



Lubrizol – Material Movement by Barge



Oevel, September 30th 2015



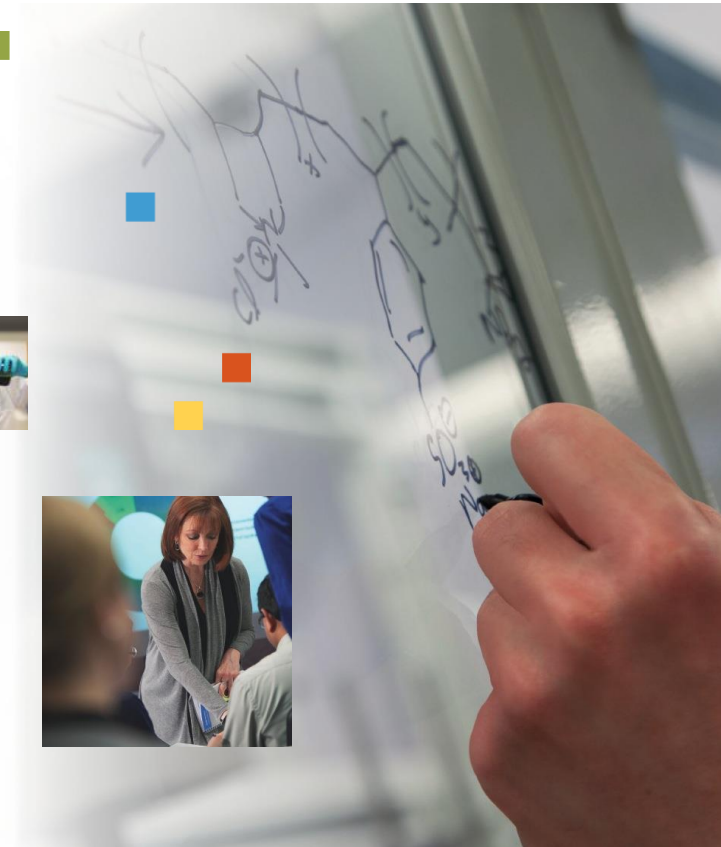
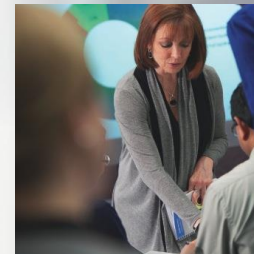
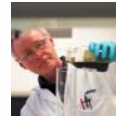
Steven D’Heer

Lubrizol Corporate Supply Chain

Kristof Nijs

Lubrizol Advanced Materials Manufacturing

- Lubrizol Company Overview
- Material Movement by Barge
- Benefits



Lubrizol is a Global Specialty Chemical Company

We combine complex, specialty chemicals to optimize the quality, performance and value of our customers' products while reducing their environmental impact



- Problem solvers
 - Deliver innovative, practical specialty chemical solutions for customers' toughest challenges
- Technology-driven
 - Hold nearly 2,000 patents and counting
- Global
 - Serve customers in more than 100 countries with approximately 8,000 employees worldwide
- Growth-oriented
 - Reinvest in our business thanks to strong record of financial success and sustained performance – 2014 Consolidated Revenue +\$7 Billion
- Owned by Berkshire Hathaway
 - Supports our commitment to continually reinvest in our business





37	Lab/Technical Facilities	
79	Manufacturing Sites	
59	Sales Offices	

AMERICAS

- 18** Lab/Technical Facilities
- 50** Manufacturing Sites
- 14** Sales Offices

EUROPE

- 10** Lab/Technical Facilities
- 14** Manufacturing Sites
- 21** Sales Offices

MIDDLE EAST & AFRICA

- 1** Lab/Technical Facility
- 2** Manufacturing Sites
- 3** Sales Offices

ASIA PACIFIC

- 8** Lab/Technical Facilities
- 13** Manufacturing Sites
- 21** Sales Offices

Lubrizol Corporation



Lubrizol Additives

- Engine Additives
- Driveline Additives
- Industrial Additives
- Fuel Additives

Lubrizol Advanced Materials

- Engineered Polymers
- Personal and Home Care
- Performance Coatings
- CPVC Piping Systems
- Lubrizol LifeSciences

Lubrizol Oilfield Solutions

- Oilfield Chemistry
- Pipeline Flow Improvers



Lubrizol Advanced Materials in Belgium

Oevel :

- Estane® Thermoplastisch Polyurethaan: TPU
- TempRite® Vinyl Polymers : CPVC



Kallo :

- Production Carbopol
- Latex®



Brussel :

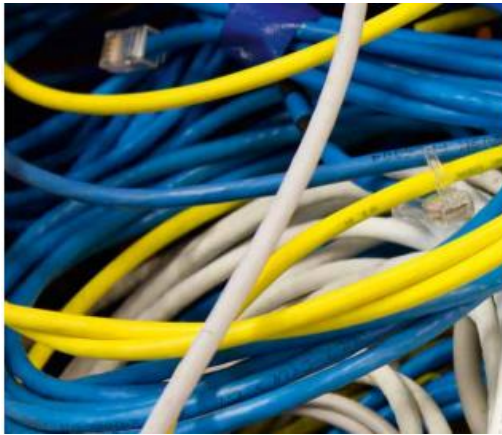
- HQ EMEA (Shared Services)



Louvain-La-Neuve :

- Lab Food and Personal Care





In November 2012 Lubrizol started a project for the Oevel Manufacturing Site in Belgium to jointly **seek opportunities of moving materials more efficiently** serving the “TempRite® Engineered Polymers” and “Estane® TPU” business segments where we ship about MT 70,000 to our Global Customers from this facility on an annual basis.

During the course of the project we **identified an opportunity** to improve the overall efficiency of transportation by moving these shipments by barge rather than by road to and from the port of loading.



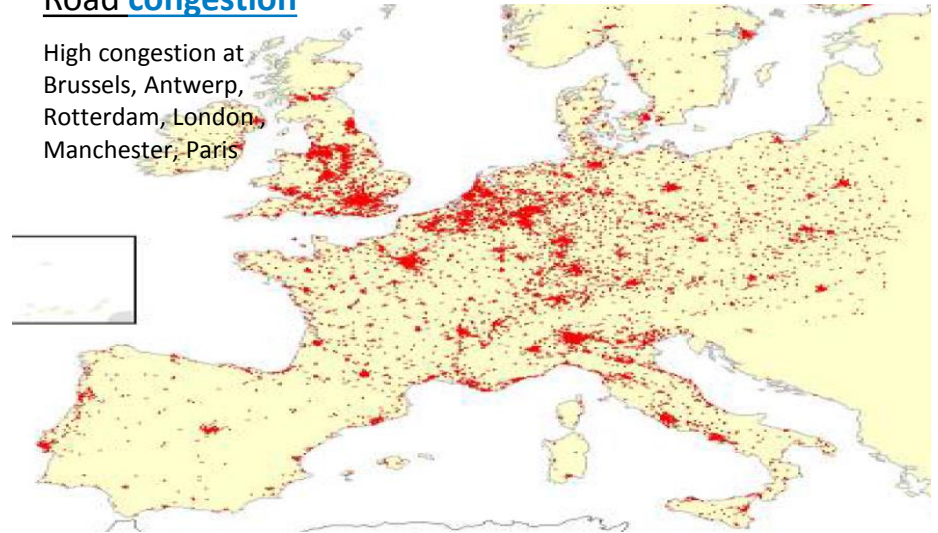
Road infrastructure

Current infrastructure insufficient to cope with current requirements



Road congestion

High congestion at Brussels, Antwerp, Rotterdam, London, Manchester, Paris



Climate legislation – 2050 transport roadmap

2020

- Establish a framework for a European multimodal transport information, management and payment system covering both passenger and freight

2030

- 30% of road freight over 300 km should shift to other modes such as rail or waterborne transport, and more than 50% by 2050
- Fully functional and EU-wide core network of transport corridors, ensuring facilities for efficient transfer between transport modes by 2030, with a high-quality/capacity network by 2050 with corresponding IT services.

2050

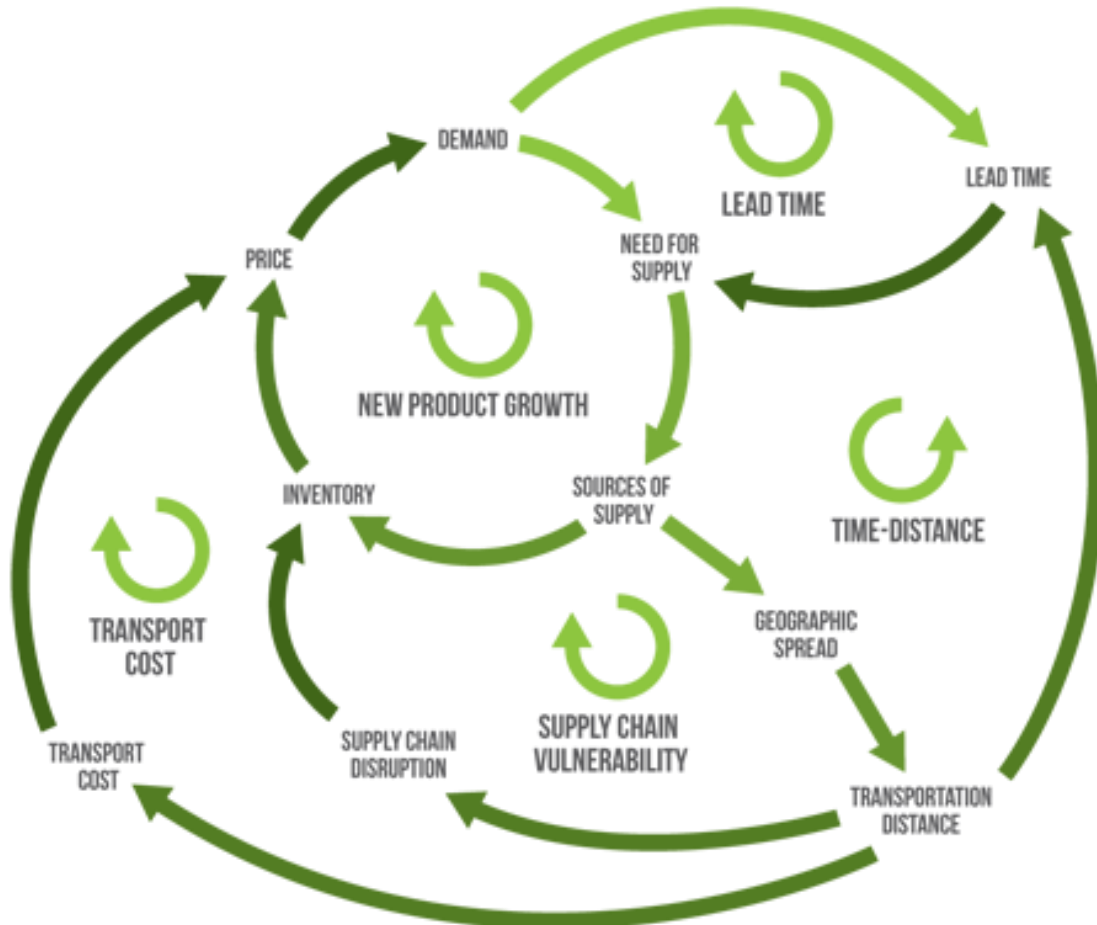
- Connect all core network airports to the rail network, preferably high-speed; ensure that all core seaports are sufficiently connected to the rail freight and, where possible, inland waterway system
- Move towards full application of “user pays” and “polluter pays” principles and private sector engagement to eliminate distortions, generate revenues and ensure financing for future transport investments.

Carrier shipment reliability

Breaking a run of six consecutive months of improvement, reliability across the main trades declined in July, falling by 4.0 percentage points from June to 73.3%



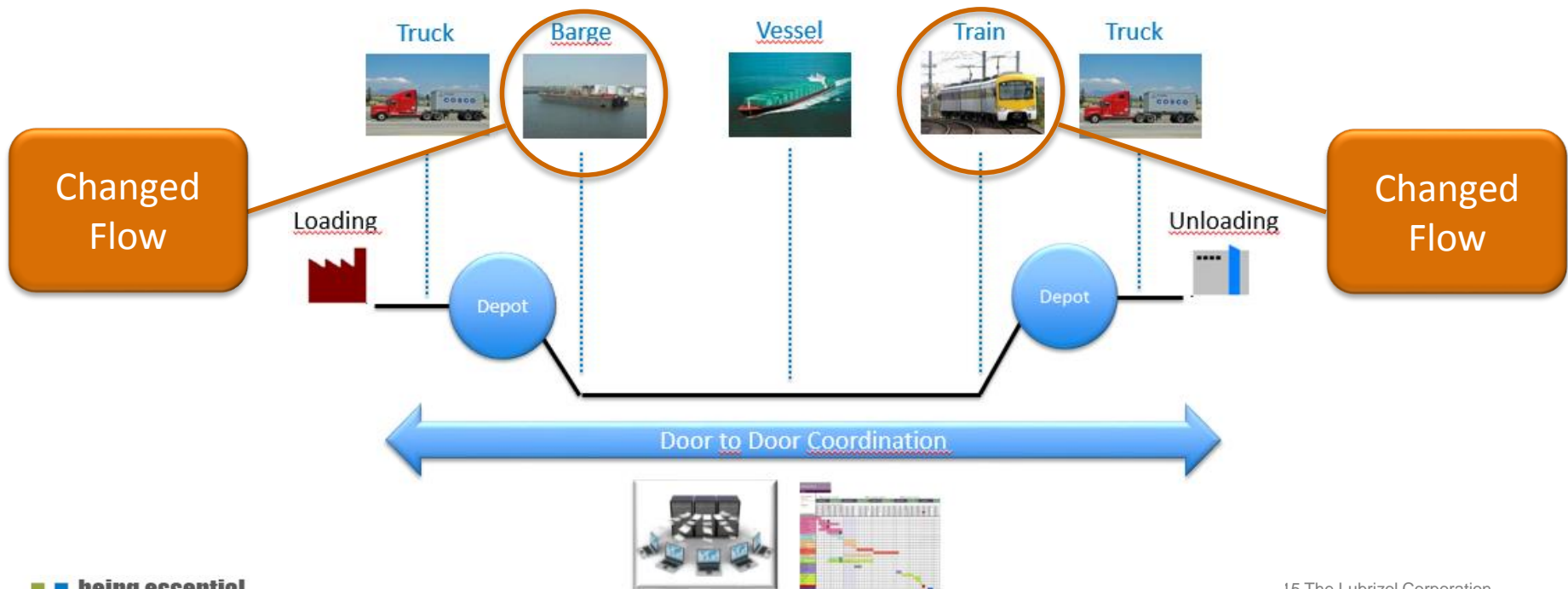
Internal Challenges



In- & Outbound	Europe
Legal Entities	6
Divisions	7
Ship to/from countries	+100
Logistics related suppliers	+100
Customers	+3000
DN's handled	+/-80000
LZ Ship to/from locations	+70
No of SKU's	+20
Material Codes	+/-8000

In order to bring this project to effect we had to identify a suitable partner which was able to not only bring the benefits we were seeking but at the same time was also able to assure :

- ❖ A **proper execution**
- ❖ Guaranteed **high level service and tracking**
- ❖ **Interface** with the different Steamship Lines



Here we found a **partnership with the “Beverdonk Container Terminal”,** part of DP World which was selected as the primary partner for Lubrizol to implement this project.



- ❖ Save 159 MT on CO2 emission on an annual basis (reduction by 37%)
- ❖ Optimize the transportation cost (reduction by 8%)
- ❖ Better service offerings to Customer (multiple sailing departures)
- ❖ Overall workflow optimization :
 - Loading frequency at shipping/receiving locations
 - Less demurrage/waiting hours
 - Container depot availability
 - Further reinvestment opportunities at the Oevel site



Beverdonk Container Terminal



The "Platform Kempen International" with members as Flanders Investment & Trade (FIT), Flanders DC, Thomas More University Kempen, Kogeka, Agentschap Ondernemen, Unizo Kempen, Belgian Chamber of Commerce and Belgian Chamber of Commerce VOKA Kempen, has **nominated Lubrizol Advanced Materials Europe BVBA** for winning "Export Company International" for its "Greener Logistics" within Europe as part of exporting international shipments.

Lubrizol won the award '2014 Kempen International' !



Thank you !

