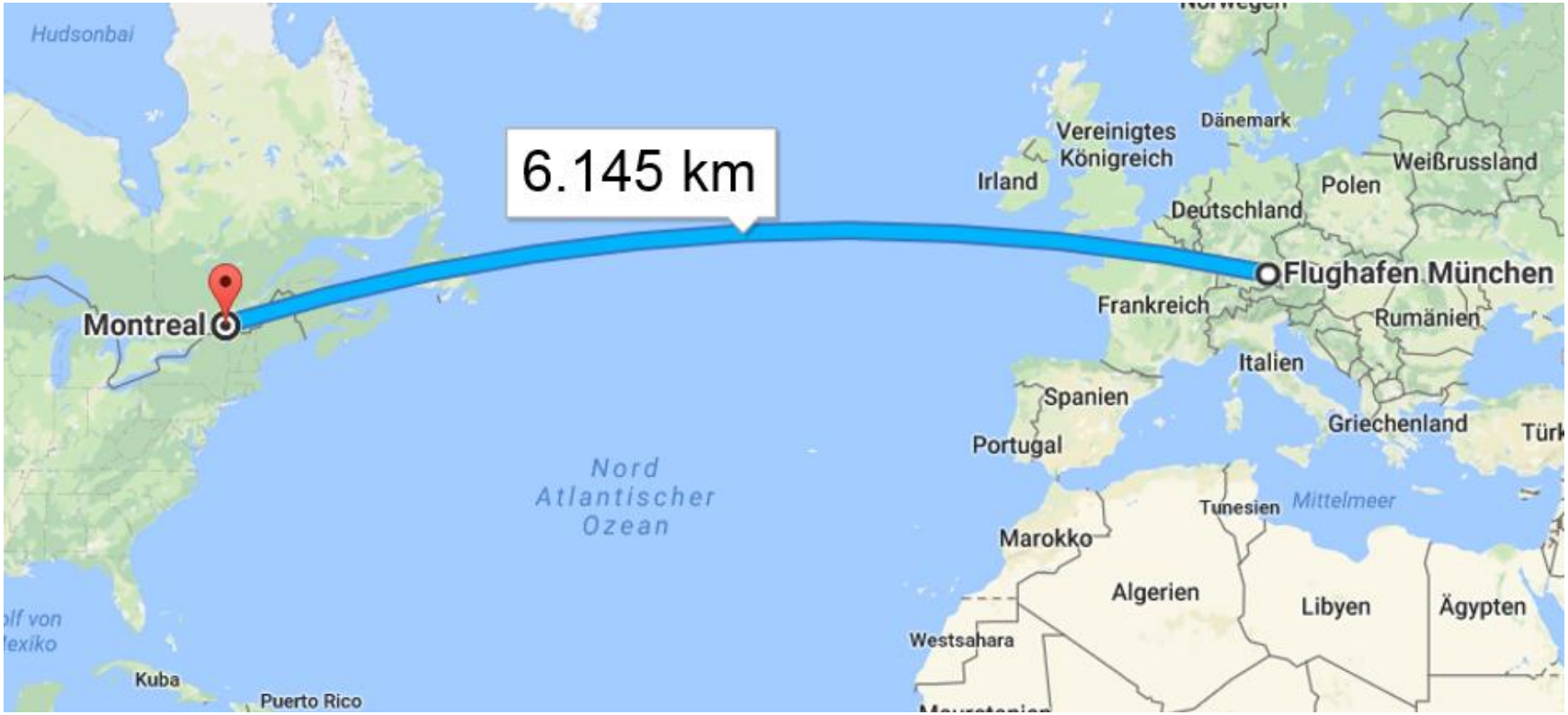
Stamping green - Green Certifications for Green Airports

Hermann Blomeyer
29th November 2017

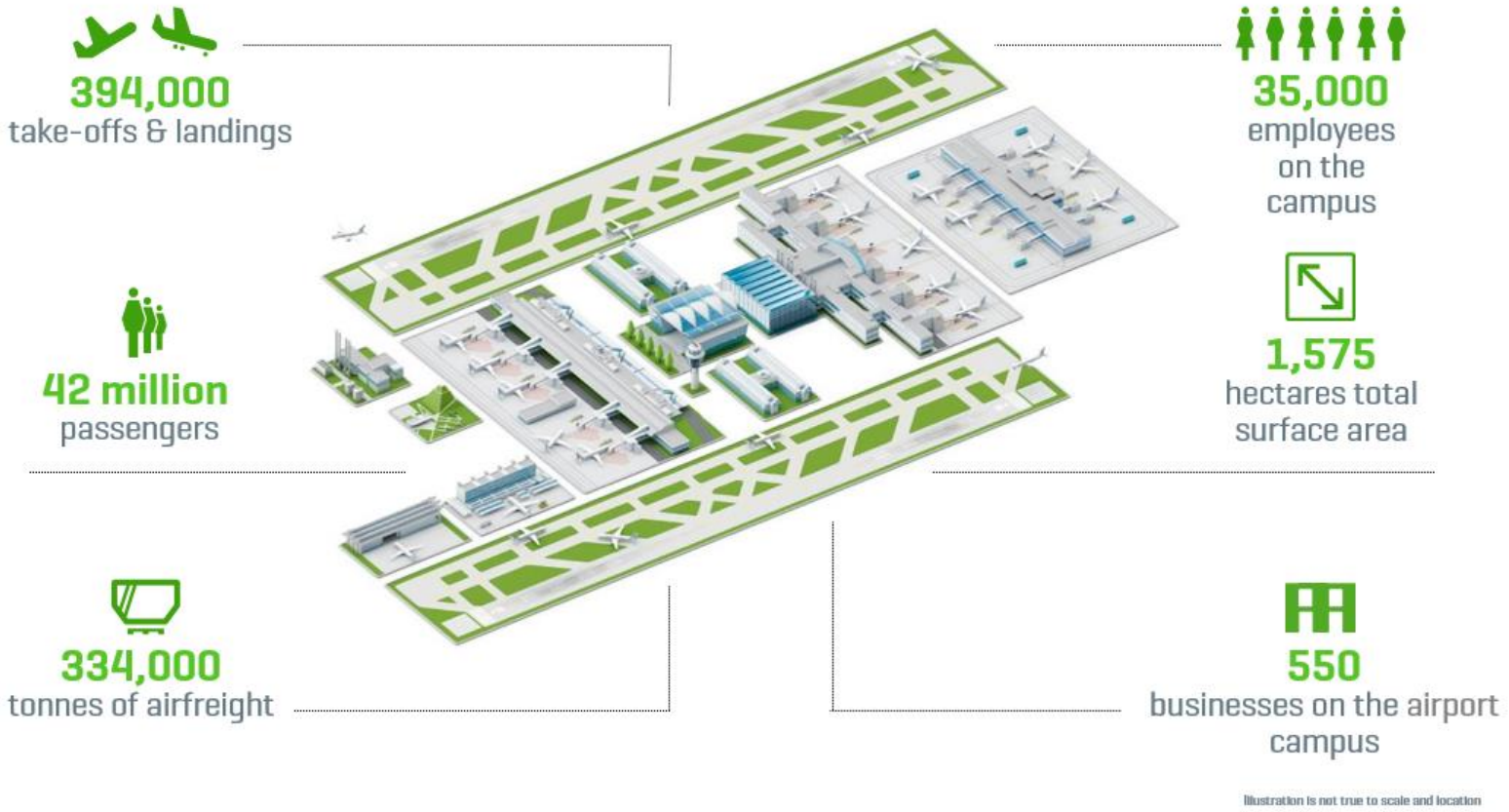
Munich - Montreal



Source: Google Maps

Aerial View of Munich Airport

Munich Airport – facts and figures (2016)



Today we are Europe's first

★★★★★

5 Star Airport

Go CO_2 neutral

“Green“ Certifications at Munich Airport

Reduction of CO_2

Renewable energy and energetic modernisation

Public-private partnership and “offsetting”

Environmental Management Systems

airport carbon accredited OPTIMISATION

aireg Aviation Initiative for Renewable Energy in Germany e.V.

UMWELTPAKT BAYERN

ISO

CDP DRIVING SUSTAINABLE ECONOMIES

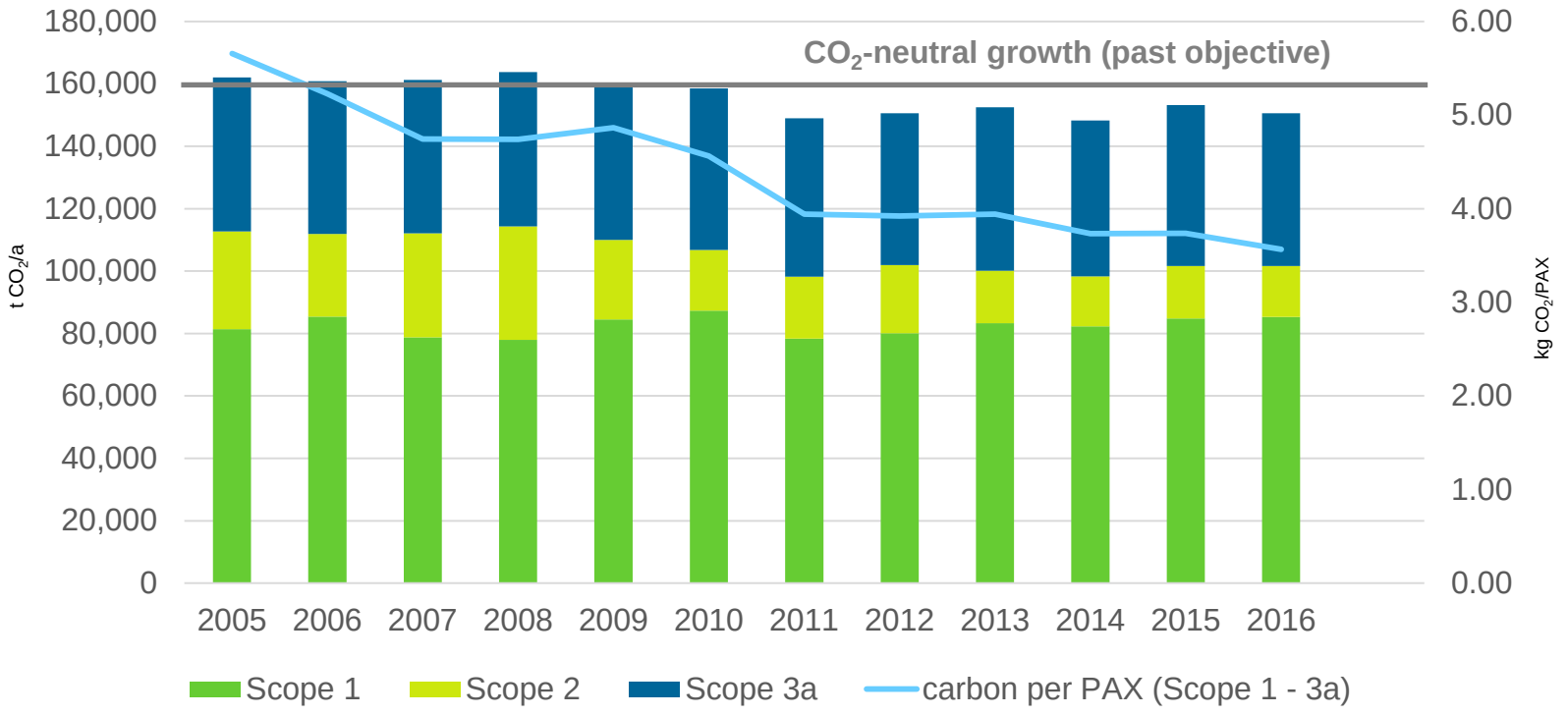
DGNB Deutsche Gesellschaft für Nachhaltiges Bauen German Sustainable Building Council

GOGREEN Der klimaneutrale Versand mit der Deutschen Post

EMAS GEPRÜFTES UMWELTMANAGEMENT D-155-00248

Go CO_2 neutral

Airport Carbon Accreditation (ACA) - CO_2-Monitoring



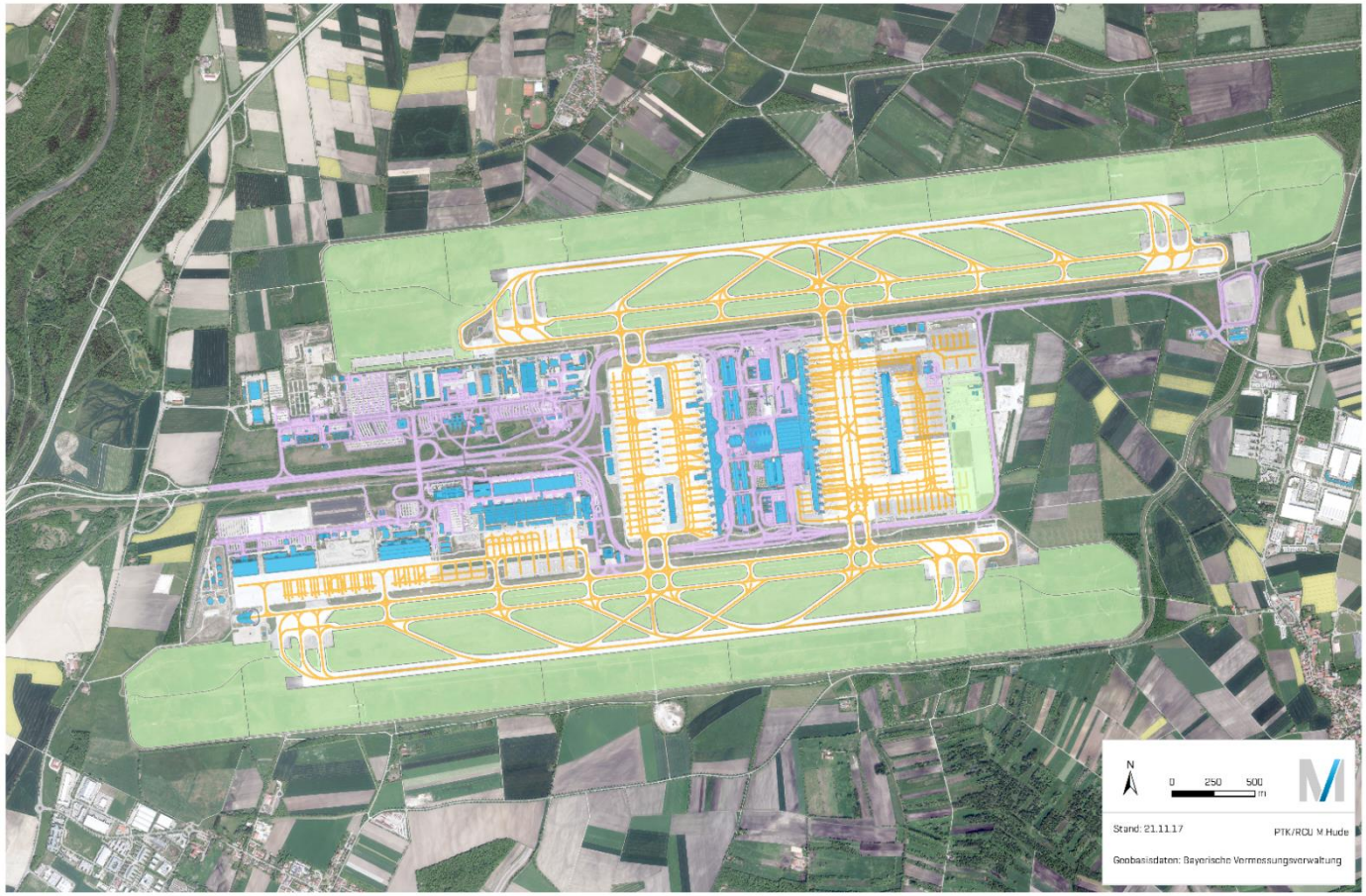
Several relevant sectors at Munich Airport in terms of environmental protection

5 main environmental relevant sectors
Climate
Resources
Air quality
Noise
Biodiversity

Administration Buildings, Management and Technology
Energy supply / Building technology
Waste management
Drinking water supply
Purchasing
Green-IT / Vehicle-Pool

Non-public sector
Area maintenance
Lighting
Winter services
Aircraft de-icing
Drainage system

Public sector
Area maintenance
Lighting
Winter services
Drainage system



Main sectors to become a Green 5 Star Airport

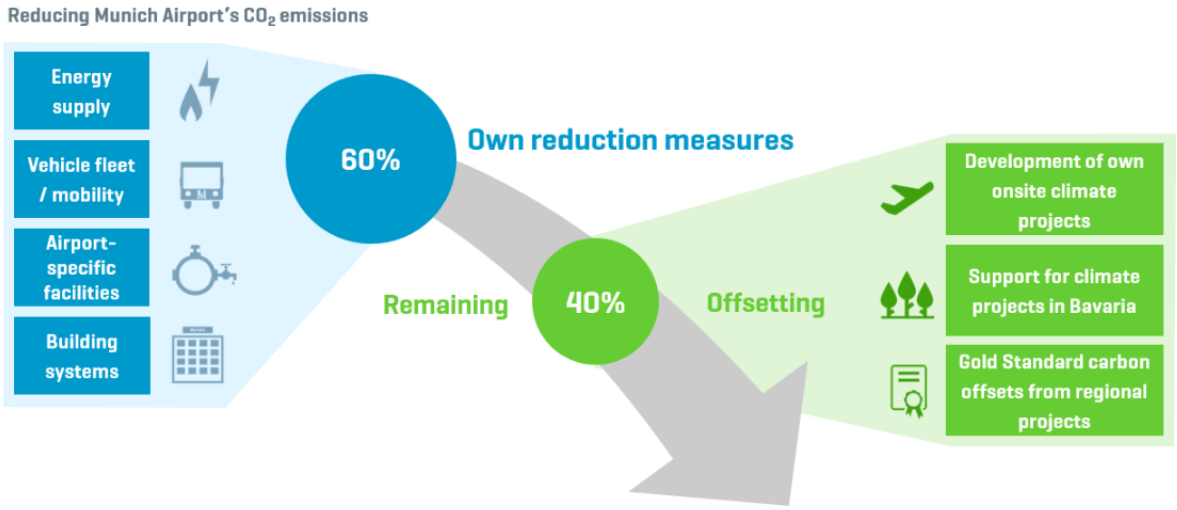
Climate | Resources | Air quality | Noise | Biodiversity

High ACA-level is indispensable for a Green Airport

Climate protection –

Munich Airport‘s ambitious objective till 2030

First reduce – then offset

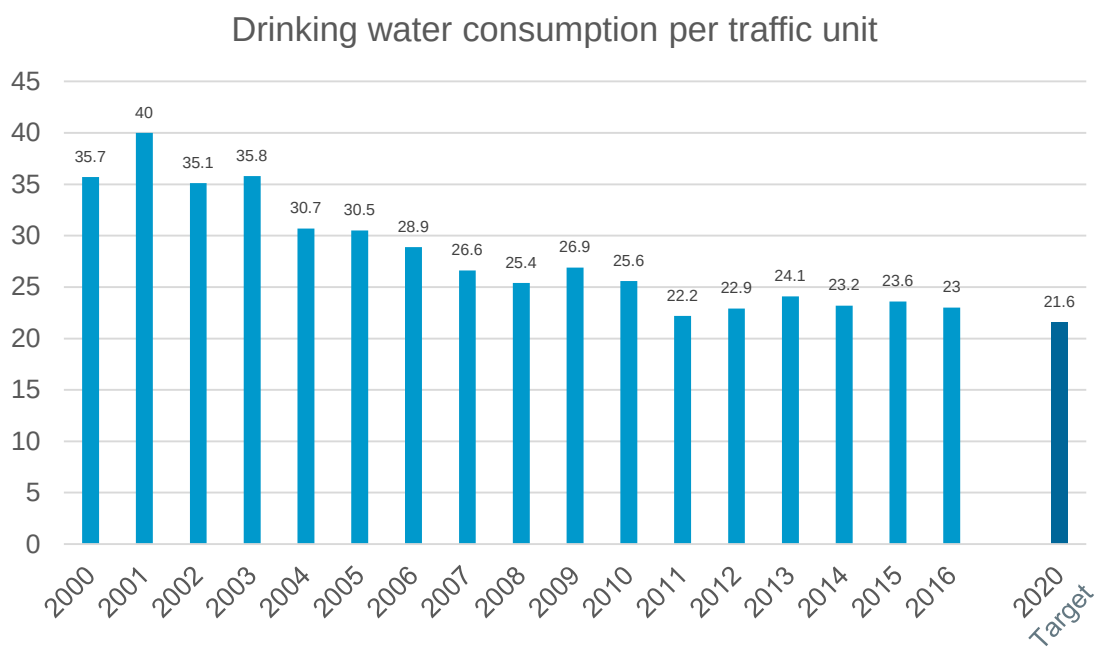


Data and long-term monitoring with Environmental Management System (EMAS)

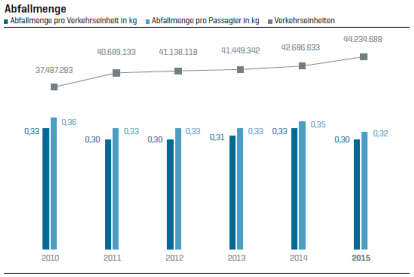
Conscious approach to recources and reducing consumption

Resources –

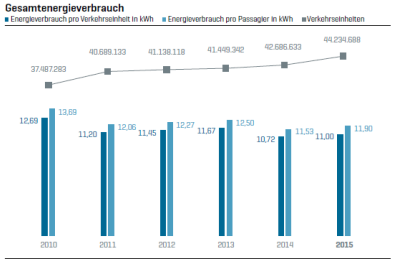
reduce consumption



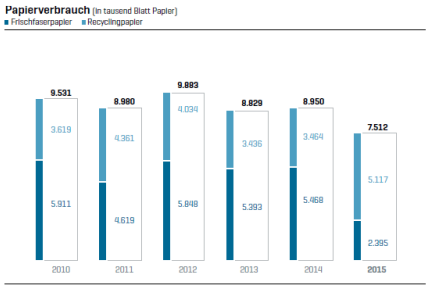
Waste monitoring



Energy monitoring



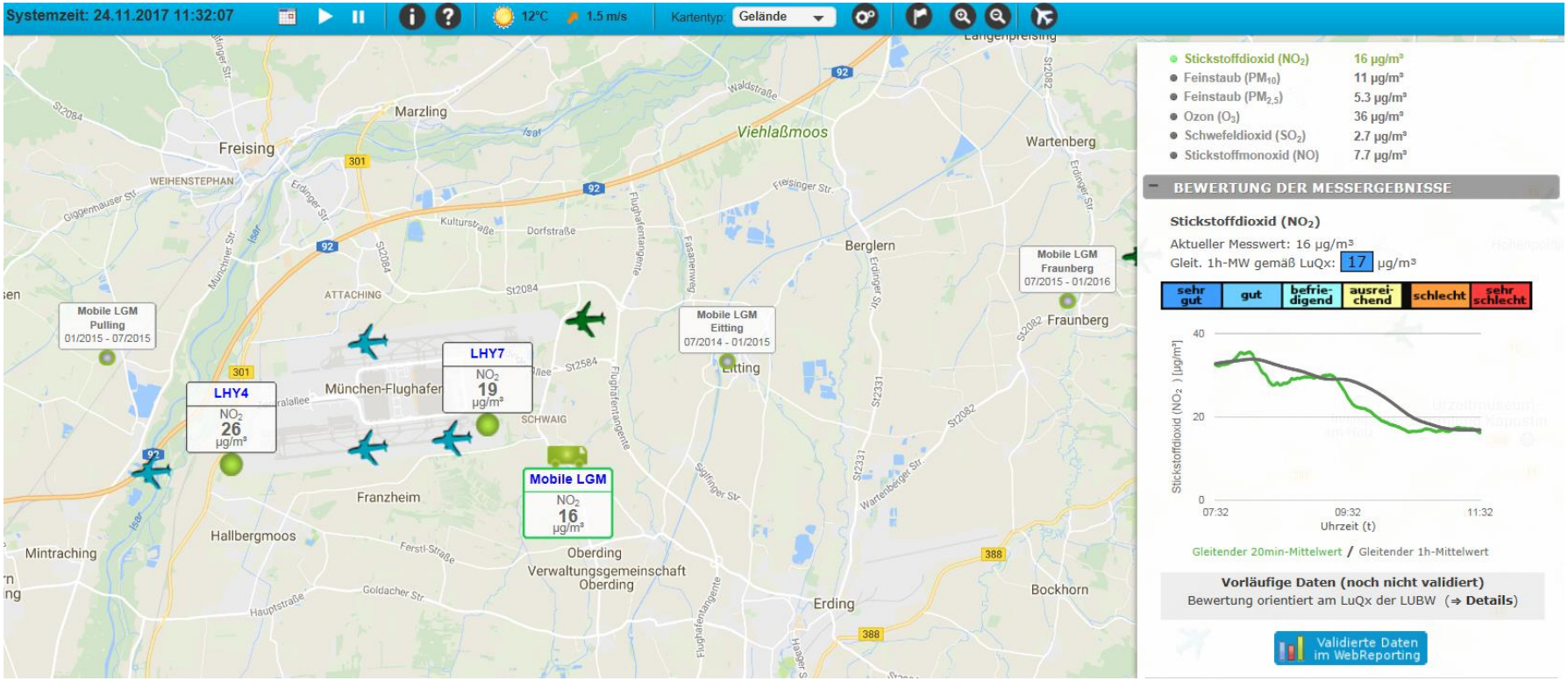
Paper monitoring



Data and long-term monitoring with Environmental Management System (EMAS)

Evaluating the air quality

High air quality

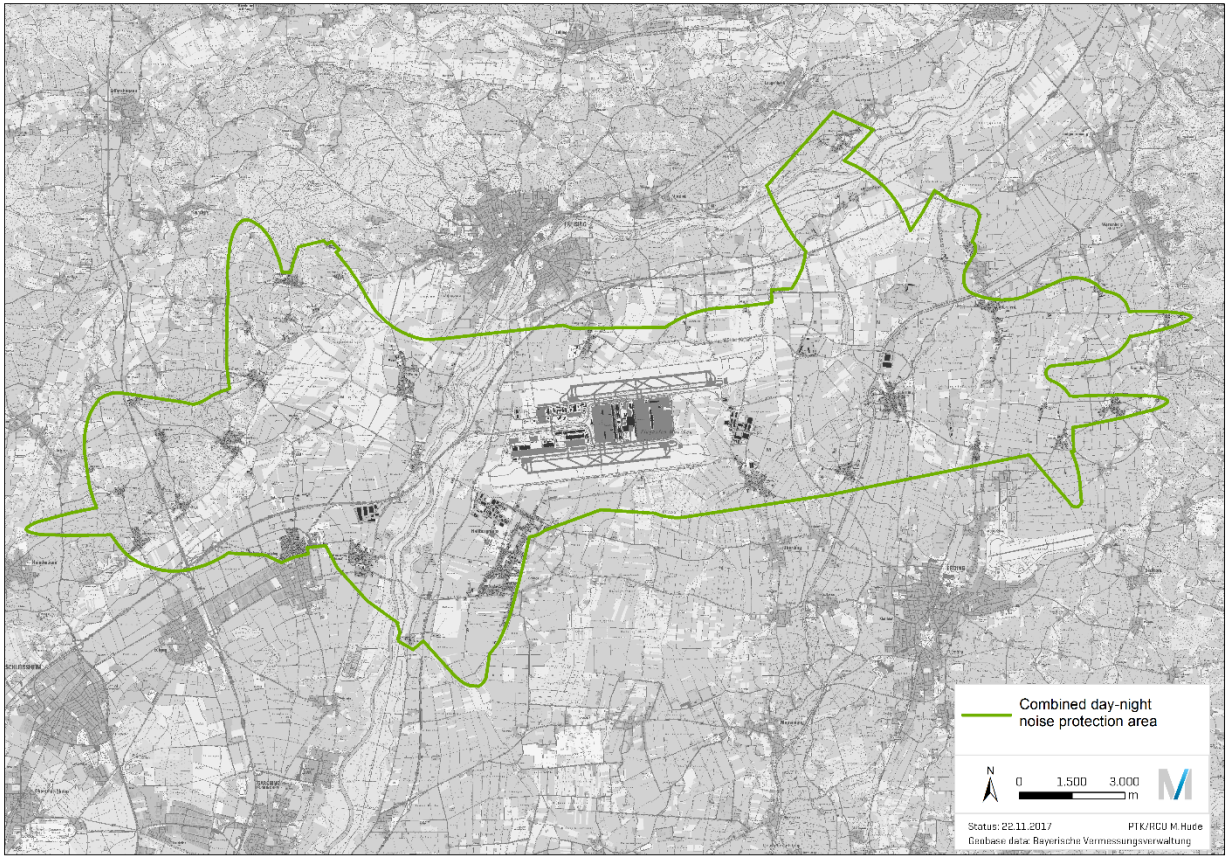


Noise protection measures for the neighbourhood

Noise protection

Attempt to a classification

Level	Airport commitment to flight noise protection measures (% of entitled estates)
perfect	> 95 %
good	85 % - 95 %
medium	< 85 %
…	…

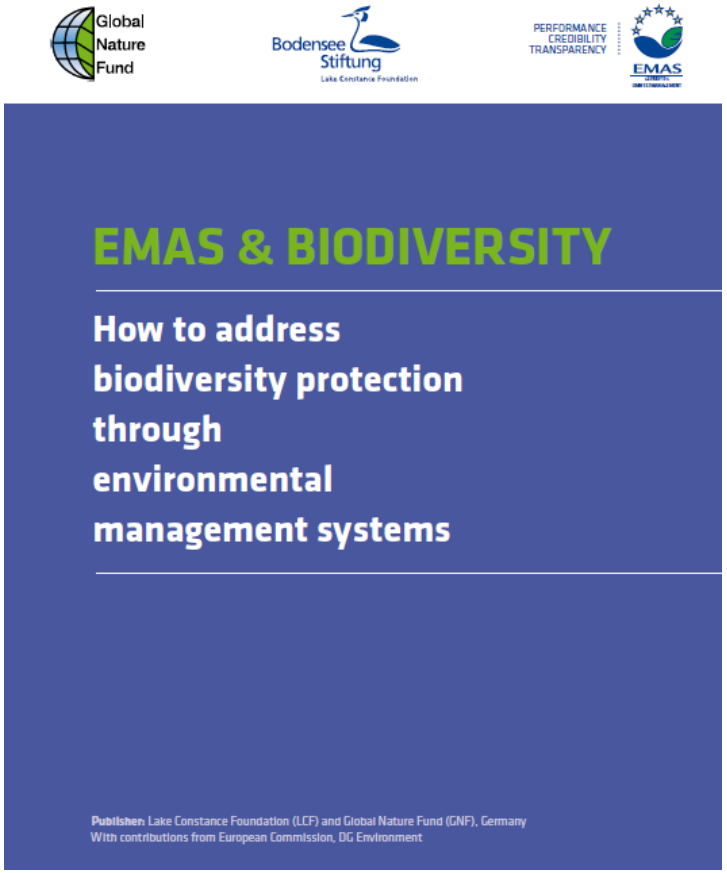


Assessing biodiversity (nature conservation, ecosystems) feasible at all ?!

Biodiversity

Many open questions / challenges:

- Diversity ecosystems - between and within species
- Genetic biodiversity
- Spatial scale and observation area



Environmental Management System is needed

EMAS or/and ISO 14001

EMAS:

- Optimising long-term monitoring
- Including core indicators
- Considering legal compliance
- Requesting continuous improvements
- Enhancing employee involvement
- Claiming external communication

CERTIFICATE

Flughafen München GmbH

Site
Nordallee 25
85326 München

Registration-No.: DE-155-00248

Date of first registration
18th November 2005

This certificate is valid until
4th August 2020

This organisation has established an environmental management system according to EU-Regulation Nr. 1221/2009 and EN ISO 14001:2009 section 4 to promote the continual improvement of environmental performance, publishes an environmental statement, has the environmental management system verified and the environmental statement validated by a verifier, is registered under EMAS and therefore is entitled to use the EMAS-Logo.

EMAS
VERIFIED ENVIRONMENTAL MANAGEMENT

IHK München und Oberbayern

Munich, 29th September 2017

Peter Driessen
Chief Executive Officer

INTECHNICA CERT GmbH

CERTIFICATE

ISO 14001:2009

for

Flughafen München GmbH

at the site

Nordallee 25, 85356 München

The accredited environmental verifier hereby certifies that the named organization has implemented an Environmental Management System.

Scope: airport

With an audit it has been assessed that the requirements of ISO 14001:2009 are fulfilled.

Nürnberg, 18. September 2017

The certificate No. UGA 514-2017 is valid until 14. September 2018.

Dr. Reiner Beer
Environmental Verifier
DE-V-0007

Dipl.-Phys. Reinhard Mirz
Environmental Verifier
Organisation, DE-V-0279

Intechnica Cert GmbH Umweltgutachterorganisation, Ostendstraße 181, 90482 Nürnberg

Go CO2 neutral

Summary

- **Reducing CO_2-emissions** is the very important indicator for a Green Airport
- But more efforts in terms of environmental protection at an airport are required such as **reduction of resource consumption**, achievement of **high air quality,** implementation of **noise protection measures** and consideration of **biodiversity**
- ACA is the airport ranking system for CO_2-reduction – further assessment systems should be developed to get the
  → Green 5 Stars
- Obligatory for monitoring, improvement and transparency:
  Certified Environmental Management System
  e.g. ISO 14001 or EMAS (recommended)

ACI Eco-Innovation Award 2017

For further information

Today we are Europe‘s first

Our challenge is to become Europe‘s first

Green 5 Star Airport

Contact

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and Environmental Affairs

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P.O. Box 23 17 55
85326 Munich Airport

Phone: +49 89 975 404 00
E-Mail: hermann.blomeyer@munich-airport.de

https://www.munich-airport.com/environmental-protection-264103

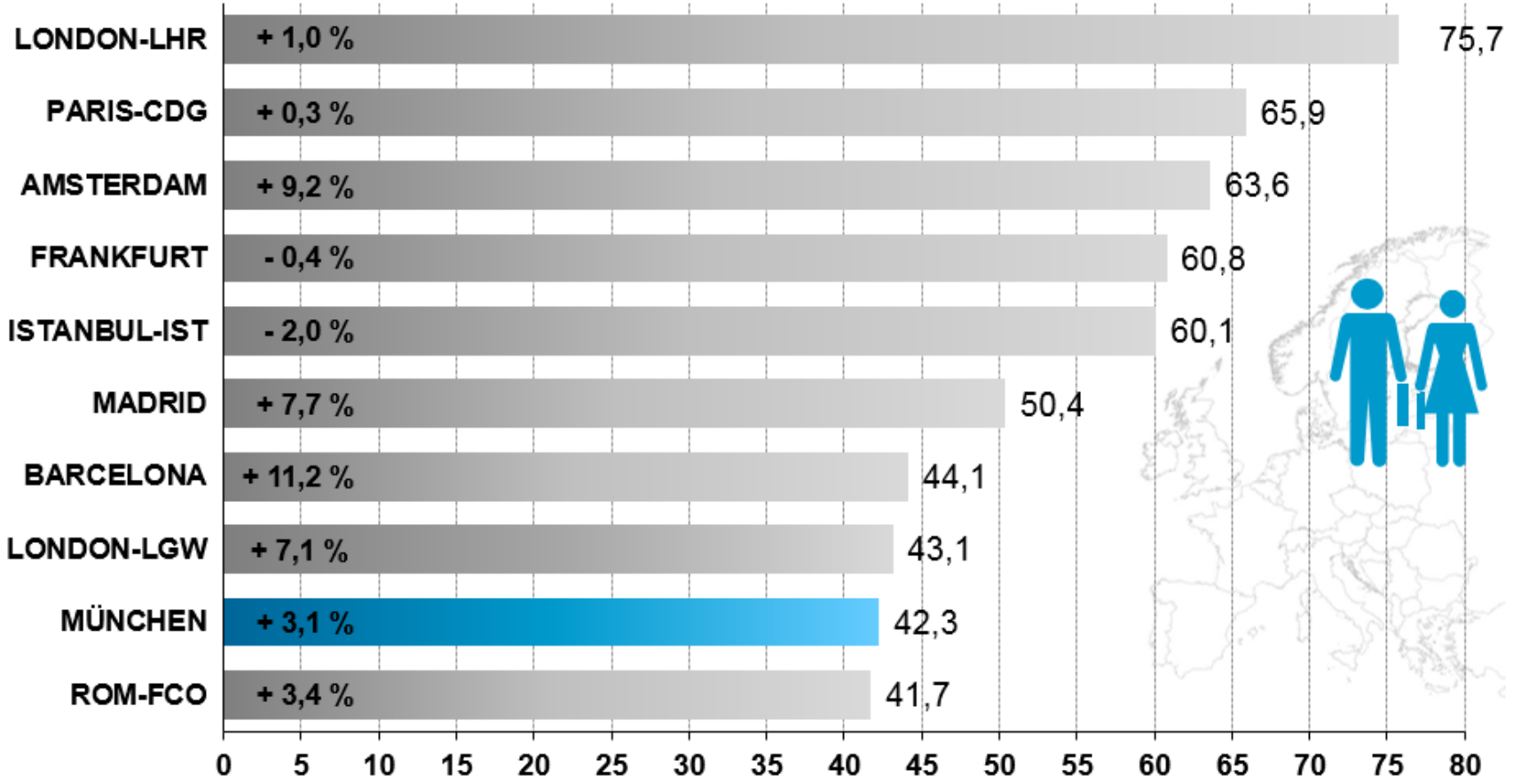
Thank you

LED

Pre-Conditioned Air

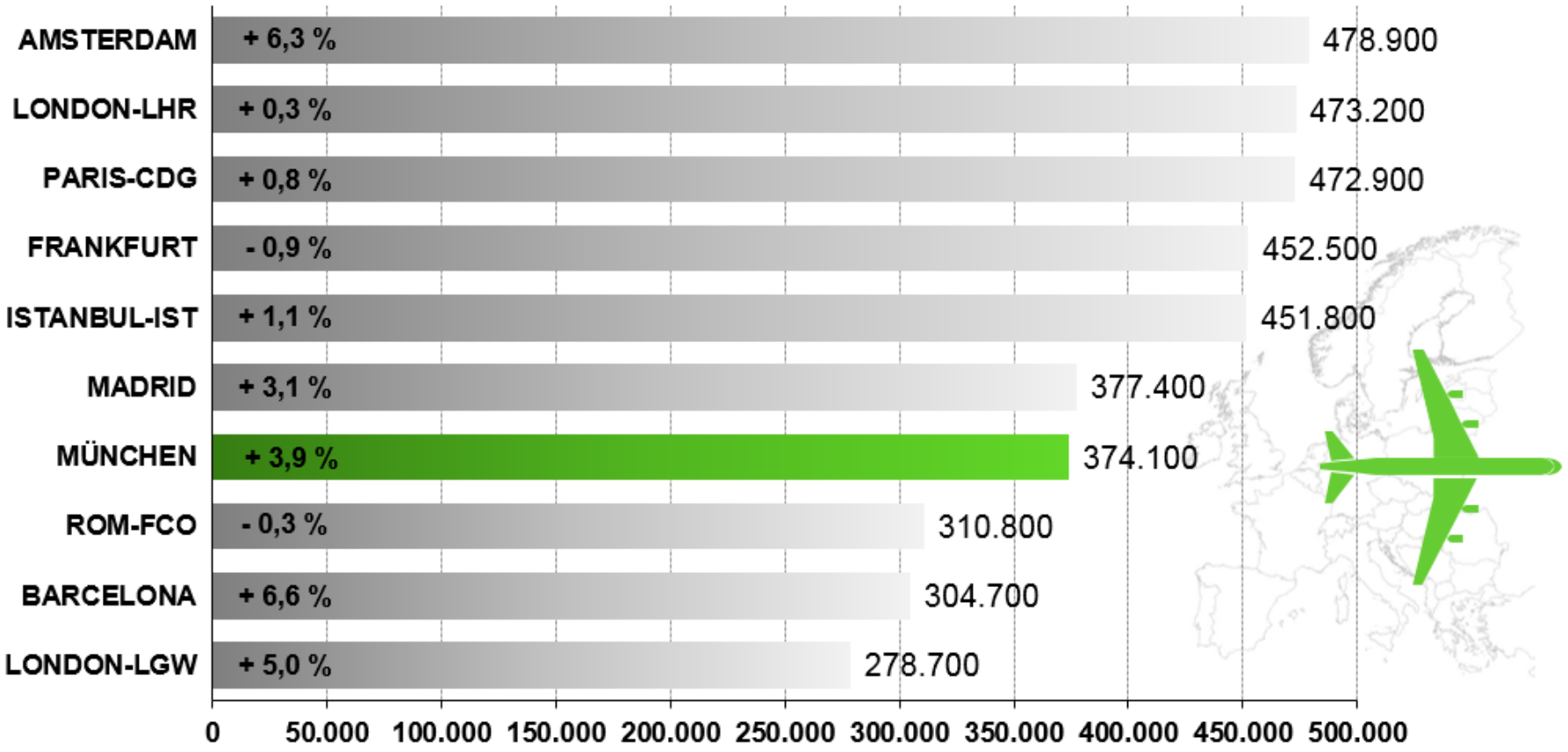
Top Ten Airports in Europe 2016

Number 9 in Europe related to passenger numbers

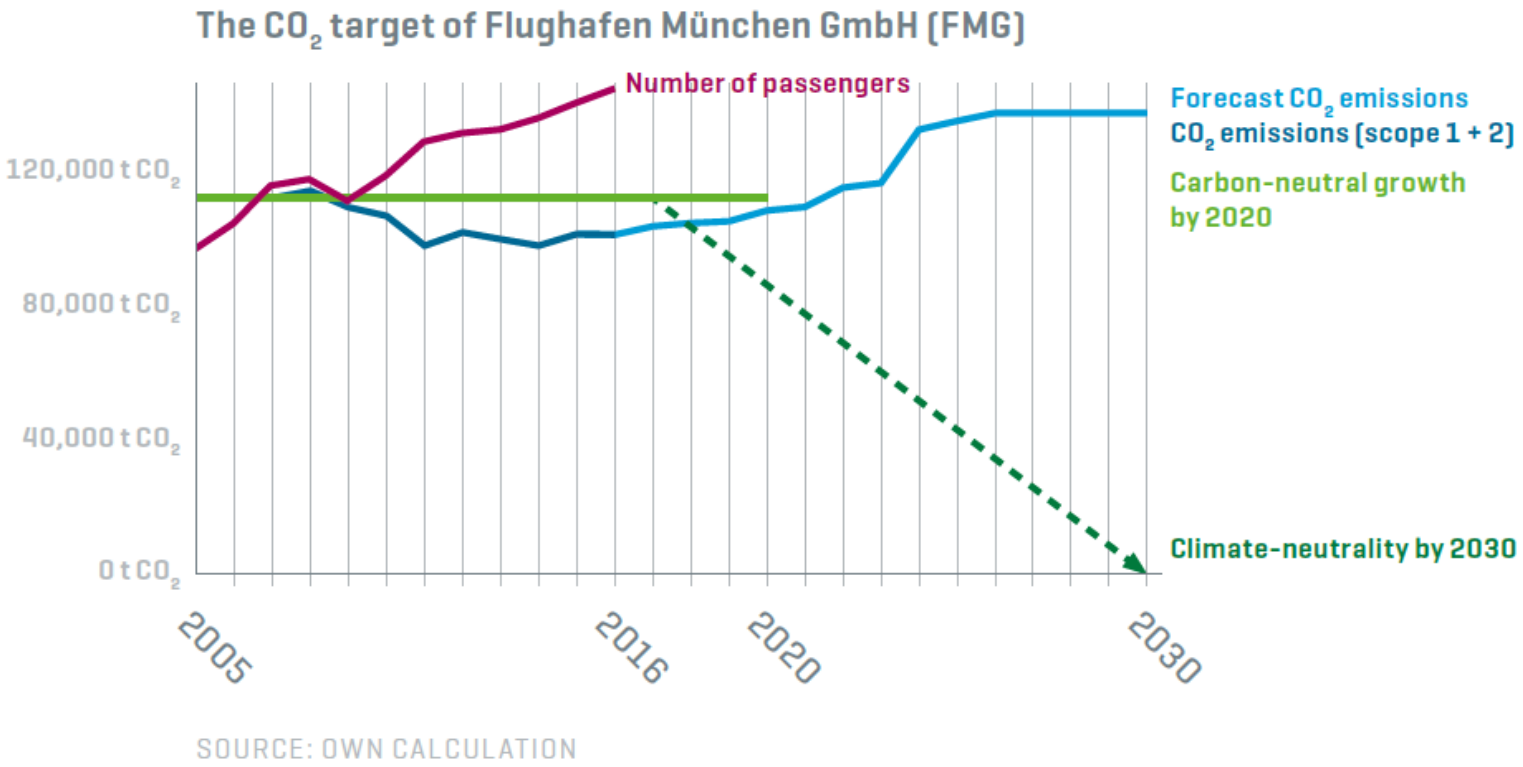


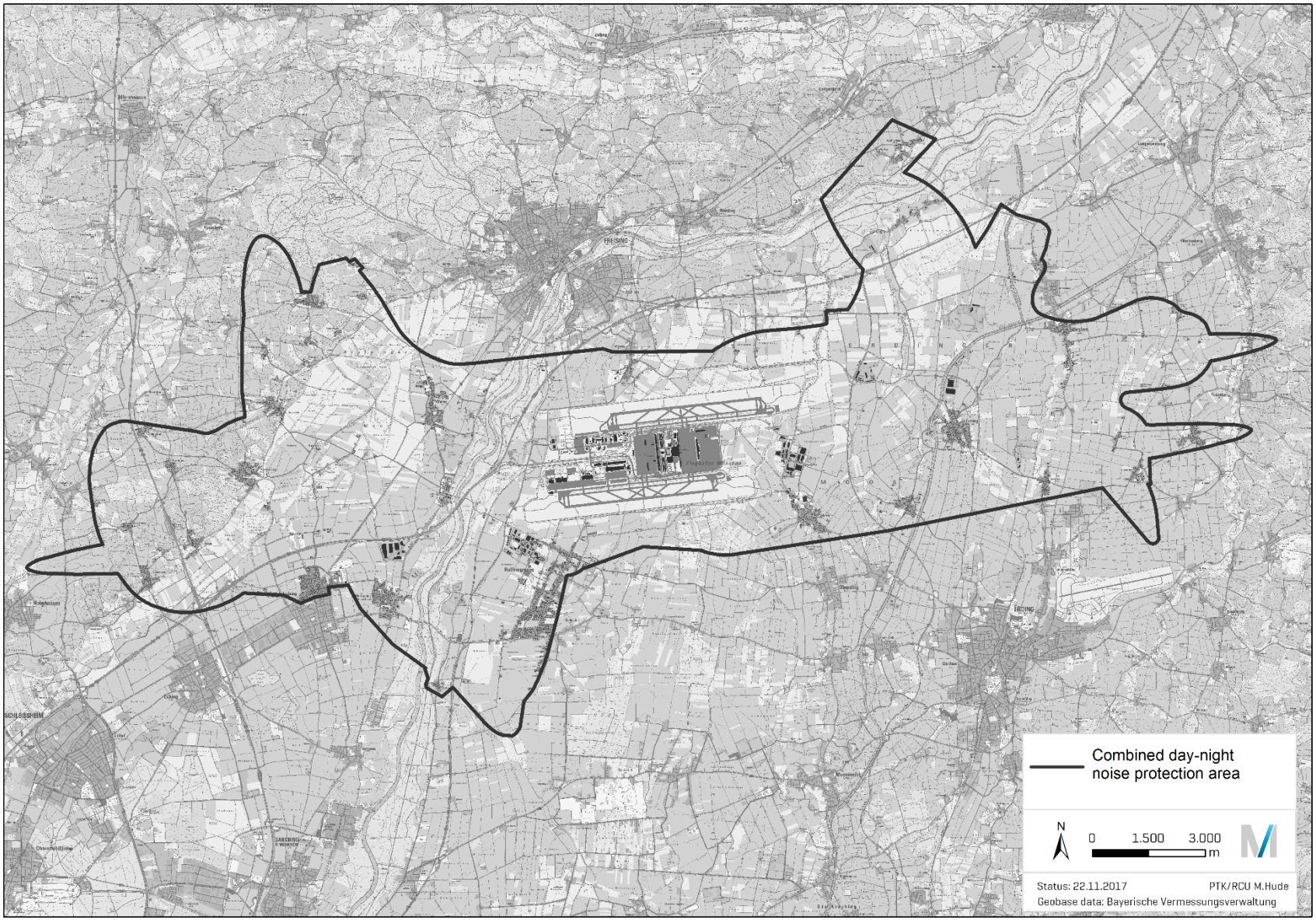
Top Ten Airports in Europe 2016

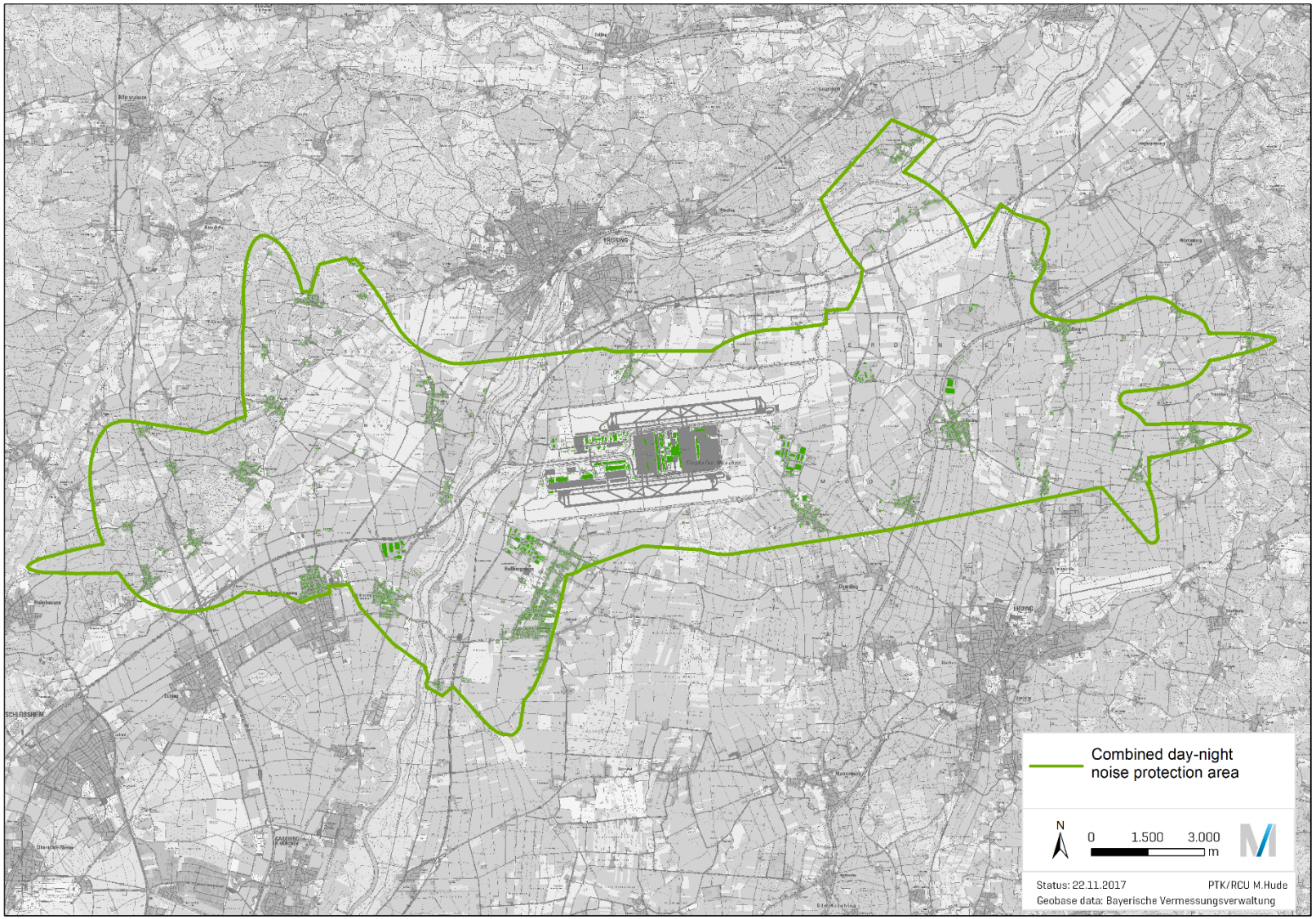
Number 7 in Europe related to traffic movements



CO_2 strategy




Combined day-night
noise protection area
N
0
1.500
3.000
m
Status: 22.11.2017
PTK/RCU M.Hude
Geobase data: Bayerische Vermessungsverwaltung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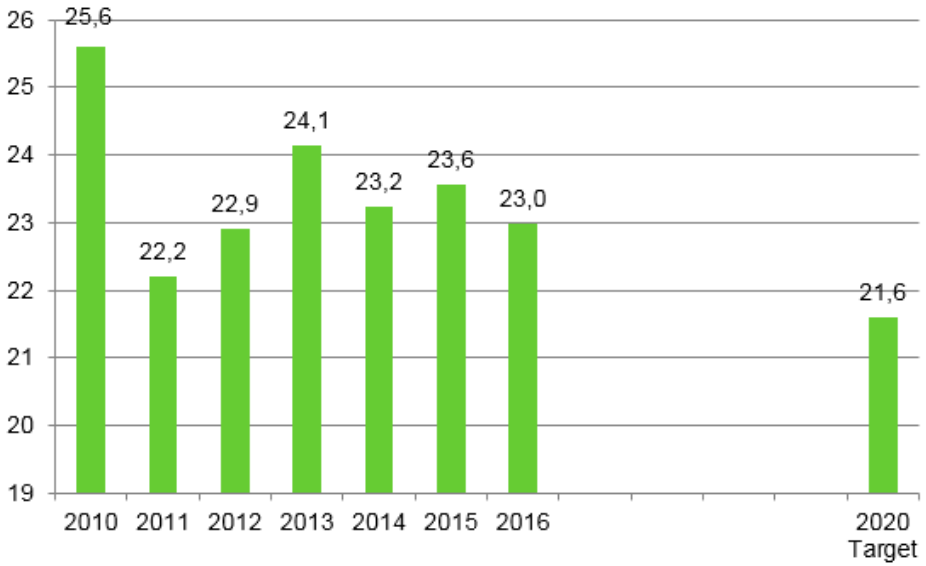
Resources –

reduce consumption

Drinking water consumption per traffic unit



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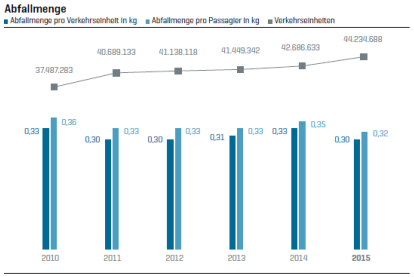

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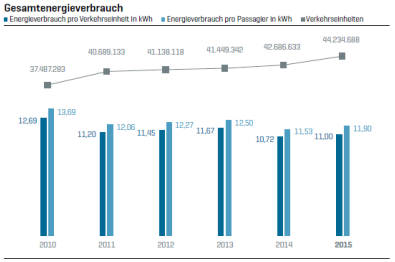

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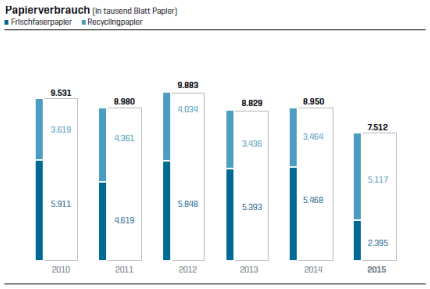

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