstofsysteem van een luchthaven in de buurt van de SAF-productiefaciliteit. De SAF wordt vervolgens geleverd en de vermindering van de CO₂-uitstoot wordt "geboekt" aan de persoon die heeft bijgedragen aan de aankoop. Alleen die persoon kan de CO₂-reductie "claimen". Deze manier van werken heeft belangrijke voordelen. Het minimaliseert zo namelijk de CO₂-uitstoot en transportkosten, door het brandstoftransport zo laag mogelijk te houden. Dit systeem wordt ook veel gebruikt bij de verkoop van groene stroom. Groene stroom wordt toegevoegd aan het elektriciteitsnet door de persoon die de aankoop doet, zonder dat deze groene stroom bij die specifieke persoon thuis wordt afgeleverd. Hierdoor wordt de algehele duurzaamheid van het net verbeterd.

Meer informatie is te vinden op de website van flyonsaf.com.

Link to article: <https://www.rotterdamthehaqueairport.nl/luchthaven-en-ik/organisatie/nieuws/item/nauwe-samenwerking-aan-met-het-noorse-klimaattechnologiebedrijf-chooose/>

Appendix D: communication content COP26



COP26: Duurzaamheid is voor RTHA van groot belang

2 november 2021

Nog tot en met 12 november komen wereldleiders van alle landen uit de Verenigde Naties in Glasgow samen voor de klimaatop COP26. Het doel van deze klimaatop is het versnellen van klimaatactie om de doelstellingen van het Klimaatakkoord van Parijs te behalen en de opwarming van de aarde beperken tot 1,5 graden Celsius. Het recente rapport van het IPCC (Intergovernmental Panel on Climate Change) heeft ook laten zien dat klimaatactie hard nodig is. Rotterdam The Hague Airport (RTHA) volgt de klimaatop nauwlettend, want duurzaamheid is voor ons vliegveld van groot belang. RTHA heeft ambitieuze doelstellingen om klimaatverandering tegen te gaan.

Onze luchthaven is al CO₂-neutraal en in 2030 willen wij een emissievrije luchthaven zijn. De uitstoot van CO₂ grondgebonden operatie wordt teruggebracht naar nul. In 2050 streven wij naar een CO₂-neutrale luchtvaart.

Duurzaamheid op RTHA

Met de bouw van het zonnepark met ruim 34000+ zonnepanelen (met een geschatte opbrengst van 14 GWh per jaar) langs de start- en landingsbaan zorgen wij ervoor dat we lokale groene stroom gebruiken. Onze vernieuwde vertrekhal en brandweerkazerne zijn gasloos. En natuurlijk daglicht zorgt voor lichte ruimtes. Beide gebouwen hebben een mos-sedum dak. Wij maken ook gebruik van een warmte- en koudeopslag installatie die onze gebouwen op een duurzame manier verwarmt en koelt. Hierdoor maken we efficiënt gebruik van energie en wat we gebruiken is duurzaam en lokaal opgewekt. Elektrische bussen brengen onze reizigers van en naar het vliegtuig. Steeds meer voertuigen zijn elektrisch en we testen momenteel met elektrisch afhandelingsmaterieel. Hierdoor wordt de CO₂ uitstoot verminderd en verbetert de luchtkwaliteit.

Vliegen duurzamer maken

Naast het verduurzamen van onze activiteiten stimuleren wij ook het verduurzamen van de luchtvaart in zijn geheel Samen met de stichting RHIA en haar partners wordt er hard gewerkt aan elektrisch en waterstof aangedreven vliegen, worden nieuwe opleidingen mogelijk gemaakt door de Rotterdam The Hague Airport Campus. En vindt steeds meer digitalisering op en rondom de luchthaven plaats. De RHIA-partners zorgt ervoor dat duurzame innovaties daadwerkelijk tot stand kunnen komen.

Het eerste elektrische vliegtuig van Nederland is gestationeerd op ons vliegveld, waarmee tests worden uitgevoerd om elektrisch vliegen in de toekomst op grotere schaal te realiseren. De eerste vlucht op waterstof is gepland in 2024 tussen Rotterdam en Londen.

Een korte termijn oplossing om de CO₂ uitstoot van vliegen te verminderen is het gebruik van duurzame vliegtuigbrandstof.

RTHA heeft een samenwerking met SkyNRG en Chooseo aangekondigd waardoor reizigers duurzame brandstof kunnen gebruiken voor hun vlucht die tot 80% minder CO₂ uitstoot. Ook investeert RTHA in onderzoek en de realisatie van een pilot fabriek voor synthetische kerosine, waarbij CO₂ uit de lucht gebruikt wordt om brandstof te produceren.

Meer lezen over hoe wij ons inzetten om onze luchthaven en de luchtvaart te verduurzamen? Neem dan een kijkje [op onze website](#).

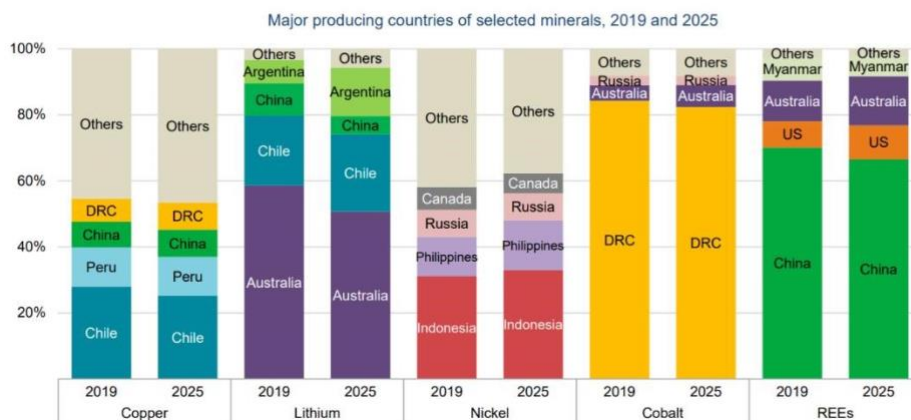
Link to article:

<https://www.rotterdamthehagueairport.nl/luchthaven-en-ik/organisatie/nieuws/item/cop26-duurzaamheid-is-voor-rtha-van-groot-belang/>

Appendix E: Fact-finding on sustainability of EV batteries and solar panels
Batterijen van elektrische voertuigen

Elektrische voertuigen gebruiken circa zes keer zo veel schaarse aardmaterialen als conventionele voertuigen. De meest gebruikte schaarse aardmaterialen zijn grafiet, nikkel, koper, lithium, mangaan en kobalt. De vraag naar EV batterijen kan tussen 2020 en 2040 toenemen met factor 40, waarbij de vraag naar schaarse aardmaterialen kan toenemen met factor 30 als de klimaatdoelen van Parijs behaald worden. In de huidige situatie zal de vraag naar EV batterijen toenemen met factor 11 en de vraag naar schaarse aardmaterialen met factor 9. Het winnen van schaarse aardmaterialen gebeurt voornamelijk in regio's met zwakke overheden en hoge emissies. Er zijn dus grote risico's voor politieke instabiliteit, geopolitieke conflicten en mogelijke exportbeperkingen. Ook wordt er erg veel water gebruikt bij het winnen van de materialen. Het aanbod van schaarse aardmaterialen is dus fragiel en loopt verschillende risico's.

Geographical concentration: Analysis of project pipelines indicates that, in most cases, the geographical concentration of production is unlikely to change in the near term



De levensduur van accu's in elektrische auto's is langer dan gedacht. Hierdoor zijn er nog weinig echt afgedankte accu's. Overigens kunnen accu's ook goed gebruikt worden in een tweede leven, bijvoorbeeld voor de opslag van zonne-energie. De International Energy Agency (IEA) schat dat er jaarlijks capaciteit is om 180.000 ton aan EV-accu's te recyclen. Ter vergelijking, het aantal verkochte EVs in 2019 zal zorgen voor 500.000 ton accuafval. De IEA denkt dat in 2040 12% van de benodigde materialen voor de productie van EVs via recycling herwonnen kan worden. Een probleem met het recyclen van afgedankte accu's is dat gerecyclede materialen zoals lithium vaak niet van voldoende kwaliteit zijn om er accu's van te maken. Een potentiële manier om dit probleem te voorkomen is directe recycling, waarbij materialen niet individueel gescheiden hoeven te worden.

De Europese Unie heeft al de eis om 50% van een accu te recyclen, maar daar kom je al snel aan als je de metalen en kunststof beschermstoffen hergebruikt. De Europese Commissie heeft beleid gemaakt om de toelevering van bepaalde materialen betrouwbaarder en duurzamer te maken met als doel het beperken van de milieu-impact van batterijen.

Box 3.5. EU Sustainable Batteries Regulation

In line with the European Union's circular economy and European Battery Alliance objectives, the [proposed regulation](#) addresses the social, economic and environmental issues related to all types of batteries, including those imported into the bloc. The proposal covers the entire battery life cycle, and directly applies to lithium, cobalt, nickel and copper supply chains. The shift from a directive to a regulation is aimed at increasing harmonisation and legal certainty by giving the instrument binding legal force in all member states. The Commission states that the regulation sets out "mandatory requirements for the greenest, safest and most sustainable batteries on this planet" (EURACTIV, 2020). It is scheduled to enter into force on 1 January 2022.

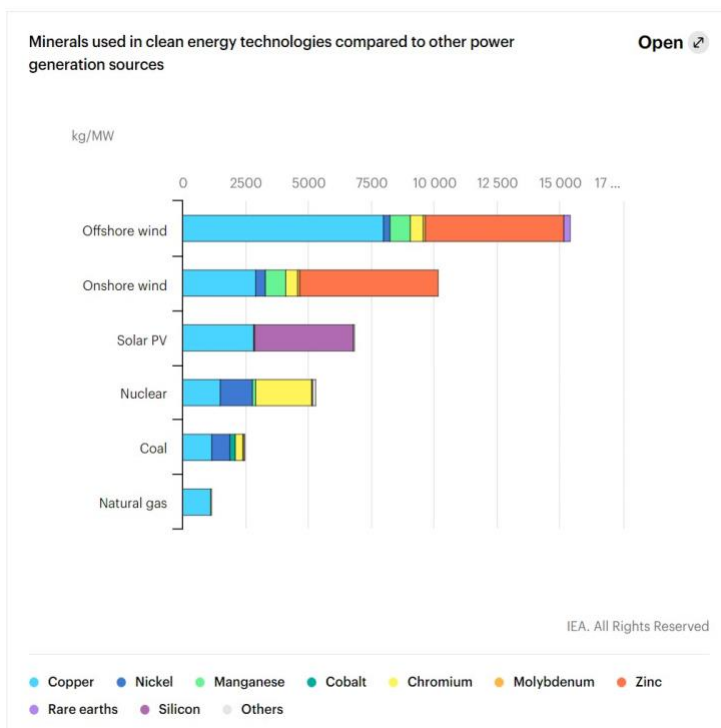
Proposals for mandatory requirements range from sustainability and safety, end-of-life management, labelling, electronic exchange of information and digital passports. The aim is to enhance separate collection of portable batteries to achieve 70% collection by 2030, against less than 50% in 2018 (EUROSTAT, 2020) and prohibit any landfilling. It also places obligations on economic operators for product requirements and supply chain due diligence. The OECD Due Diligence Guidance is incorporated into the legal instrument, ensuring that sustainable batteries do not come at the expense of responsible and sustainable supply chains (see Box 4.8).

The regulation's general objective is to mitigate the environmental impact of batteries and their effects on climate change and public health by controlling toxic substances and mandating waste management. As part of the EU Sustainable and Smart Mobility Initiative, it aims to facilitate the transition to cleaner mobility by contributing to a 90% reduction in transport-related GHG emissions by 2050. The deployment of clean batteries reduces GHG emissions while improving air quality. The proposal sets out minimum levels of recycled content (12% cobalt, 4% lithium and 4% nickel by 2030) and material recovery (90% cobalt, 90% copper, 35% lithium and 90% nickel by 2026) which will gradually increase. Batteries sold in the European Union will have to carry a carbon intensity performance label and comply with carbon footprint thresholds. The carbon footprint, recycled content and responsible sourcing will be verified by recognised third-party entities. The Commission is supporting research on batteries in line with these objectives, in particular through H2020 projects receiving approximately EUR 500 million (European Commission, 2020b).

The regulation is a critical step towards achieving both clean mobility and high penetration of renewables, ensuring a fully circular economic model. By facilitating a market for recycled products and waste, it lays the groundwork for sustainable minerals development.

Zonnepanelen

Zonnepanelen bevatten voornamelijk koper en silicium (50/50) en een klein beetje zink. De Europese WEEE regelgeving (Waste from Electrical and Electronic Equipment) stelt dat producenten en importeurs verantwoordelijk zijn voor de inzameling en verwerking van afgedankte elektrische en elektronische apparaten. In Nederland wordt dit bijgehouden door het Nationaal WEEE Register. Hier uit blijkt dat er in 2020 in Nederland ongeveer 237.000 ton nieuwe zonnepanelen op de markt zijn gebracht. In datzelfde jaar is er 771 ton afgedankte zonnepanelen ingezameld waarvan 506 ton is verwerkt. Het is niet duidelijk wat er precies onder "verwerkt" wordt verstaan. 1% van de zonnepanelen die tussen 2017 en 2019 op de markt zijn gebracht is ingezameld. Internationaal zal het cumulatief opgesteld vermogen in 2030 wereldwijd 1.600 GW zijn. De totale hoeveelheid afgedankte zonnepanelen is dan 1.7 tot 8 miljoen ton. In 2016 werd 0.1% van de totale hoeveelheid afgedankte zonnepanelen hergebruikt in nieuwe panelen. In 2030 zal dit waarschijnlijk 4-14% zijn. Dit lage percentage (evenals het lage inzamelingspercentage) komt voornamelijk door de relatief lange levensduur van zonnepanelen.



Appendix F: Internship logbook

Week	Hours	Tasks and activities
Sept 6 – Sept 10	24	This week I met my new colleagues and followed along my supervisor's meetings. I also helped writing the application for an Eco Award that RTHA applied to. I have also spent this week reading into informative documents relating to RTHA and strategy and sustainability.
Sept 13 – Sept 17	32	I met more new colleagues this week and followed more meetings. I also joined a meeting with SkyNRG to talk about a collaboration between SkyNRG and RTHA, which eventually led to the launch of the Fly on SAF tool in February 2022. I also got introduced to the process around a new Airport Decree and read more into informative documents.
Sept 20 – Sept 24	32	This week looked quite similar to last week, I met even more new colleagues and read more information about RTHA.
Sept 27 – Oct 1	32	This week I started my attempt to map the materials and waste flows at RTHA, and met with the respective colleagues. I also read into the Schiphol strategy for circularity. Furthermore, I was started preparing for an ISO audit I was asked to help organise. This week I also started mapping the mobility of RTHA partners for RTHA's carbon footprint. Finally I helped with the sustainability reporting for third quarter of 2021 and helped with preparations for the official celebratory opening of the newly renovated terminal.
Oct 4 – Oct 8	32	During the board of examiners meeting this week, I was asked to take minutes and replace my supervisor. I also had a meeting about waste flows at RTHA and read more into circular and zero waste strategy. I also helped with an ISO audit. Furthermore, I continued helping with the sustainability reporting and prepared a presentation about the solar park that is being parked next to the runway to be presented to the board of directors. I also helped the communications department with sustainability-related content and continued working on mapping the mobility of partners for RTHA's carbon footprint.
Oct 11 – Oct 15	32	This week I attended more meetings about the new Airport Decree and visit Rotterdam The Hague Innovation Airport Foundation (RHIA). I also joined a meeting about sustainability at RTHA with the Schiphol Innovation Hub and Eindhoven and Lelystad Airport. I continued working on the presentation about the solar park and helped the communications department organizing a kid's day at the airport (which eventually got cancelled due to COVID restrictions). We had another meeting with SkyNRG about the Fly on SAF tool.
Oct 18 – Oct 22	32	This week I joined the board of directors to discuss the developments around Airport Decree. I also attended a congress about sustainable travel policies at large Dutch corporations (Anders Reizen congress). Furthermore, I

		helped prepare a press release about the collaboration between RTHA and SkyNRG and attended the monthly Corporate Responsibility meeting with Schiphol. I continued working on mapping the mobility of partners and the solar park presentation.
Oct 25 – Oct 29	32	This week, I helped process the feedback of colleagues on the solar park presentation. I also replaced my supervisor in a meeting with RHIA Foundation relating to the solar park. I also met with a new colleague to discuss waste flows and circularity.
Nov 1 – Nov 5	32	This week I worked on an article about COP26 and RTHA in collaboration with the head of communication. I also was involved in an internal meeting with the communications department to explore how we would like to communicate about the Fly on SAF tool. This week, I also started efforts with another colleague to calculate the carbon footprint of RTHA for our Airport Carbon Accreditation (ACA) certificate. My supervisor and I agreed this week that looking into circularity of waste flows at this point is not useful due to lack of data, which was the first issue that needed to be tackled next by a different department. This week I also started helping with brainstorming about a sustainable passenger journey with the commercial, communications, and customer experience departments.
Nov 8 – Nov 12	15	I continued working on mapping mobility of partners and actively started to reach out to partners. I provided them with information and invited them to one of three information sessions.
Nov 15 – Nov 19	24	This week, I also continued working on mapping mobility of partners and met with my colleague to organise the data needed for our ACA certification. I also joined a meeting about the Fly on SAF tool due internal actions that still needed to be taken. Furthermore, I attended the monthly Corporate Responsibility meeting with Schiphol.
Nov 22 – Nov 26	32	I continued my work from last week regarding mobility and the ACA certificate. I also met with a new intern joining my team. Furthermore, I was involved in how to incorporate sustainability in non-aviation commercial contracts and helped prepare a presentation for a next session about a sustainable passenger journey.
Nov 29 – Dec 3	32	This week, I hosted two information sessions for RTHA's partners to provide more information about the mobility of partners and the importance to RTHA's sustainability targets. I also explained what we expected from our partners and answered their questions. I also worked on inviting more partners to an extra session. Furthermore, I met with a start-up to explore a possible collaboration between them and RTHA (in the end, we decided not to collaborate).

Dec 6 – Dec 10	32	I met with a colleague about waste and explained what the sustainability department wishes to see with regards to waste flows and circularity. Furthermore, I had a meeting with the department of Assets & Projects to talk about the sustainability of buildings and installations. I also worked on data gathering for the ACA certificate and met with a contractor to discuss their mobility, also for ACA. Lastly, I attended the end of year conference of the Duurzame Luchtvaarttafel, at which sustainability in the Dutch aviation sector was discussed.
Dec 13 – Dec 17	32	This week, I made plan with my supervisor to gather data from contractors for mobility and ACA. I also met with two colleagues to discuss electricity meter readings in light of the ACA certificate. I had another meeting for developing a sustainable passenger journey and joined a meeting about the new Airport Decree. I also attended the monthly Corporate Responsibility meeting with Schiphol.
Dec 20 – Dec 24	32	I continued my work for the ACA certificate. I also met with the organizers of the Aviation Management Conference to discuss how we would collaborate. Lastly, I attended a meeting about integrating sustainability in retail and Food&Beverage partners at RTHA.
Dec 27 – Dec 31	0	I did not work due to Christmas Holidays.
Jan 3 – Jan 7	1	I did not work due to Christmas Holidays. I did spend some time to prepare my speech for the Aviation Management Conference
Jan 10 – Jan 14	32	I met with a contractor to further discuss their mobility for ACA. I also spent time replying to emails I had missed out on during my holidays. I worked on organising data for mobility and sent out reminders to partners who had not sent their data yet. I also helped creating a marketing plan about the Fly on SAF tool and brainstormed about the sustainable passenger journey. I also participated in the Aviation Management Conference with my supervisor. Furthermore, I attended a meeting about the new Airport Decree. I also met with a local non-profit organization to explore potential collaborations (we decided not to collaborate).
Jan 17 – Jan 21	32	I met with the managers of the different departments to update the sustainability reporting of the fourth quarter of 2021. I also worked on the sustainability year review of 2021. I did some research/fact-finding on the sustainability of EV batteries and solar panels (relating to the use and recycling of rare earth materials). I also attended the monthly Corporate Responsibility meeting with Schiphol.
Jan 24 – Jan 28	32	This week I gathered more data for the ACA certificate and continued the sustainability reporting. I also wrote a content proposal for the website for the Fly on SAF tool.
Jan 31 – Feb 4	32	I finalised the sustainability reporting and year overview this week. I tackled some issues relating to the ACA

		certificate with my supervisor. I also met with the commercial department about incorporating sustainability in commercial contracts. Furthermore, I had a meeting with the parking management department to incorporate the Fly on SAF tool in RTHA's parking system. I also met with a Dutch environmental NGO. This week, I also organised data for the ACA certificate.
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Total hours worked: 608 hours