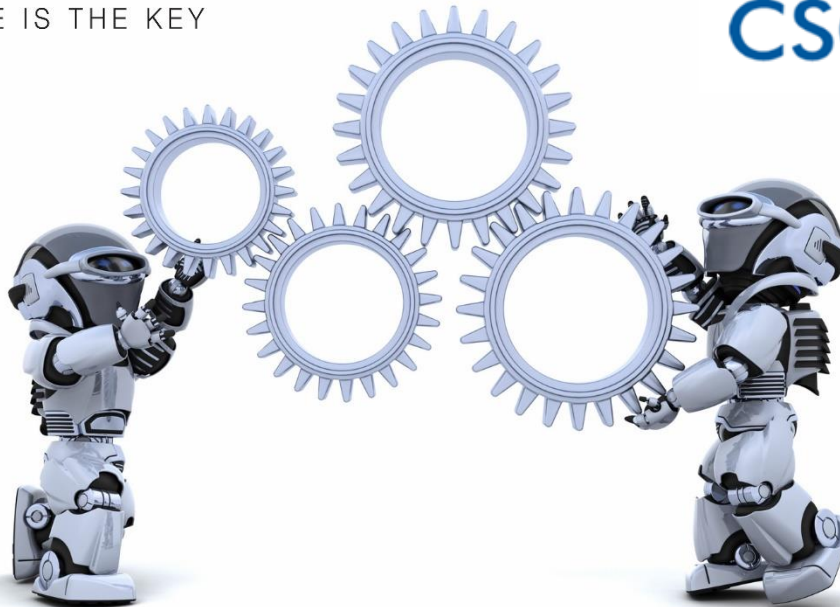




Cluster for Logistics
Luxembourg
a.sbl

ADDING VALUE IS THE KEY



Robotics & Artificial Intelligence change the logistics landscape

21 Nov 2017, Luxembourg



Thanks to our Sponsors



Platinum Sponsor



KUEHNE+NAGEL

Gold Sponsor



Silver Sponsors



FANUC

- » The Cluster for Logistics (C4L) subscribes to all principles of free competition and **adopts without exceptions all relevant anti-trust rules**. Anti-trust rules are understood to be any legal requirement or international regulations including but not limited to exchange of information between commercial companies, which could influence or limit independent commercial decisions and competition.
- » Any **collection of personalized data** for statistical purposes to compile statistical data will be done with precise rules concerning the precise purpose, the duration of conservation and the potential recipients of these data . Those rules have to be approved by companies that participate before collection of the data. This data can only be put at disposition of participants in an aggregated manner. Databases have to be produced and maintained according to rules as provided by the legislator.
- » For every meeting a precise agenda has to be provided with the invitation and has to be formally approved during every meeting. Meeting minutes and a list of participation will be provided for approval to any members of any statutory group, working groups and/or commissions within a reasonable timing. The meeting minutes will report in case of occurrence, any dispute in relation with confidentiality and/or potential or evident violation of anti-trust rules.

Compliance & anti-trust rules



Agenda



14:00 Introduction by Carlo Thelen

President of Cluster for Logistics

14:10 Keynote speech: Minister Nicolas Schmit

The Government's view

14:20 Presentations

16:00 Coffee pause

16:30 Presentations and round table

18:00 Walking Dinner

Luxembourg Logistics Performance & Mission

Indice de performance
logistique (IPL) Banque mondiale

6 Indicateurs de la
qualité des services
logistiques



**ADDING
VALUE
IS THE KEY**

N = 160 pays au classement Banque mondiale 2016

Price is what you pay. Value is what you get.

Warren Buffett



Wish you a valueable afternoon

Thanks to our Sponsors



Platinum Sponsor



KUEHNE+NAGEL

Gold Sponsor



Lunch,
Dinner and
attendance of
young people

Silver Sponsors



FANUC

Welcome:

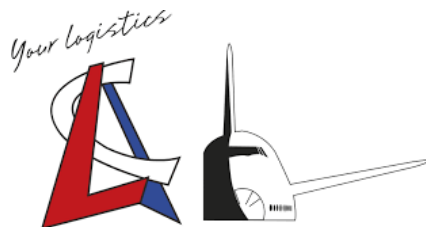
How Artificial Intelligence and Logistics will change the (Luxembourg) Logistics landscape

**LET'S NOT UNDERESTIMATE
CHANGES
LET'S ANTICIPATE THEM**



**Carlo Thelen
President Cluster for Logistics
Director General Chamber of Commerce**

Our new Members 2017



Strengthening the Cluster for Logistics and increasing diversity

Melanie Laidié
Assistant Cluster manager



WE NEED YOU TdL 2018



CLUSTER ▾

YOUNG PROFESSIONALS ▾



SUPPLY CHAIN DAY

April 27, 2017

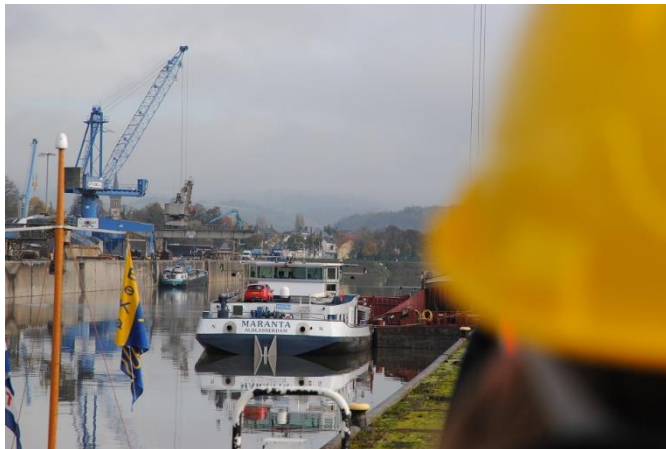


“Tag der Logistik” 19.4.2018
to explain your activities

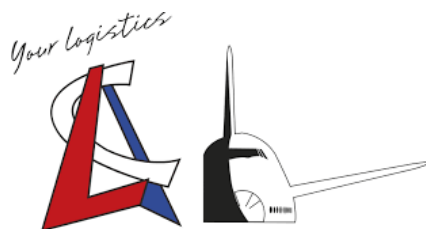
WE NEED YOU

Apprenticeships 2018-2021

Open your company for Dual apprenticeships
Speeddating 20. 2. 2018 DT Logistics students



Our new Members 2017



SUSTAINABLE URBAN MOBILITY

Luxembourg Logistics landscape

How robotics and Artificial Intelligence will change the landscape



Monsieur Nicolas Schmit
**Ministre du Travail, de l'Emploi et de l'Économie
sociale et solidaire**

Luxembourg Logistics landscape

Consolidation of Logistics for a robotics & machine manufacturer in Luxembourg

Mr Paul Ribus,
General Manager FANUC Benelux



Mr Andrea Scammacca,
Head of European supply chain
FANUC Europe



Luxembourg Logistics landscape

Pioneering Deep Learning to guide robots in warehousing & logistics

Mr Herbert ten Have, CEO - Fizyr



Luxembourg Logistics landscape



How to meet the global challenges
in Industry 4.0 and robotics through
performance logistics and supply chains

Malik Zeniti

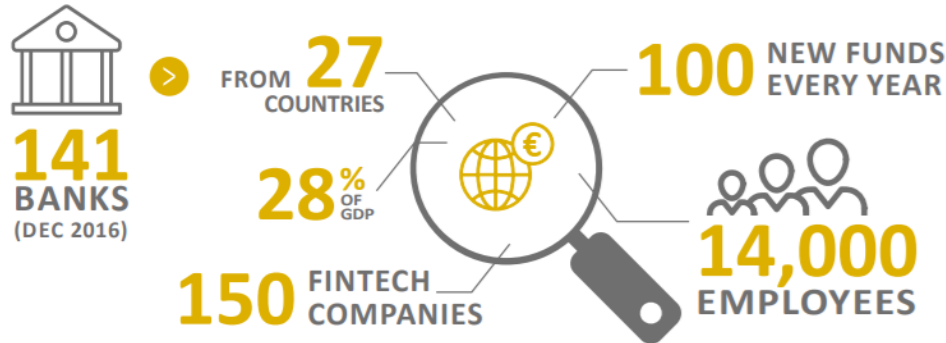
Director

Cluster for Logistics Luxembourg



Why Luxembourg?

INTERNATIONAL FINANCIAL EXPERTISE



RESEARCH AND INNOVATION



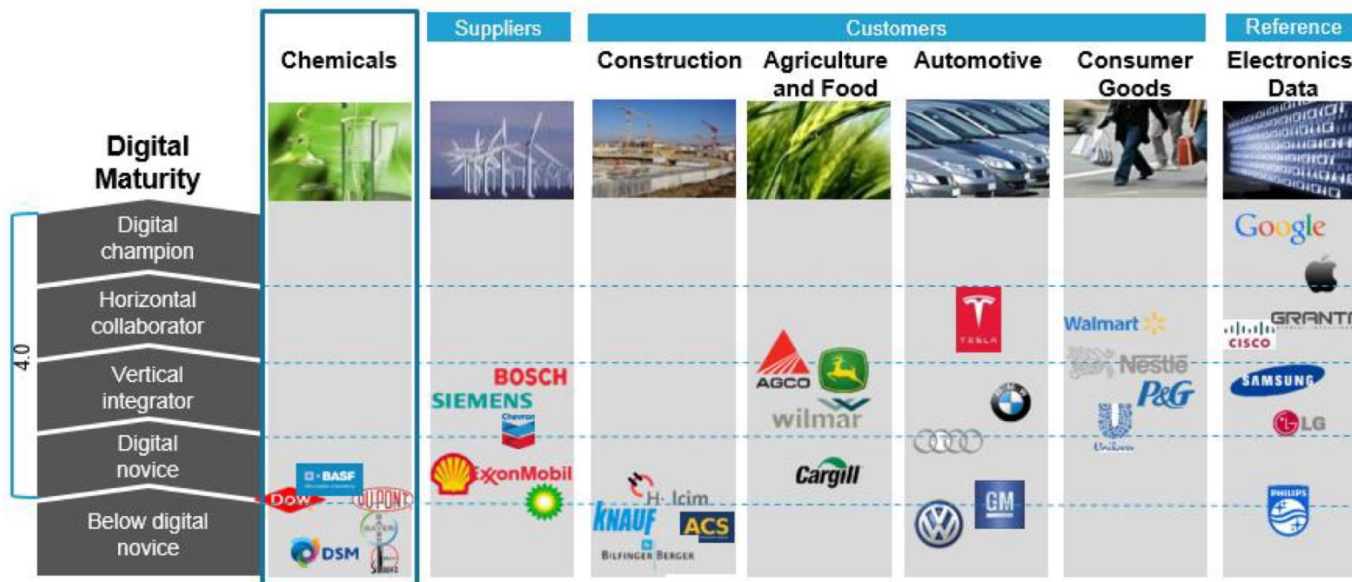
TIC / DATACENTRES / DIGITALISATION



Advanced Logistics Strategy

Why Logistics in Luxembourg?

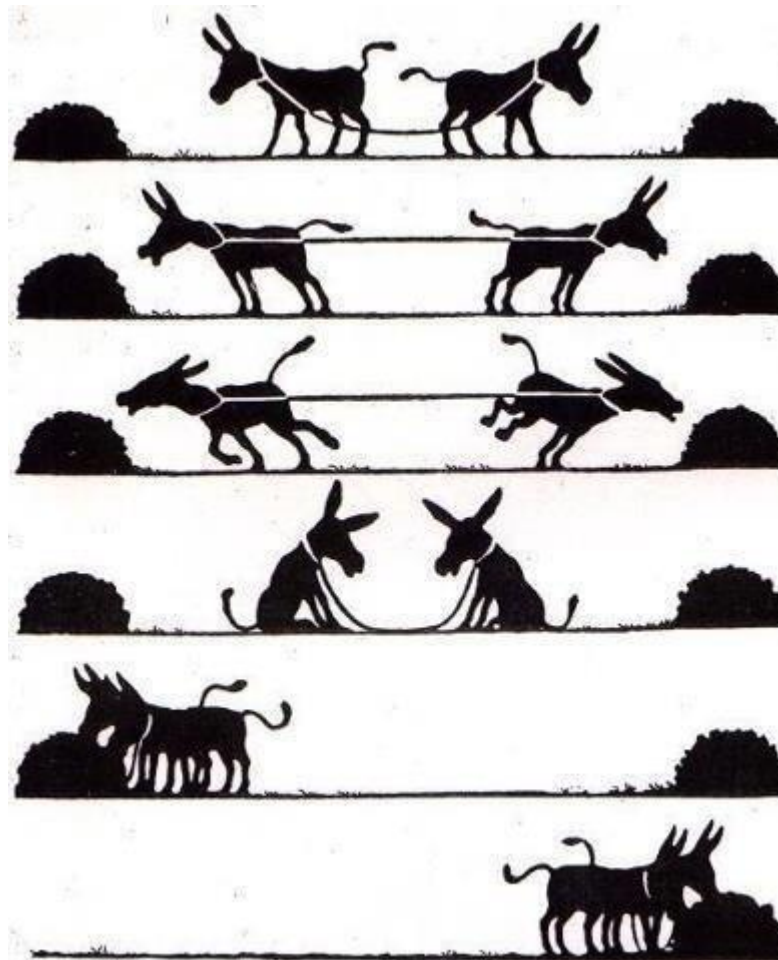
Digital Maturity



Source: PwC, Strategy

- Digital maturity, availability of Digital natives?
- e-Logistics expected to increase in Europe

Why new Members? Collaboration



Thanks for your recommendations for new members



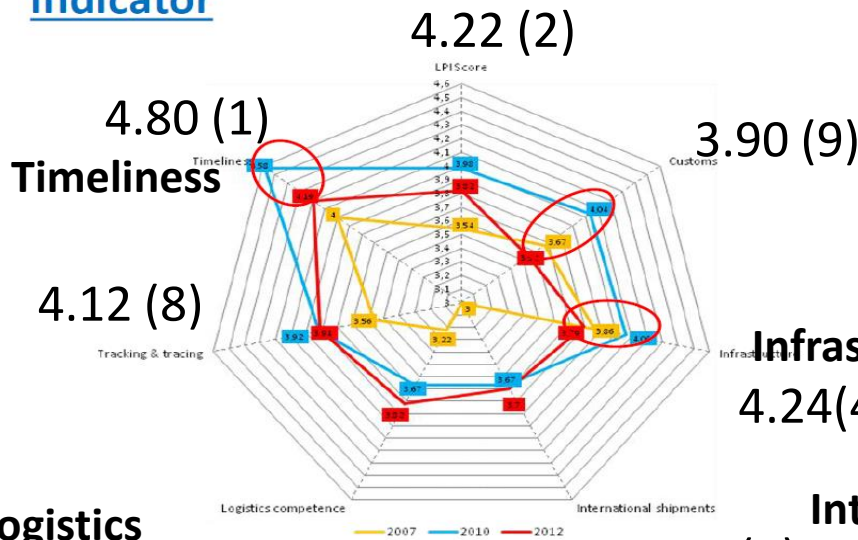
Luxembourg Logistics Ranking Logistics Performance Index



Indice de performance
logistique (IPL) Banque mondiale

6 Indicateurs de la
qualité des services
logistiques

World Bank Logistics performance indicator



N = 160 pays au classement Banque mondiale 2016

Logistics Competence 4.01 (10) International shipments 4.24 (1)

ADDING VALUE IS THE KEY **LU X E M B O U R G** **LET'S MAKE IT HAPPEN**

21/11/2017

Digitization E-CMR enhance efficiency



Pilot Project: electronic consignment note (e-CMR)

It is possible to use the updated electronic consignment note or e-CMR in countries that have ratified the use in Europe. Luxembourg has now introduced a projet de loi on the UNECE e-cmr Protocol that should pass ratification in the next months.

Luxembourg decided to join a Benelux pilot project that will enable participating companies to use the e-CMR documents in Belgium, the Netherlands & Luxembourg.

The Luxembourg approach was aligned with B (signed e-cmr UNECE Protocol and implements the BENELUX pilot) & NL (has signed & ratified the UNECE Protocol).

- **BENELUX pilot starts on December 1st 2017 and will run for three years. Transport between Benelux countries as well as BENELUX transport and cabotage.**

obtain more info on our webpage: www.c4l.lu/ecmr

Digitization E-CMR reduced costs through efficiency



Pilot Project: electronic consignment note (e-CMR)

- **e-CMR a COST SAVING MEASURE: reduction of 4.5 € administrative costs/CMR**

Faster administration (reduced data entry, no paper Handling)

The CMR Convention (1956) also makes it mandatory to use a paper consignment note, unless countries have joined the UNECE convention's e-protocol (2008). If two bordering countries have ratified the UNECE eprotocol, road haulage is possible between them by carrying an accompanying electronic consignment note. This e-CMR procedure is aimed to reduce costs and enhance efficiency. 12 member states have signed or ratified the UNECE e-CMR protocol and more are working at an implementation.

Belt and Road Initiative (BRI) September '17



Past Events

Trade mission to China Sept. 10-15 2017

Logistics centric trade mission to Hong Kong, Zhengzhou and Shanghai

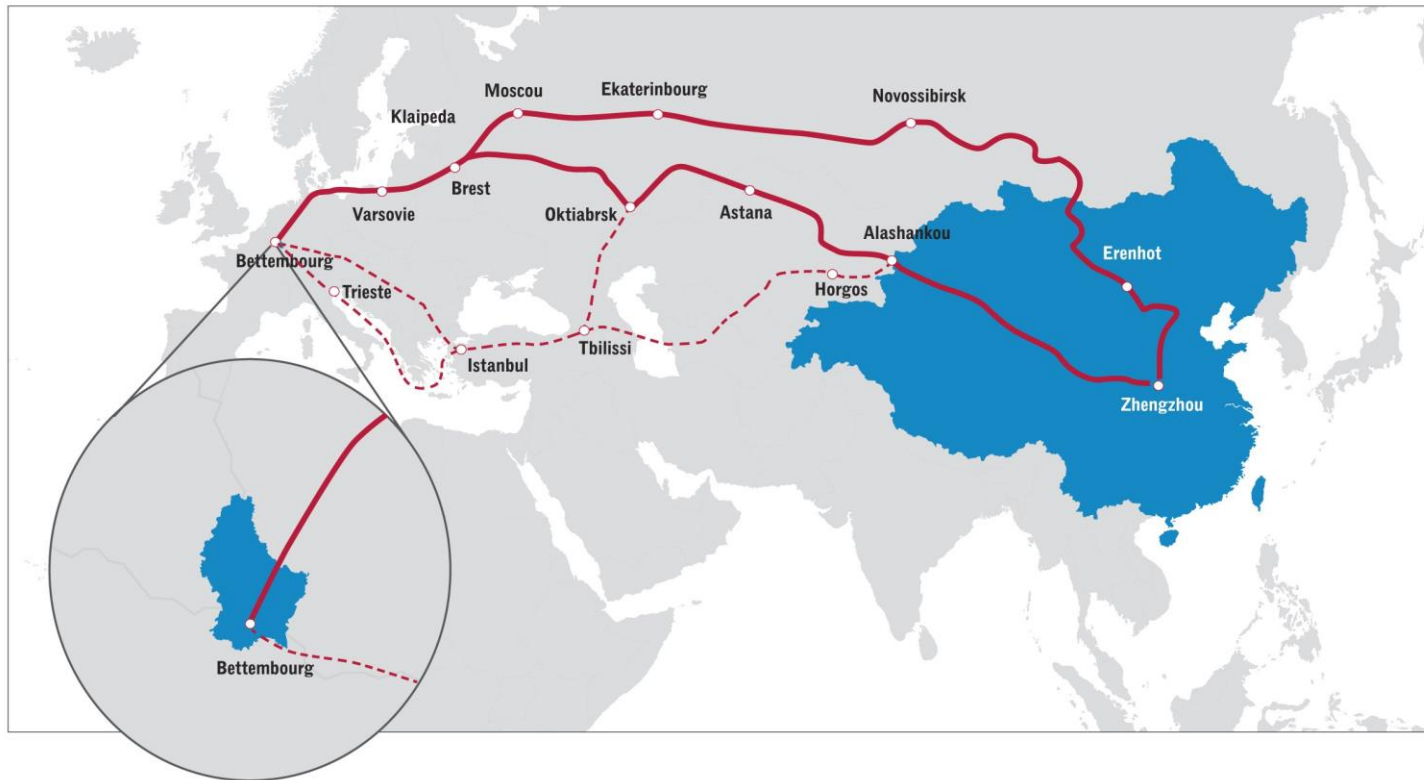
Visits to Hong Kong Airport and Zhengzhou Airport

The delegation made the headlines and into the Henan News from today with the economic mission from Luxembourg to Zhengzhou capital of the 100 million inh. Henan province. Round table on logistics with participants of HNCA Cargolux' s shareholder from the province and Mrs Catherine Xi Ping from the Henan Bonded Group.



Past events

Official mission to Lithuania with Grand Duke Henri
Vilnius and Kaunas 25-27th Oct
Roundtable on Logistics moderated by C4L



Lithuania vs Luxembourg

Key basics



Luxembourg
LPI 4.22 No 2

2,586 km²

0,563 Mio inh

223 inh / km²

51 Mrd. EUR
GDP 2015
Transport: 3,7%

58,8 Mio tons
2016 (30 MM
outside
Luxembourg)

**6 th freight airport in
Europe 900.000tons/year**



**Modern Multimodal Hub 2017
5 million tons/year
300 km to Antwerp , Rotterdam**

Lithuania
LPI 3.63 No 29

65,300 km²
(401 km²
Vilnius)

2,849 Mio inh
(0,543 Mio
inh)

43 inh / km²
(1392 inh / km²)

37,2 Mrd. EUR
GDP 2015
Transport: 13%



**4th largest Baltic Sea Deepwater
Port Klaipeda 38,4 Mio tons
(Non freezing port)**

Lithuania vs Luxembourg

Key basics



Poland VS Luxembourg

Key basics



Luxembourg
LPI 4.22 No 2

6 th freight airport in Europe 900.000tons/year



Modern Multimodal Hub 2017
5 million tons/year
300 km to Antwerp , Rotterdam

2,586 km²

0,563 Mio inh

223 inh / km²

51 Mrd. EUR GDP
2015

Transport: 3,7%
169 km highway
275 km rail

58,8 Mio tons 2016
(30 MM outside
Luxembourg)

Gdansk
LPI 3.43 No 33

Poland 312,679 km²
(262 km² in Gdansk)

38,6 Mio inh
(0,463 Mio inh in
Gdansk)

123 inh / km²
(1767 inh / km²)

961 Mrd. EUR GDP
2017 EST

3,163 km highway
19,000 km rail

One of the largest Baltic Sea Ports
37,4 Mio tons 2016



Main topics:

Talent development and needs



Main topics

DT en Logistique 2017/2018

Contract with five teachers for the DT en Logistique for 5 courses

1. Road: Jeanette Klar
2. Road: Markus Lauer, K&N
3. Rail: Eric Lambert/ CFL mm
4. Seafreight: Jeanette Klar
5. Airfreight: Issham Haiba /Panalpina

Central Sharepoint platform for the teachers has been installed

Almost 40 apprentices will be available for a 3 year contract at the

Speedating event 20.2.2018



Lobbying

UECC meeting Sept 26th—27th

Posted Workers EU Directive in Transport

General Problems in posting

- Bus round-trip not accepted as transit
- No changes of posting form during transport (e.g. change of driver or car, additional delivery orders)
- Internet application: reusable/savable form only in F
- Form A1: for every transport, „nightmare“ to get
- Labour contract: data protection problem (clients start demanding as well)
- Third-party representatives: data protection problems, costs
- Order/delivery: only 5 deliveries possible in registration form
- Minimum wage: no general certification available, information not in E

Lobbying with EP-C4L meetings




Georges BACH

 **Group of the European People's Party (Christian Democrats)**

Luxembourg
Parti chrétien social luxembourgeois




Mady DELVAUX

 **Group of the Progressive Alliance of Socialists and Democrats in the European Parliament**

Luxembourg
Parti ouvrier socialiste luxembourgeois



Frank ENGEL

 **Group of the European People's Party (Christian Democrats)**

Luxembourg
Parti chrétien social luxembourgeois



Charles GOERENS

 **Group of the Alliance of Liberals and Democrats for Europe**

Luxembourg
Parti démocratique



Viviane REDING

 **Group of the European People's Party (Christian Democrats)**

Luxembourg
Parti chrétien social luxembourgeois



Claude TURMES

 **Group of the Greens/European Free Alliance**

Luxembourg
Déi Gréng - Les Verts

- LUX
- TRAN COM

Past Events

Shippers council Lunch on Sept. 20th

- Meeting at MDDI with several companies to create a shipper's council in Luxembourg on September 20th 2017. During the lunch we introduced the idea and gathered their thoughts and expectations
- CERATIZIT Luxembourg S. à r. l.
- Husky Injection Molding SA
- Arcelormittal
- Kronospan Luxembourg S.A.
- AMOVA SARL
- Goodyear Dunlop Tires Operations SA
- Heinz van Landewyck
- Ampacet
- Dow Dupont - Excused

Next meeting scheduled for January 16th at Kronospan

Past events

LEAN & GREEN “CLUB” Meeting at Goodyear Oct. 17

LEAN & GREEN Club visits for Label winners and candidates, potential candidates and solution providers

Subjects

- How to obtain the LEAN & GREEN Star
- Goodyear Tyre Solutions
- Plant Visit in the afternoon



Main topics

Green and sustainability subjects



SPEAKERS



Walter StaHEL

Founder-Director, The Product-Life Institute Geneva



Paul Kauten

Managing Director, Eids s.a.



Laurent Magi

Head of Energy and Consultancy Services, Enovos



Max Nilles

Chargé de Direction, Direction de la Navigation Intérieure et de la Logistique



Malik Zeniti

Cluster Manager, Cluster for Logistics



GREEN INNOVATION SUMMIT



Créé en 2011, le Luxembourg Green Business Summit change de nom cette année pour devenir le Green Innovation Summit. Organisé par le Groupe Farvest, cet événement attire chaque année plus de 350 professionnels. Les CEO et C-levels (CFO, CHRO, CMO, CTO, CIO*) participent ainsi à la prestigieuse conférence et cérémonie de remise des Luxembourg Green Business Awards clôturée par une soirée autour d'un networking cocktail.

Le Green Innovation Summit vous propose d'explorer les enjeux de développement durable actuels au niveau international ainsi que de découvrir les dernières innovations du secteur sur le salon. Ce sommet sera également l'occasion de promouvoir les initiatives locales et de récompenser les bonnes pratiques.

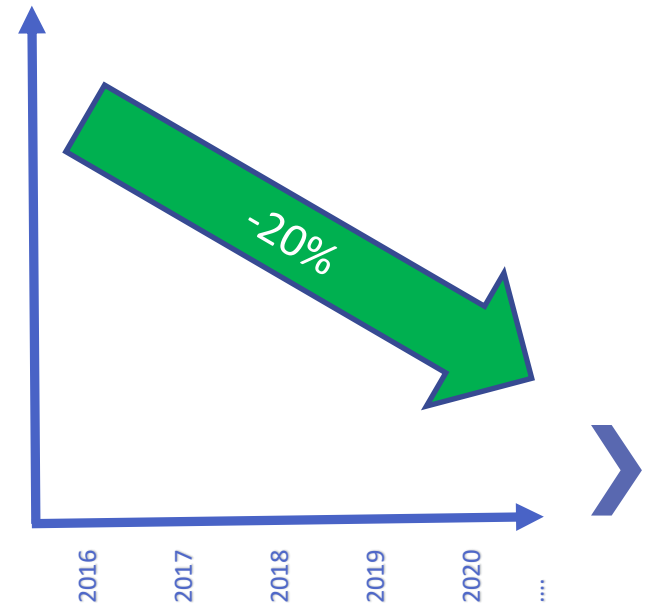
Lean and green award



- » Public recognition for voluntary program
- » For having a strategy towards sustainable logistics
- » Based on realistic and achievable measures
- » Which leads to 20% less CO₂
- » In maximum 5 years time

4th edition in 2018
Candidates welcome

CO₂



Future activities

Lean and Green award

Feb 6th 2018 Brussels

Participation with certified companies and candidates in Brussels @ Benelux L+G award ceremony

4 Candidates Lean and Green

3 Candidates and 1st Lean and green Stars



Past events

Innovation workshop with Luxinnovation

20.Oct Meeting from 14:00 to 16:00, Chamber of commerce

Topics:

What are the innovation needs?

What are the issues with innovation in Logistics?

What are the projects the companies could need help with?

How can Luxinnovation and C4L help directly?

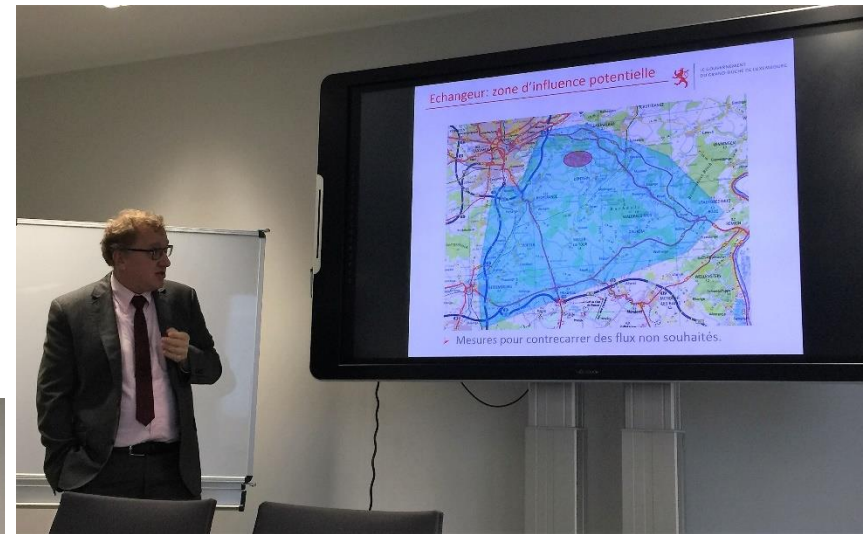


tp://www.clusterforlogistics.lu/

Past Events

Lobbying for Logistics

Presentation to CEO's of Infrastructure projects impacting logistics Hub by Minister Bausch Nov 21st



Future activities

Fruit Logistica 7-9 Feb 2018 Berlin



Participation of Cluster on a stand in collaboration with MECO and Chamber of commerce to promote **Fresh Hub Luxembourg** with 4 participant companies

Arthur Welter
Cargolux
DuPont
Grosbusch



Future activities

Supply Chain Day 2018

Save the Date
Tag der Logistik

Thursday 19 April 2018

Link supply chain day film on C4L.lu

Participation target > 120 visitors

Candidates: Please contact us



The flyer is for 'Journée Portes ouvertes' (Open Doors Day) and 'Supply Chain Day 27. April 2017'. It features the logos of Cluster for Logistics Luxembourg and BVL (Bundesvereinigung Logistik). The central image shows a person wearing a futuristic headset holding a tablet displaying a warehouse interface with 'Order Pick Time' and a timer. Below the image, there is a QR code and the text 'Check out our Video of 2016'. At the bottom, it mentions support from the Luxembourg Government, Ministry of Economy and the Ministry of Education, Nationality, Youth and Sports.

Cluster for Logistics Luxembourg
ADDING VALUE IS THE KEY

BVL
Bundesvereinigung Logistik

Journée Portes ouvertes

Supply Chain Day
27. April 2017

Check out our Video of 2016

Avec le soutien de / Mit Unterstützung von

LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Économie

LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse

www.c4l.lu

www.tag-der-logistik.de

SAVE THE DATES 2017-2018



-
- 21. November Luxembourg Logistics Robotics and AI conference
 - 29. November visit Ouganda Ministry of transport
 - 5. December BVL Chapter Luxembourg
 - 7. December Career hints in Logistics by Kevin Nash (YPL2)
 - 2018**
 - 16. January 12-15h Shippers meeting (for shippers only)
 - 7-9. February Fruit Logistica, Berlin
 - 20. February pm Diplom Technician of Logistics Speeddating
 - 22. February DLWI Logistics evening event TBC
 - Tbc February Premium members dinner
 - 1. March Luxembourg Center of Logistics (Partner event)
 - 19. April Tag der Logistik/Supply chain day
 - May 29 tentative Spring Conference:
Smart start-ups Last mile & city logistics

Luxembourg Logistics landscape

How CSCMP supports supply chain professionals to build competence and inspire smart logistics

Mr Jeroen Bolt,
CSCMP Benelux Roundtable



Coffee Pause offered by Our Sponsors



Thanks to our Sponsors



Platinum Sponsor



KUEHNE+NAGEL

Gold Sponsor



Silver Sponsors



FANUC

Robotics Process Automation in Logistics

Mr Ajay Bali,
Director, Ernst & Young
Business Advisory Services



Luxembourg Logistics landscape

Say "Hello" to Watson on the Shopfloor AI and Cognitive Manufacturing in Action

Mr Thorsten Schröder, Director
IBM Industrial Sector



Luxembourg Logistics landscape



Tom Leys, Head of Logistics Engineering, Kuehne + Nagel BeLux

Paul Ribus, General Manager FANUC Benelux or

Andrea Scammacca, Head of European supply chain, FANUC Europe

Thorsten Schröer, Director, IBM Industrial Sector

Ajay Bali, Director, Ernst & Young Business Advisory Services

Herbert ten Have, CEO Fizyr

Panel Discussion

Meeting the AI and robotics challenge!
What Luxembourg needs to address
to develop into a smart European Hub
for logistics

Moderators: Mr Jeroen Bolt, Mr Malik Zeniti

Our Sponsors

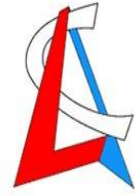
Walking dinner offered by



New Members 2017



d'Assurance / **nei erfannen**



Thanks for your recommendations for new members



Thanks for support to 22 Effective Members and Partners 2017

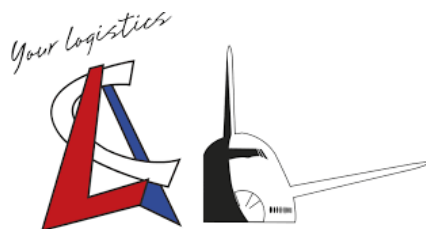


LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère du Développement durable
et des Infrastructures



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Économie
et du Commerce extérieur

Our new Members 2017



Thanks to our Sponsors



Platinum Sponsor



KUEHNE+NAGEL

Gold Sponsor



Silver Sponsors



FANUC

Contact us



Cluster for Logistics
Luxembourg
a.s.bl.

ADDING VALUE IS THE KEY

For more information: www.clusterforlogistics.lu

Contact us at : info@c4l.lu

director

Malik Zeniti

+352 42 39 39 849

Assistant manager

Melanie Laidié

+352 423939-847

Communications Assistant

Ronny Wolff

+352 42 39 39 848



President

Directeur general

CC

Carlo Thelen

+352 42 39 39 300



Join us on Twitter and follow us on LinkedIn



LinkedIn