



Welcome

- 01/02/2022
- Sustainability & Innovation MAA
- NO history in Aviation
- Innovation Management
 - Petrochemical Industry
 - Start ups



Roel Ubaghs

Yankee '44

Fast Forward 77 Years.....



Maastricht Aachen Airport

Profile

- Fully owned by Province of Limburg
- MAA hosts Qatar, Turkish Airlines and Saudia on a weekly basis
- Preferred import station for flowers
- No slot restrictions
- Fire department CAT 9
- ILS CAT 3
- Runway 2.500 meters
- Opening hours: 06.00 – 23.00 CET +1
- 5 wide body full freighter stands



Maastricht Aachen Airport

Activities

- Cargo
- General Aviation (ASL)
- Pax
- Maintenance, repair & overhaul (MRO)
- Education (Aviation Competence Center)



Maastricht Aachen Airport

Facts & Figures 2021

- Regional Airport
- Primarily cargo airport
- # Employees: 220 FTE
- Turnover: approx. €25 mio
- # passengers: approx. 100.000
- # tons cargo: approx. 130.000
- # Flight movements: 12.910



The plan for today

Agenda

- What defines our level playing field: the Euregion
- Something about Politics
- Maastricht Aachen Airport Strategy: Present and Future
- Curious for your input: break-out session (afternoon)



Some context

The Euregion

Geography

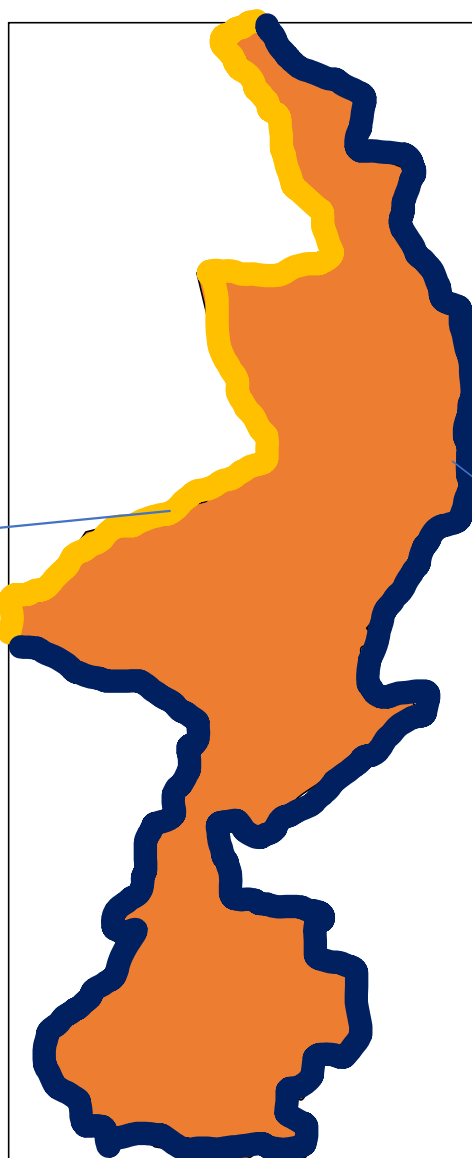
The “Euregion”



Geography

The Province of Limburg

113 km



351 km

Distances

- 15 minutes downtown Maastricht
- 10 minutes Belgian border
- 20 minutes German border
- Aachen > 40 km
- Amsterdam > 200 km
- Antwerpen > 120 km
- Brussel > 120 km
- Keulen > 110 km
- Düsseldorf > 100 km
- Luik > 40 km
- Rotterdam > 190 km



The Logistics sector in Limburg

Facts and Figures Logistics Limburg



2.060

companies



64.000

jobs



4,7 billion

GDP in Limburg



12,40 %

± 25 FTE/ha
contribution to total
employment in Limburg



The Logistics sector in Limburg

The Logistics strengths of Limburg



Central
Location



Excellent
multimodal
Connectivity



2nd largest **cargo**
airport NL



Largest **inland**
rail terminal of
the Netherlands
with **China**
connection

The Agrifood sector in Limburg

Facts and Figures Agrifood Limburg



3,900
companies



46,555
jobs



25%
Of all open field
vegetables are grown
in the Limburg
region.



€1 bln
Turnover in food
processing,
suppliers, logistics



8%
contribution to
total employment
in Limburg



€ 723 mln
Turnover in fruit,
vegetables, flowers
and plants



The second-largest horticultural region in
Europe is centered around North Limburg.



The Agrifood sector in Limburg

Strong AgriFood sector in Limburg

- Central hub located within short distance of Germany (NRW) and Belgium. Lot of potential for entrepreneurs to sell their products/ services to these markets next to the Dutch market.
- Strong primary sector
- High availability of knowledge, network and capital organisations
- Strong focus on new initiatives and innovations; entrepreneurs active in this region see Limburg as nursery of innovations
- Stimulation of attention by Brightlands Campus Greenport Venlo to specific topics such as healthy and safe food, future farming and bio-circular/ bio-based economy
- Cross-overs with other strong sectors in Limburg, such as the industry/ high-tech and logistics



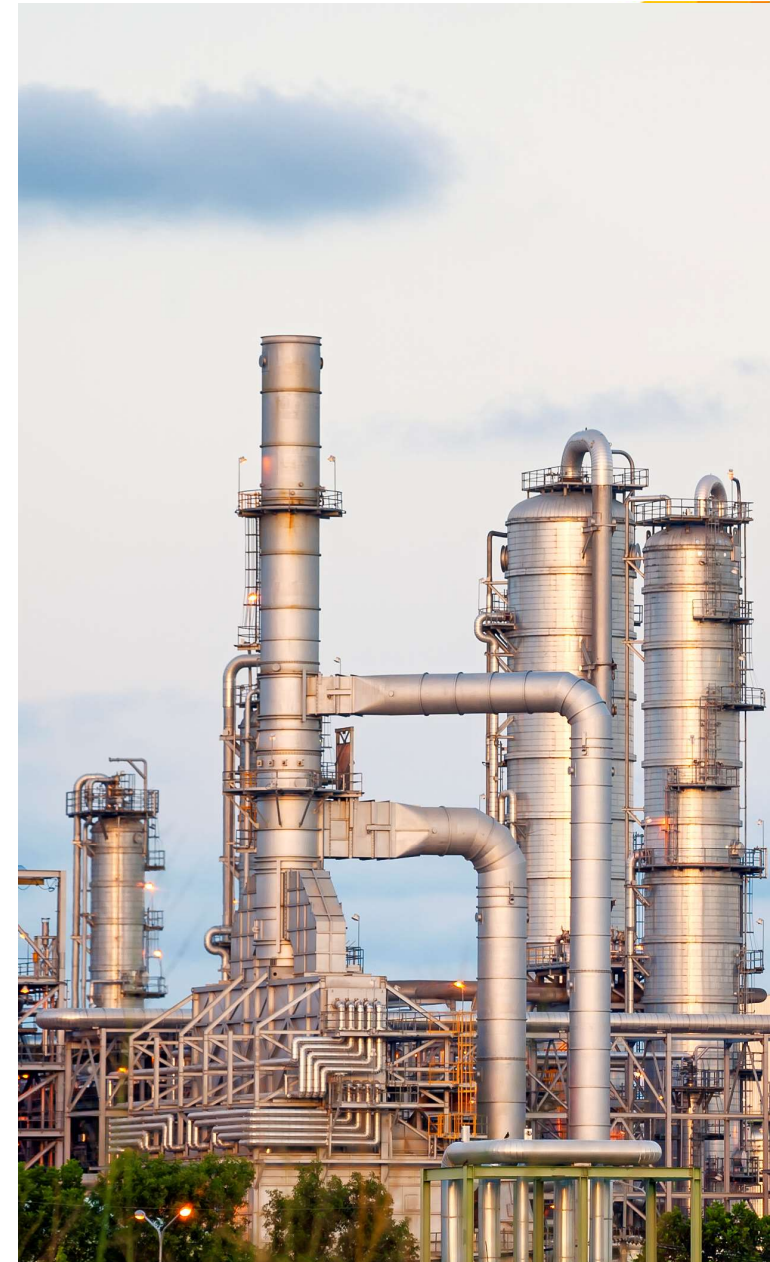
Chemicals & Materials

Large share of Limburg's economy

- Approximately 20% of Limburg's industrial employment
- Companies: DSM, SABIC, Sekisui, Celanese, OCI Nitrogen, ARLANXEO, Mitsubishi Engineering Plastics, Jindal and Mondi with Limburg-based headquarters, production and/or R&D
- Clusters: Geleen/Sittard, Heerlen/Kerkrade, Maastricht, Roermond, Venlo/Venray

Chemelot Industrial Park

- 'Hotspot' of chemicals industry in Limburg
- One of the largest industrial sites in Europe
- Sabic: two naphtha crackers and several polymerization plants for the production of polyethylene & polypropylene
- Major hub for pipelines that originate in Antwerp and Rotterdam and continue into Germany



Chemicals & Materials

Brightlands Chemelot Campus

- Open innovation concept for chemicals and materials research
- Unique community combining basic research, applied research, value creation and education
- Ambition: to develop into the primary European site for advanced materials in automotive, biomaterials, and packaging
- Focus on the total value chain, for developing sustainable and efficient production processes and products

Sustainable
technologies

High-performance
materials

Bio-based
chemicals and
materials

Biomedical
materials



Futuristic Scenario's

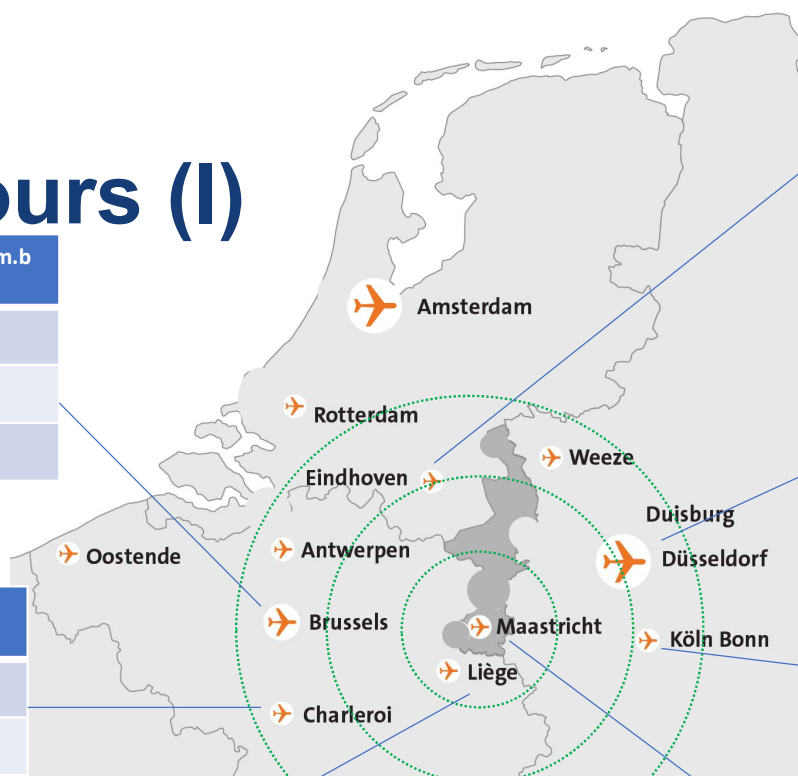
Politics

Our neighbours (I)

BRUSSELS- 2019	Mobilitbelgium.be 2019
# Flights (arrivals+departures):	234460
# PAX	26,36 mln pax
# Cargo	500703 ton

CHARLEROI - 2019	Mobilitbelgium.be 2019
# Flights (arrivals+departures):	82050
# PAX	8,23 mln pax
# Cargo	388 ton

LUIK - 2019	Mobilitbelgium.be 2019
# Flights (arrivals+departures):	39879
# PAX	0,17 mln pax
# Cargo	902047 ton



EINDHOVEN - 2019	CBS data 2020
# Flights (arrivals+departures):	40209
# PAX	6,78 mln pax
# Cargo	0 ton


DÜSSELDORF – 2018/2019	de.statistica.com
# Flights (arrivals+departures):	218818 (2018)
# PAX	25,50 mln pax
# Cargo	96000 ton (2018)

KÖLN - BONN – 2018/ 2019	de.statistica.com
# Flights (arrivals+departures):	131000 (2019)
# PAX	12,35 mln pax
# Cargo	844000 ton (2018)


MAASTRICHT - 2019	CBS data 2020
# Flights (arrivals+departures):	7134
# PAX	0,43 mln pax
# Cargo	108831 ton

Our neighbours (II)





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Stop vlieghinder boven ons Zuid-Limburg!

[Home](#)

AIR

31 maart 2022 was een historische dag. Francine Houben, een internationaal gerenommeerde architecte van Limburgse oorsprong, presenteerde de mogelijkheden van alternatieve gebiedsontwikkeling van het luchthaventerrein na sluiting MAA. [Informatie over die dag](#)

Met dit symposium is een nieuwe fase ingetreden en is de **Alliantie pleinAIR Maastricht** van start gegaan op een nieuwe [website](#). Hiermee wordt voorliggende website van de Alliantie Tegen Uitbreiding MAA slapend.



Social Cost-Benefit Analysis (2021)

“the benefits for freight traffic mainly land outside the province...”

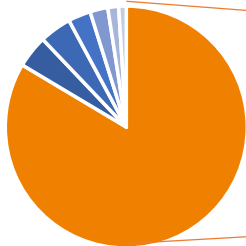
“... and the nuisance lands within the province”
– SCBA 2022

→ 4 scenario's



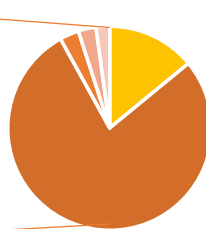
1. Scenario: utilize maximum capacity
2. Scenario: environmentally aware and sustainable airport
3. Scenario: Innovative and Sustainable aviation
4. Scenario: alternative civil area development

Import Cargo per Destination Country



■ The Netherlands ■ Germany
■ Belgium ■ United Kingdom
■ France ■ Luxembourg
■ Other countries

Import Cargo the Netherlands per Province

















■ Limburg
■ Noord-Holland
■ Noord-Brabant
■ Zuid-Holland
■ Overig















Scenario's

				
	Internationale oriëntatie	Internationale oriëntatie	Europese oriëntatie	Regionale oriëntatie
	Vracht & passagiers <ul style="list-style-type: none"> • 1,1 miljoen pax p/j • 330 duizend ton vracht p/j 	Focus op vracht <ul style="list-style-type: none"> • ~ 500.000 pax p/j • ~ 227.000 ton vracht p/j 	Zakelijk verkeer <ul style="list-style-type: none"> • gelijkmatige afbouw pax fossiel • snelle(re) afbouw vracht fossiel • groeiend aandeel elektrisch 	Energie & natuur
	22.000 vliegbewegingen	11.480 vliegbewegingen	Meer vliegbewegingen door kleinere volumes (pax en vracht)	Geen vliegbewegingen
	Max. 13.400 ernstig gehinderden	Max. 5.250 ernstig gehinderden	Max. 5.250 ernstig gehinderden	Geen ernstig gehinderden
	Beperkt, o.a. vlootvernieuwing	Regionale innovatie gestimuleerd	Koploper innovatie	Innovatie gericht op energie
	Inzet Omgevingspakket	Inzet Omgevingspakket	Inzet Omgevingspakket	Geen Omgevingspakket
	2750 meter	2750 meter	2500 meter	0 meter
	Baanonderhoud nodig	Baanonderhoud nodig	Baanonderhoud nodig	Sanering baan
	6:00 – 23:00	7:00 – 23:00	7:00 – 23:00	Gesloten
	<ul style="list-style-type: none"> • Capaciteitsuitbreiding terminal tot 1,1 miljoen pax • Extra vrachtloods(en) en twee extra opstelplaatsen • Extra parkeercapaciteit 	<ul style="list-style-type: none"> • Extra vrachtloods • Twee extra opstelplaatsen 	<ul style="list-style-type: none"> • Upgrade energiesysteem • Faciliteiten voor afhandeling eCTOL/eVTOL (passagiers en cargo) 	<ul style="list-style-type: none"> • Sanering en sloop baan en gebouwen • Energie-infrastructuur aanleggen

Our preferred outcome...

			
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Because we already started...

			
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Present and Future

Transformation



Electrification ground handling operation



Electrification ground handling operation

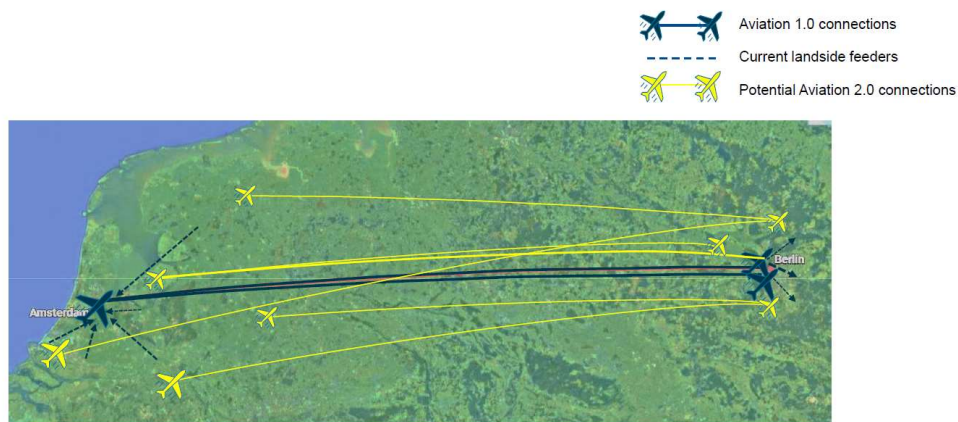
- Tuesday May 10th 2022: **First successful 100% emission free pax handling**
- Target: 100% emission free GSE in 2025
 - Cargo
 - Pax
 - Except for fire department crashtenders



Fully operational Passenger Hub function in 203X

- Depending on development of technology and market demand
- We believe in the developments of fine-meshed networks for e-Aviation

Small-scale zero-emission technology will not replace current routes but serve regional flows that are not viable with Aviation 1.0 technology



Zero-emission aviation and EV car sharing models may well become the most desirable ways of travel from a policy AND consumer point of view

Overview of key travel options in the 50 - 750 km travel range color-coded by desirability from a policy point of view by period*

	Pre-2015	2015 - 2025	Scenario post-2025?
Individual travel	Fossil fuel car travel	Fossil fuel car travel Electric car travel	Fossil fuel car travel Electric car travel (e-)car sharing/MaaS Urban Air Mobility
	Fossil fuel air travel	Fossil fuel air travel	Fossil > SAF air travel Electric air travel** Hyperloop?
	Intercity rail travel High-speed rail travel	Intercity rail travel High-speed rail travel	Intercity rail travel High-speed rail travel

* Author's own reflection on observed mobility policies and analyses of future technologies based on long standing experience in travel and transport in Europe
** Includes both battery-electric and hydrogen-electric air travel

Least desirable
Most desirable

Fully operational Passenger Hub function in 2035

- Scenario “Low” in electric aviation adaptation at MAA annually:
 - 10.000 eCTOL movements
 - 9.000 eVTOL movements
 - 1.000 eCargo movements



Self-sufficient with green energy
in 2035



E Aviation

Power Up, Silent Air Taxi



Thank You