

City logistics living labs to enable transitions

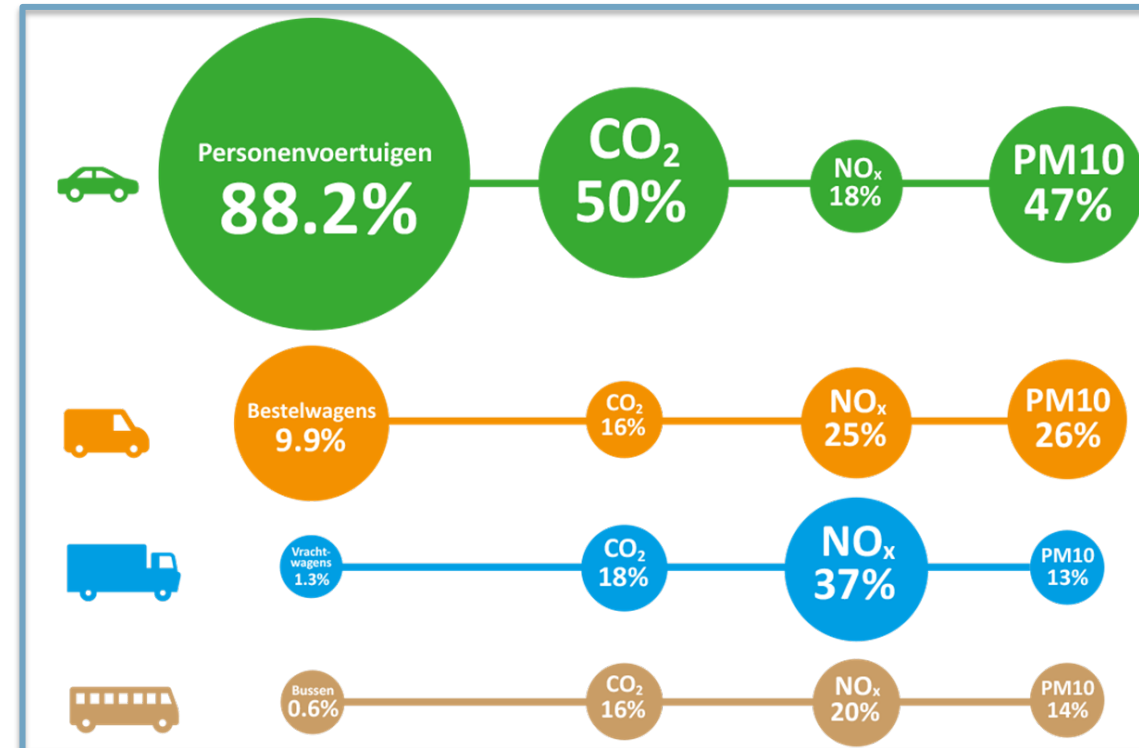
Dr. Hans Quak, senior research scientist @ TNO

hans.quak@tno.nl

Why do we need living labs?

› City logistics faces serious challenges:

- › Climate change, air quality, emission free city logistics by 2030, livability, accessibility, noise, safety and scarcity of urban space
- › Many demonstrations, but limited lasting implementations
- › Local and not transferable ‘best practices’;
- › Technically possible interventions, but scaling up is difficult
- › Urban freight transport is often not a part of a long term policy
- › Transition to a more sustainable urban logistics system requires a long term involvement from industry, authorities and researchers

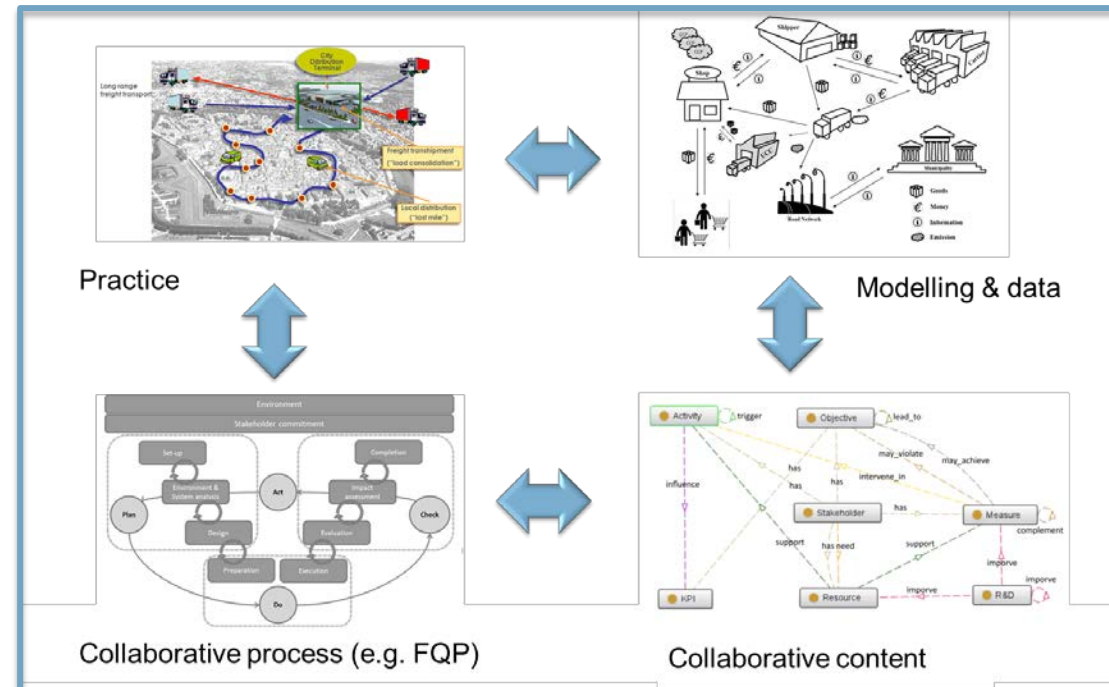
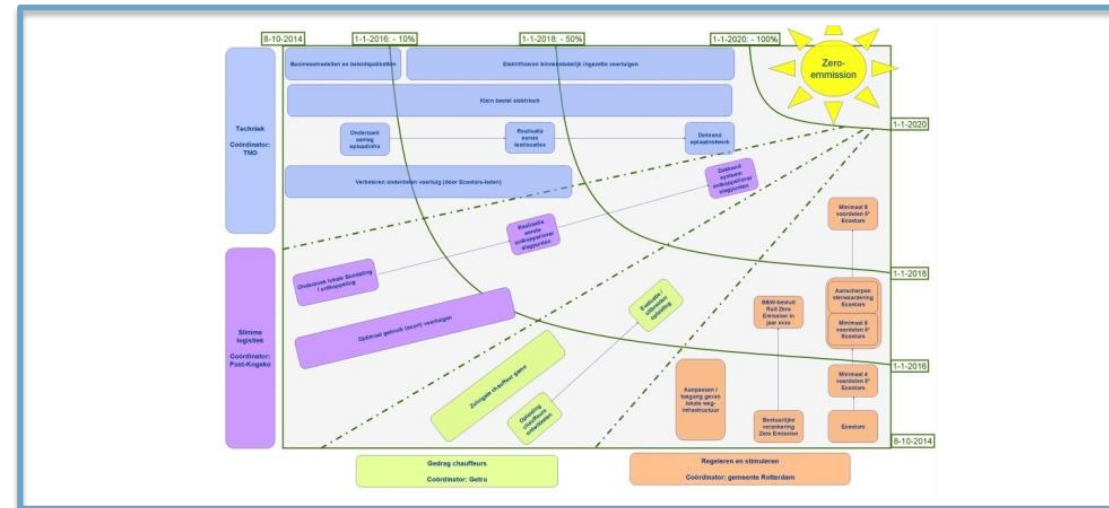


TNO: Rotterdam City Centre, 2015

What is a living lab?

› No single definition, but it contains:

- › Experimental test environment in real world setting
- › Action driven, active participation for all stakeholders
- › Cyclical development and continuous monitoring and learning
- › Focus on medium / long term objectives
- › Solving complex issues
- › Public – private – knowledge – user cooperation
- › Transition roadmap is leading: long term objective is known, exact way is jointly developed in living lab



Experiences with living labs?

› Set-up:

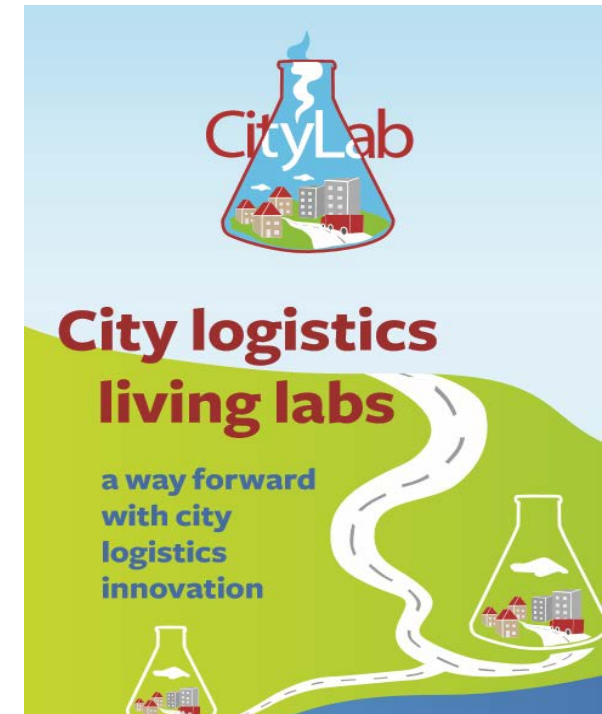
- › Group with shared vision, objective, values
- › Shared roadmap including roles and actions
- › Continuous monitoring
- › LL governance structure

› Benefits:

- › Shared responsibility and commitment
- › Easier to correct in experiments
- › Opportunity to extract more funds / projects

› Pitfalls:

- › New way of working is difficult
- › Not 'just' a project
- › Lots of uncertainty in planning
- › Long-term commitment required, also if people change



THANKS FOR YOUR ATTENTION

Dr. Hans Quak
Senior Scientist Sustainable Transport & Logistics

TNO innovation
for life

Anna van Buerenplein 1
2595 DA Den Haag
T +316 31792851
hans.quak@tno.nl
www.linkedin.com/in/hquak



TNO innovation
for life

For more information:

- Quak, Lindholm, Tavasszy, and Browne (2016) From Freight Partnerships to City Logistics Living Labs – Giving Meaning to the Elusive Concept of Living Labs. *Transportation Research Procedia* 12, pp. 461 – 473
- Nesterova, Quak and Van Rooijen (2018) Living Labs – an Approach for achieving Sustainable Change in City Logistics. Conference: OpenLivingLabDays 2018 Geneva, Swiss
- CITYLAB: www.citylab-project.eu