

A wide-angle photograph of a bustling city street. In the foreground, several cars are parked along the side of the road. A woman in a white dress is walking towards the camera from the left. In the middle ground, two women are walking away from the camera; one is pushing a stroller. The background features a row of multi-story buildings, some with scaffolding, and a green tree-lined sidewalk. A traffic light is visible on the right side of the frame.

# THE IMPACT OF NEW MOBILITY CONCEPTS

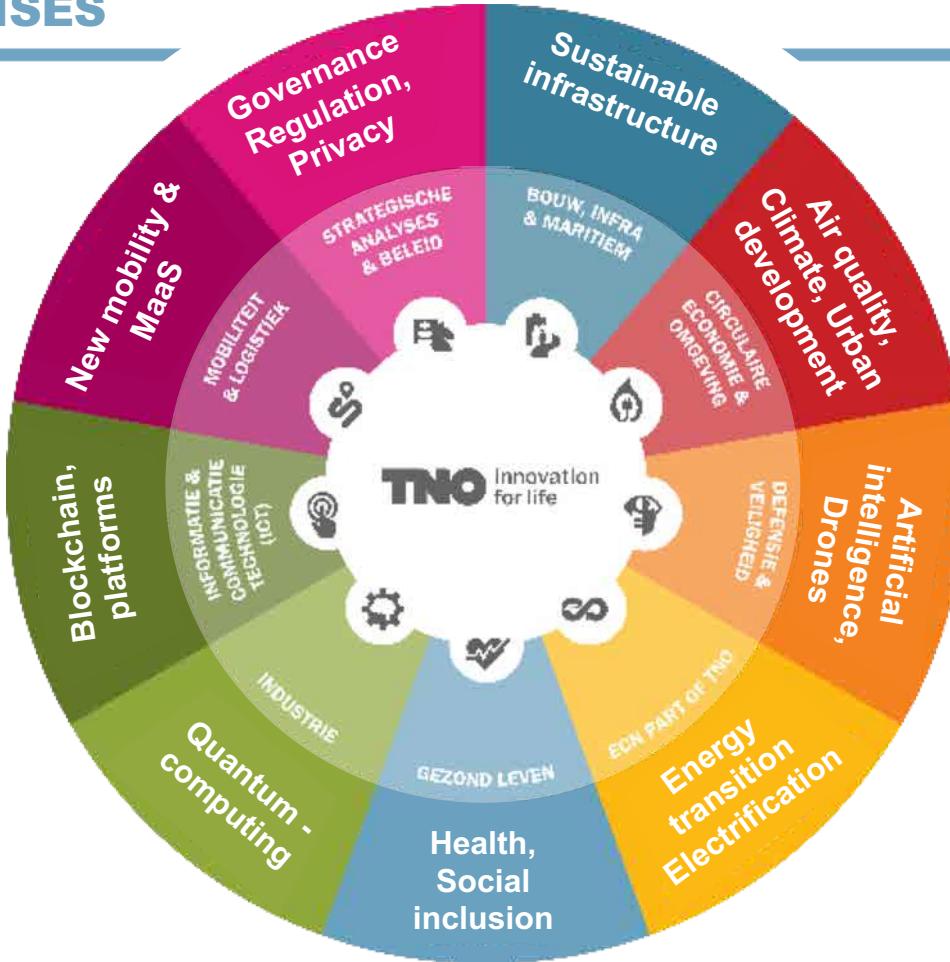
Geiske Bouma – Senior Consultant, lead Urban Innovation | 09-05-2019

**TNO** innovation  
for life

## VISION – NEW MOBILITY

- › In 2030 we can have a better living environment for society and individuals
- › New Mobility can potentially solve problems → preconditions need to be set now
- › How to scope with uncertainties? → investment decisions are long term and large
  - › Explore scenarios & reduce uncertainty

*TNO has an integral, future oriented, multidisciplinary focus (technologies and social innovation) and a neutral precompetitive role*



## FOCUS AREAS

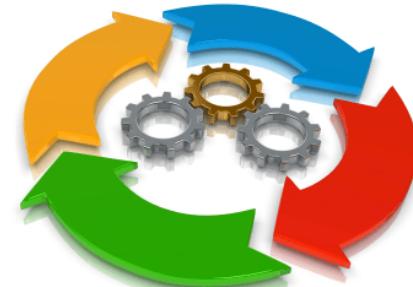
### Strategy



### Impacts



### Governance



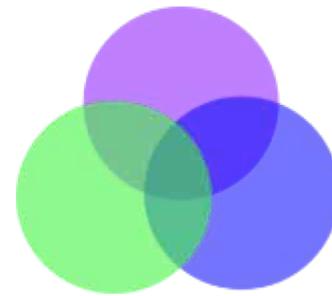
## DIGITALIZATION: IMPROVING DECISION MAKING IN CITIES



using worldwide  
**knowledge**



**fact-based** using  
different data sources



an **integral** approach  
avoid sub-optima



**adaptive**, use  
experience to improve



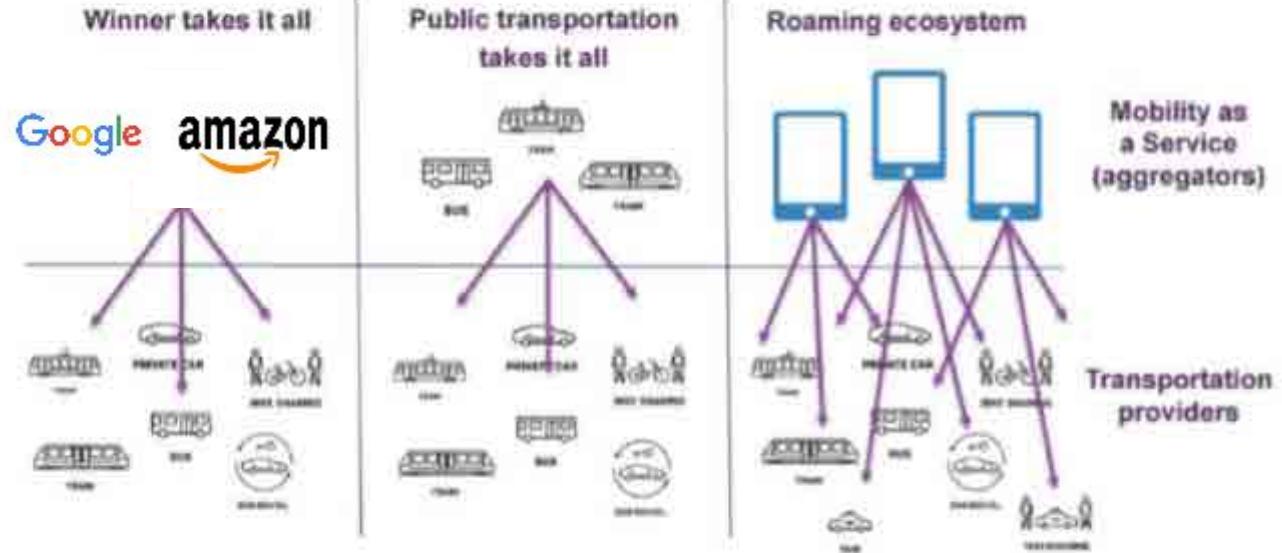
in **collaboration** with stakeholders

# MARKET COMPETITIVENESS

Strategy

Impacts

Governance



# DRIVERS AND BARRIERS

Strategy

Impacts

Governance

## *Drivers*

- Efficiency en Reliability
- Usability
- Receptive Public
- Fragmented Market
- Worldwide Competition
- NL Government involvement

## *Barriers*

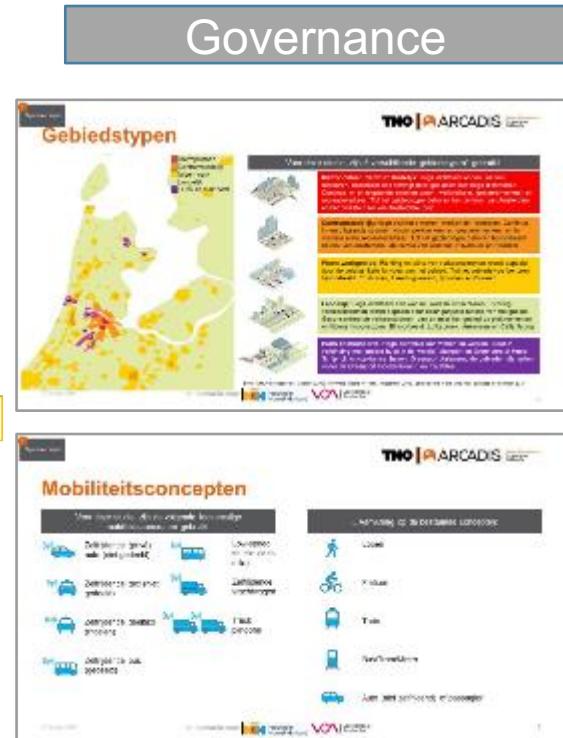
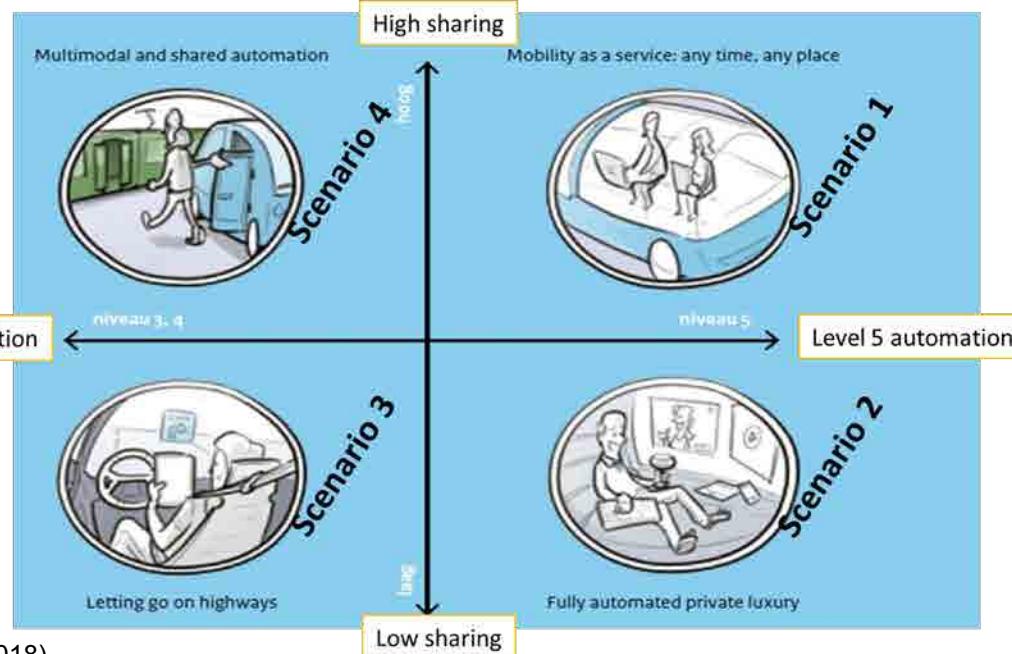
- Fear for change
- Lack of knowledge
- NL not ideal market
- OV chipcard
- Path towards integrated platform

# SCENARIO PLANNING

## Strategy

## Impacts

## Governance

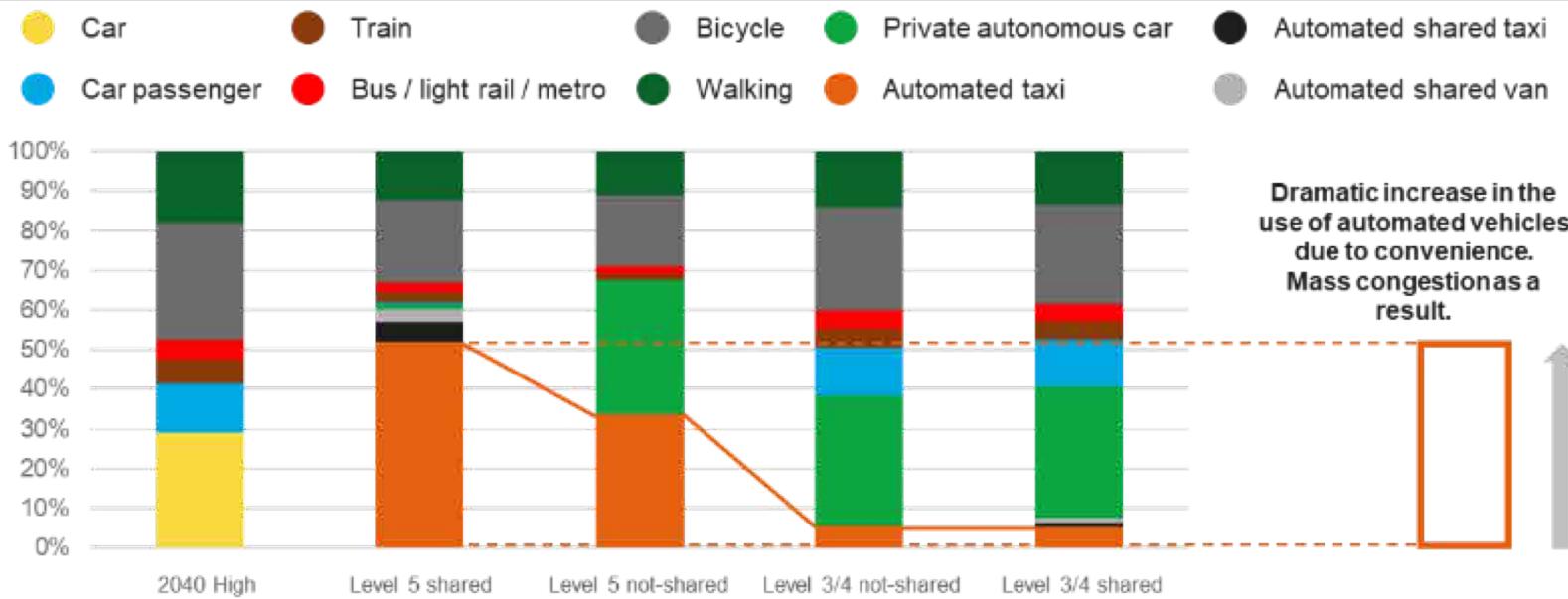


# TRANSPORT IMPACTS

## Strategy

## Impacts

## Governance



## TRANSPORT IMPACTS

Strategy

Impacts

Governance

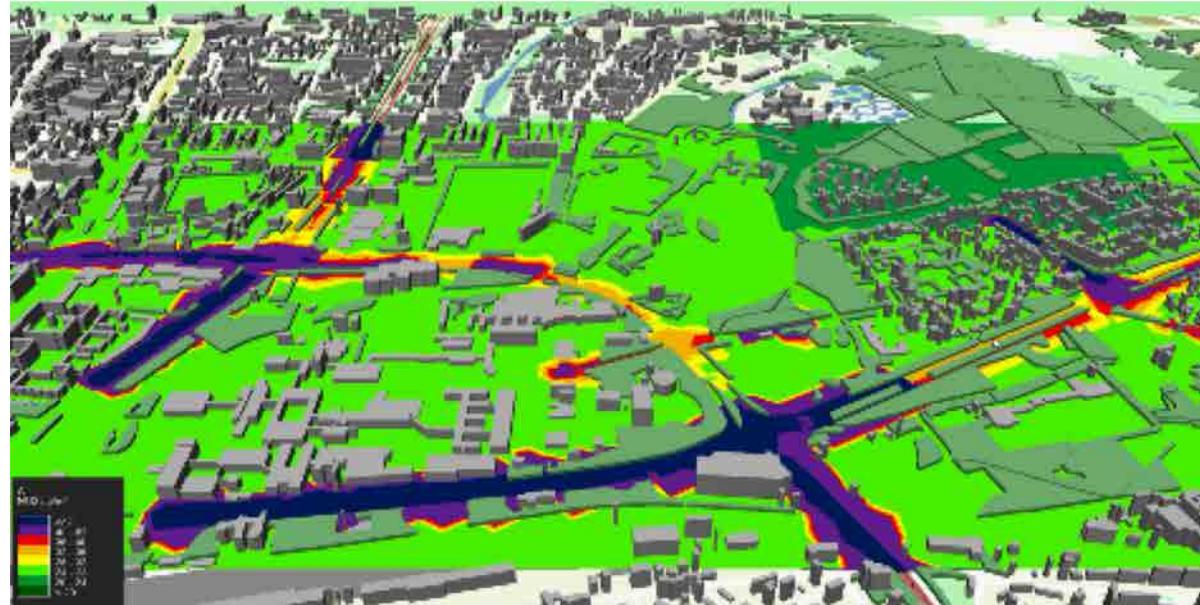
**AVs = Congestion X 2,5**

# SPATIAL PLANNING – URBAN STRATEGY

Strategy

Impacts

Governance

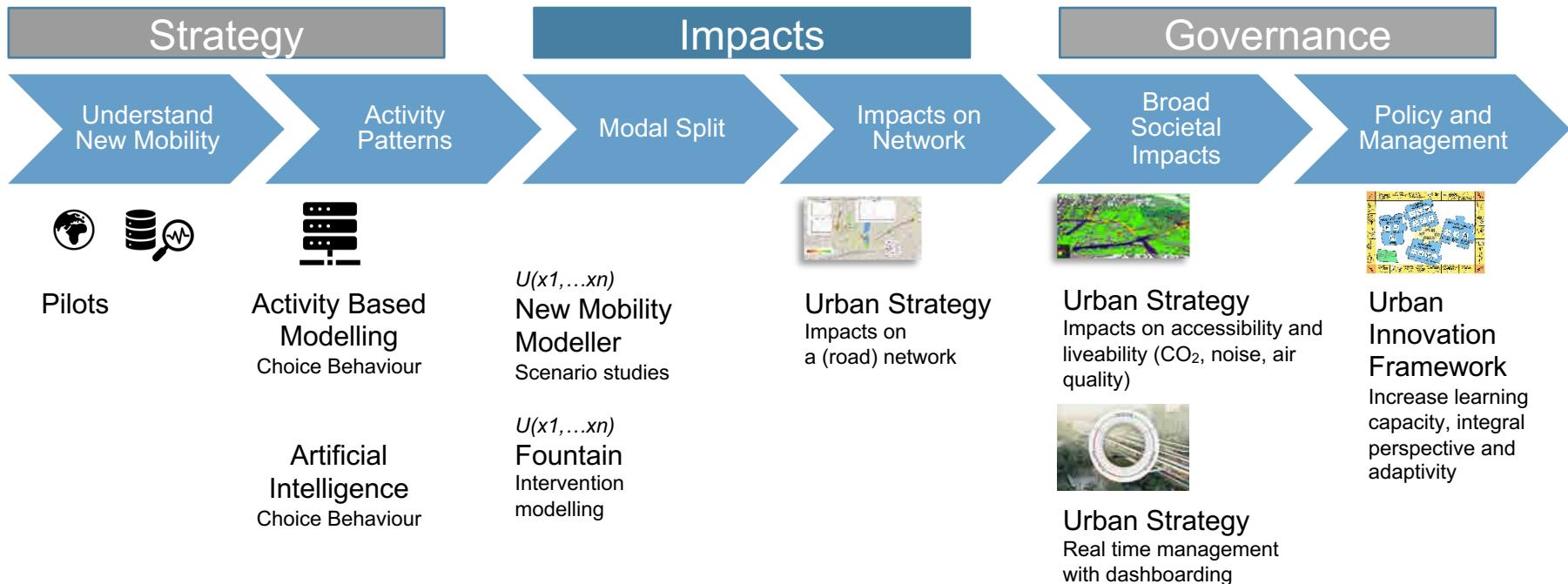


# INTEGRAL INTERACTIVE PLANNING

- › There is a need for:
  - › Strategic spatial planning
  - › Traffic & Environmental impacts
  - › Urban (re)development
  - › Solutions for Bottlenecks
- › Use of various data sources and simulation models
- › Need to cooperate between various departments and levels of decision making



# KNOWLEDGE CHAIN OF NEW MOBILITY



Accelerating insight in scenarios, decision making and implementation

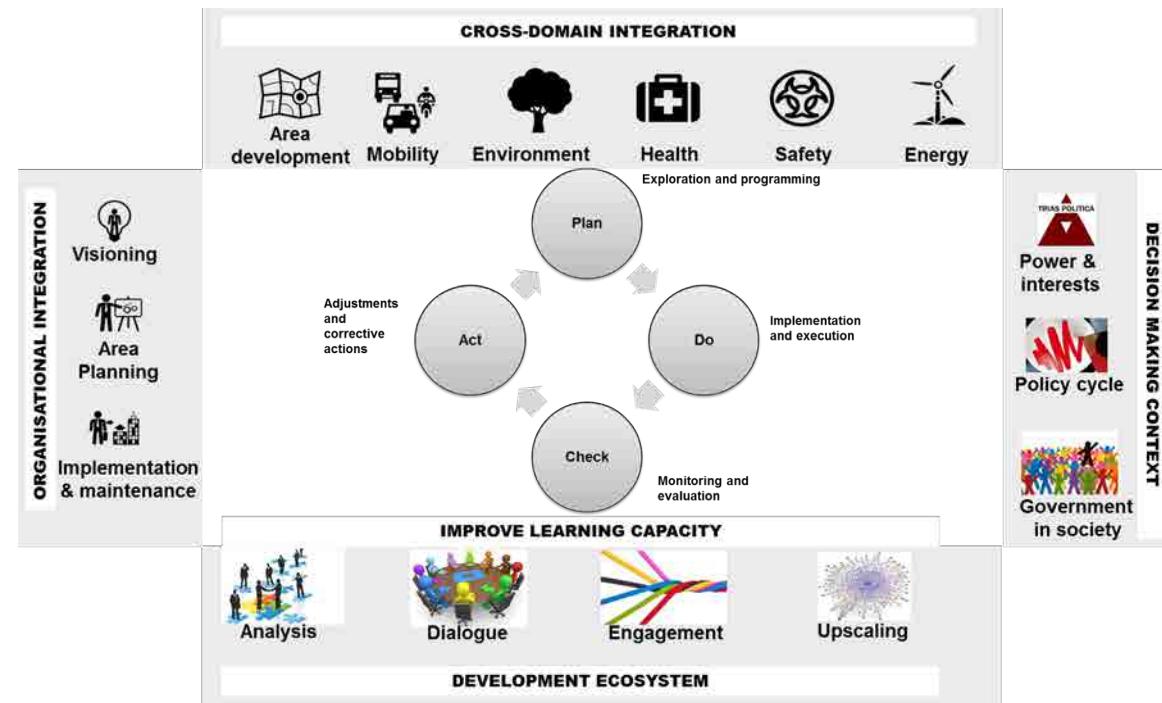
# GOVERNANCE

## Strategy

- Adaptive Policy Making
- Implementation of Pilots & Strategies for scaling-up
- Decision-making structures

## Impacts

## Governance



# TNO NEW MOBILITY STRATEGY

## Strategy

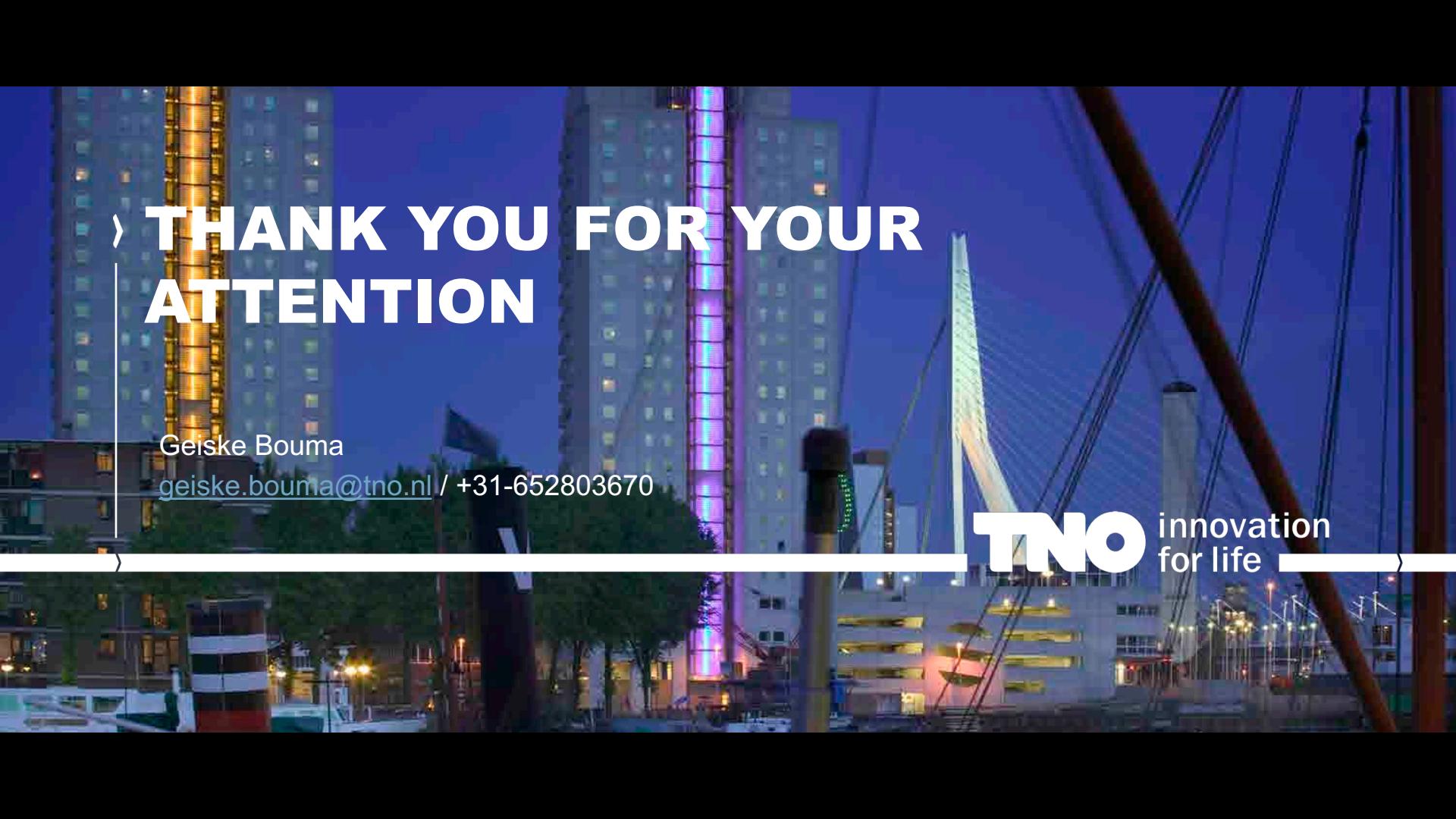


## Impacts



## Governance





› **THANK YOU FOR YOUR  
ATTENTION**

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