

Roundtable Zuid-Holland in transition 20/03/2017 Mark Dijk – Manager External Affairs



Rotterdam Port and Industrial complex: Global Hub and Industrial Cluster

- Total port area 12,500 ha (net 6,000 ha)
- Total employment 175,000 people
- Total added value € 20 billion (3.0% GNP)
- Largest port in Europe, 9th port worldwide
- Throughput 460 million tons; 12.4 million TEU (containers)
- Depth up to 75 ft (= 24 m)



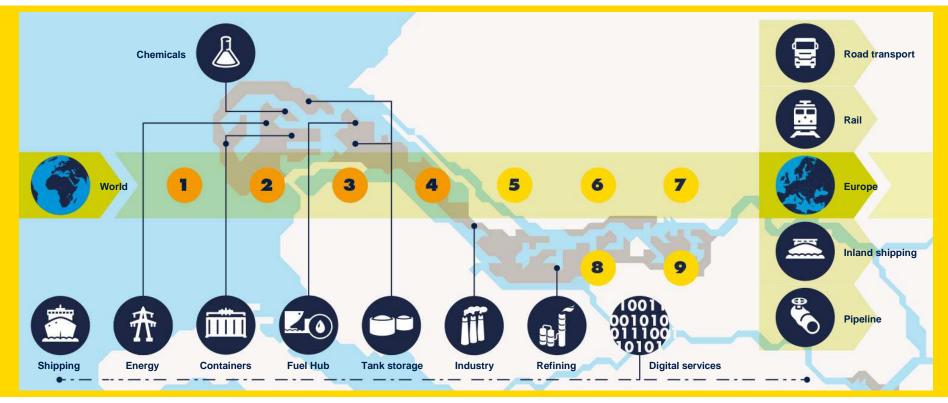


- 80 terminals
- 9 power plants, 20% Dutch power production
- 3.000 companies
- 5 oil refineries
- Largest biobased cluster of Europe
- 70,5 km quay length
- Part of ARRRA-cluster (40% chemical industry in Europe)



Core tasks of the Port of Rotterdam Authority Manager, developer, facilitator, booster and sometimes co-

Manager, developer, facilitator, booster and sometimes coinvestor





Current developments

- Geopolitcal developments influence trade flows
- Long-term moderate growth rates (eg in BRIC countries)
- Container Market is dynamic (alliances, overcapacity), strong competition
- Structural changes in energy market (emerging sustainable technology, shale gas)
- Ratification Climate Accord Paris
- Rapid application of new technologies Digitization and robotics (inter alia self transport, drones)





Main challenges: <u>Digitalisation</u>, energy transition, accessibility

Rotterdam wants to be a smart port by:

- Optimising ship handling through transparent information sharing
- Offering clients the possibility to determine the most efficient routes
- Smart hinterland planning
- Dolphins that indicate the actual load
- Berths and dolphins that give notification when available



Main challenges: Digitalisation, energy transition, accessibility

- Energy transition strategy is two-fold:
 - Renew the existing business
 - Welcome new businesses
- Goal: strengthen the competitive position of the industrial cluster in the interest of business and society
- Major adaptations and flexibility are needed.....No more business as usual...
- A lot of projects are already underway in Rotterdam...





Heat Roundabout

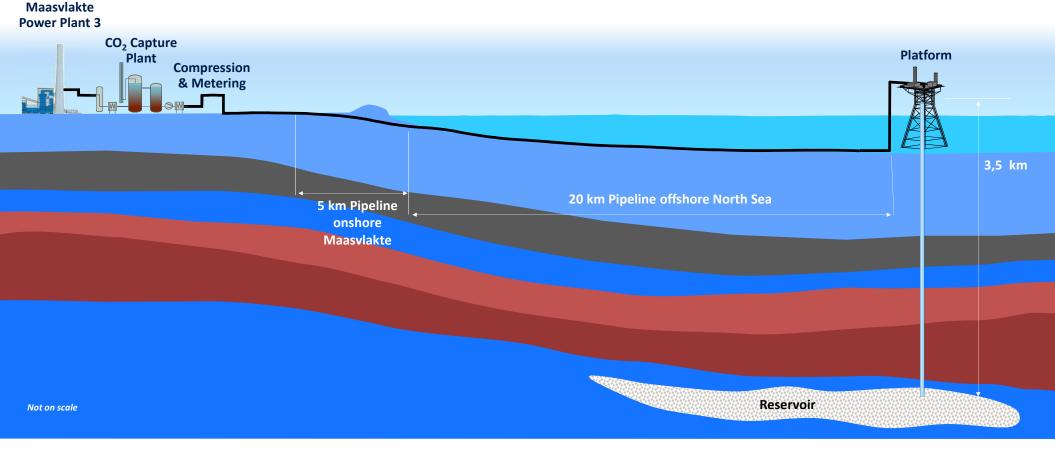
- Pipeline between the port Westland The Hague: distribution network for greenhouses
- Energy savings: 7.3 PJ annually;
- Reduction in CO₂ emissions: 450 ktons/year;
- Reduction in NO_x emissions: 2 ktons/year







Carbon Capture & Storage: ROAD-project





LNG as transport fuel





Biobased industry



Neste to build biopropane plant at Maasvlakte



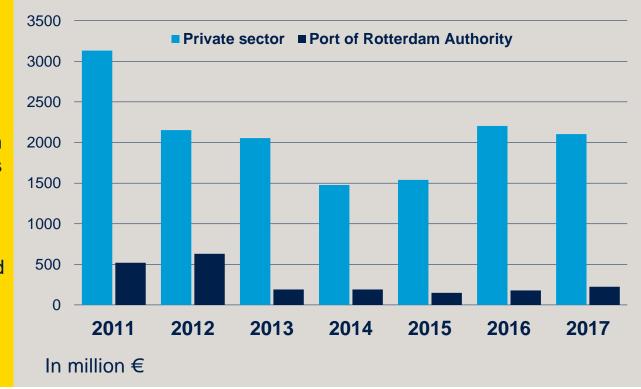
Circular economy: waste-to-chemicals initiative





Investments by Port Authority encourage necessary investments of private sector

- In 2016, the Port Authority invested approx. € 180 million in renewing the industrial cluster and improving accesibility of the Port
- Investments by the Port of Rotterdam trigger necessary private investments
- Ratio of Port Authority to private sector investments is 1:7
- However, we need public support and reliable policies as well...





How can policymakers help?

- 1. Increase the cost of CO₂ emissions
- 2. Provide a clear legal framework and timeline for industrial decarbonization paths.
- 3. Support R&D and investments in new low carbon technologies and infrastructure
- 4. Stimulate the use of clean transport fuels (i.e. LNG)
- 5. Enhance fair competition between European seaports







