Chemelot

CO2 Reduction in the industry

29 January 2020
Loek Radix, Executive Director Chemelot

Chemelot

60 plants

> 100 organizations

8000 employees

> 80 nationalities

Chemelotsite

> 800 ha	ground
	Rail Terminal Chemelot
1	Dome permit
1	In-land harbour
2400	Street lights
280 MW	Gas consumption
2 bln m3	Steam
1000 tn/hr	Water (demi)
50 km	Roads
60 km	Rail
800 km	Pipe lines

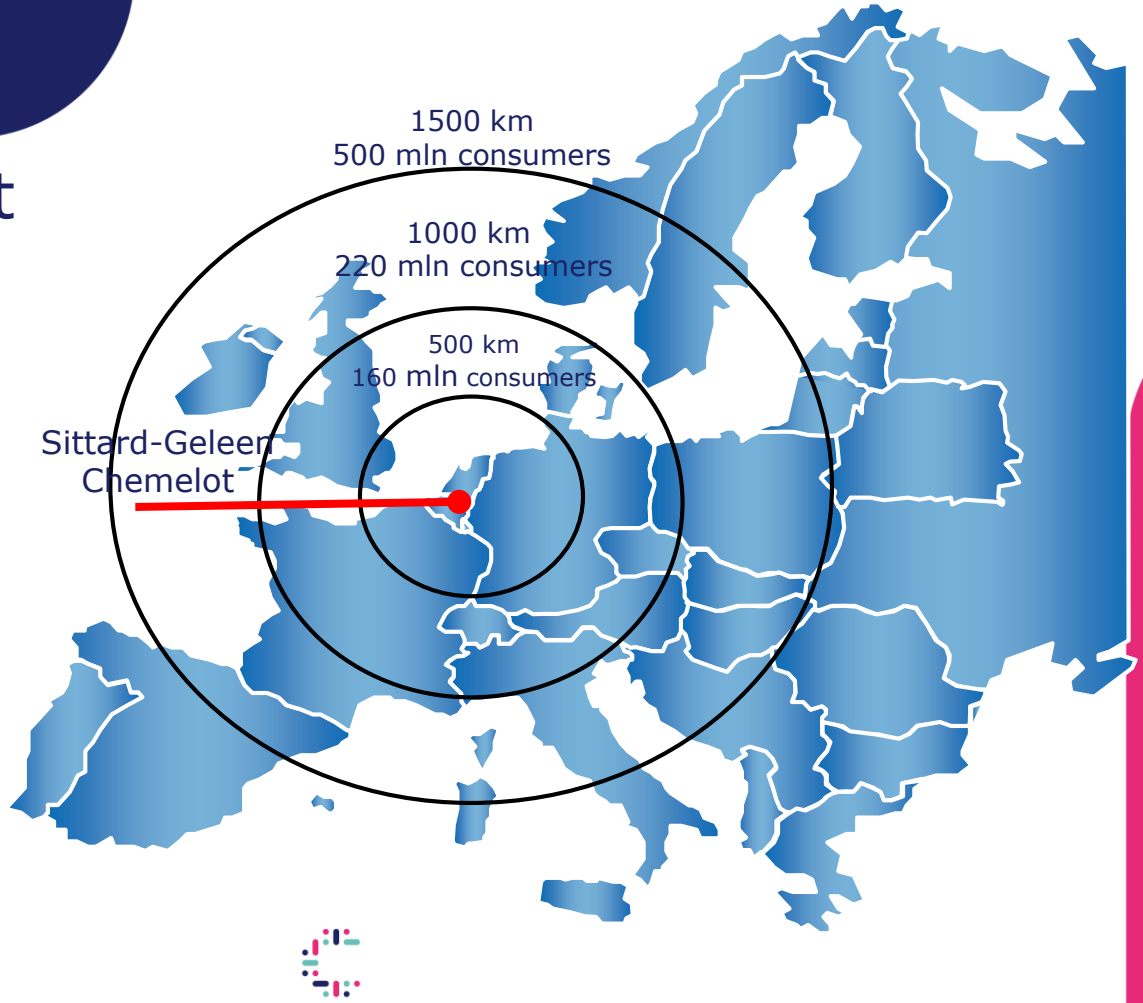
7 airports within 1 hour driving distance

European hotspot

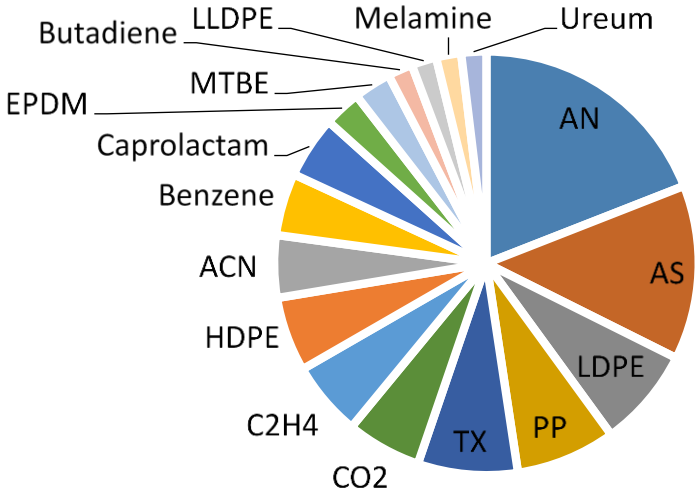
One of the largest material- and chemical sites in Europe (8 km2)

Campus & industrial park

- Sharing infrastructure, costs and value chains
- Annual turnover 10 billion euro,
- Yearly production >5,5 miljoen tons of product
- Average investment on site: € 250 miljoen per year
- Central organisation permits and emergency response
- Sharing specialist expertice
- Joint agreements in the field of Safety
- Brightlands Chemelot Campus; 2500 employees

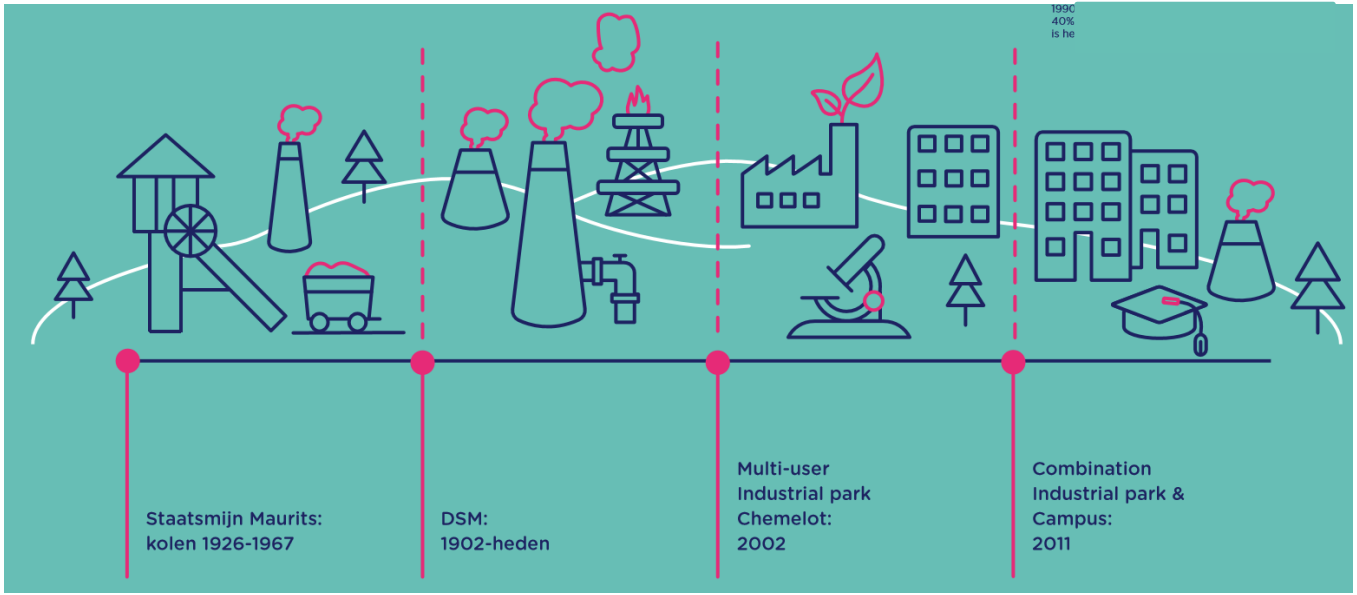


Production Chemelot 5,5 Mt per year



Legenda: AN: Ammoniumnitraat kunstmest; AS: Ammoniumsulfaatkunstmest; LDPE: Low Density Polyethylene; PP: Polypropylene; TX: Benzine component met voornamelijk tolueen en xyleen. CO2: Koolstofdioxide; C2H4: etheen export; HDPE: High Density Polyethylene; CAN: Acrylonitril; EPDM: Etheen-Propeen-Dieen Monomeer-Rubber; MTBE: Methyl-tert-butylether (octaan verhogend benzine additief); LLDPE: Lineair Low Denisity Polyethylene.

History in succesful transitions



Roadmap 2030

- Carbon Capture Storage
- N_2O reduction
- Electrification and Energy savings projects

Beyond 2030; Brightsite

1. Replacing naphta by biomass and recycled plastic
2. Hydrogen without fossile CO2 generation
3. Electrification of high temperature processes
4. Circular water

The 5 I’s

- Instrumentation *CO2-levy, innovation subsidies, bridging the ‘Valley of Death*
- Innovation Sustainable Technology; feedstock and processes
- Infrastructure for energy carriers/CO2/H2
- Involvement of citizens/society
- International Level Playing Field/infrastructure

On the way to 2025!

Thank you!