2050 CliMobCity

Interreg Europe

European Union
European Regional
Development Fund

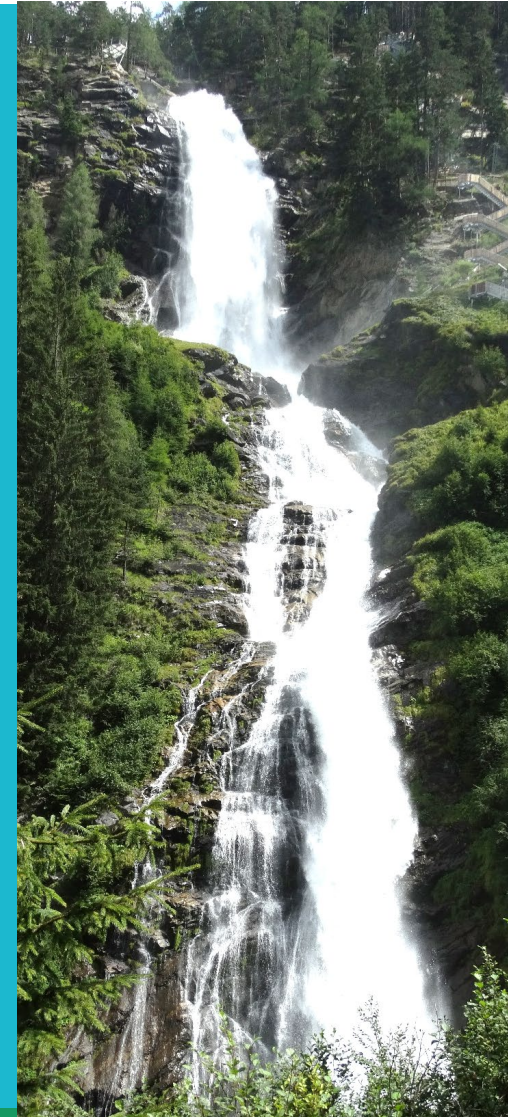# Coherent 'Action Plans': inspiration

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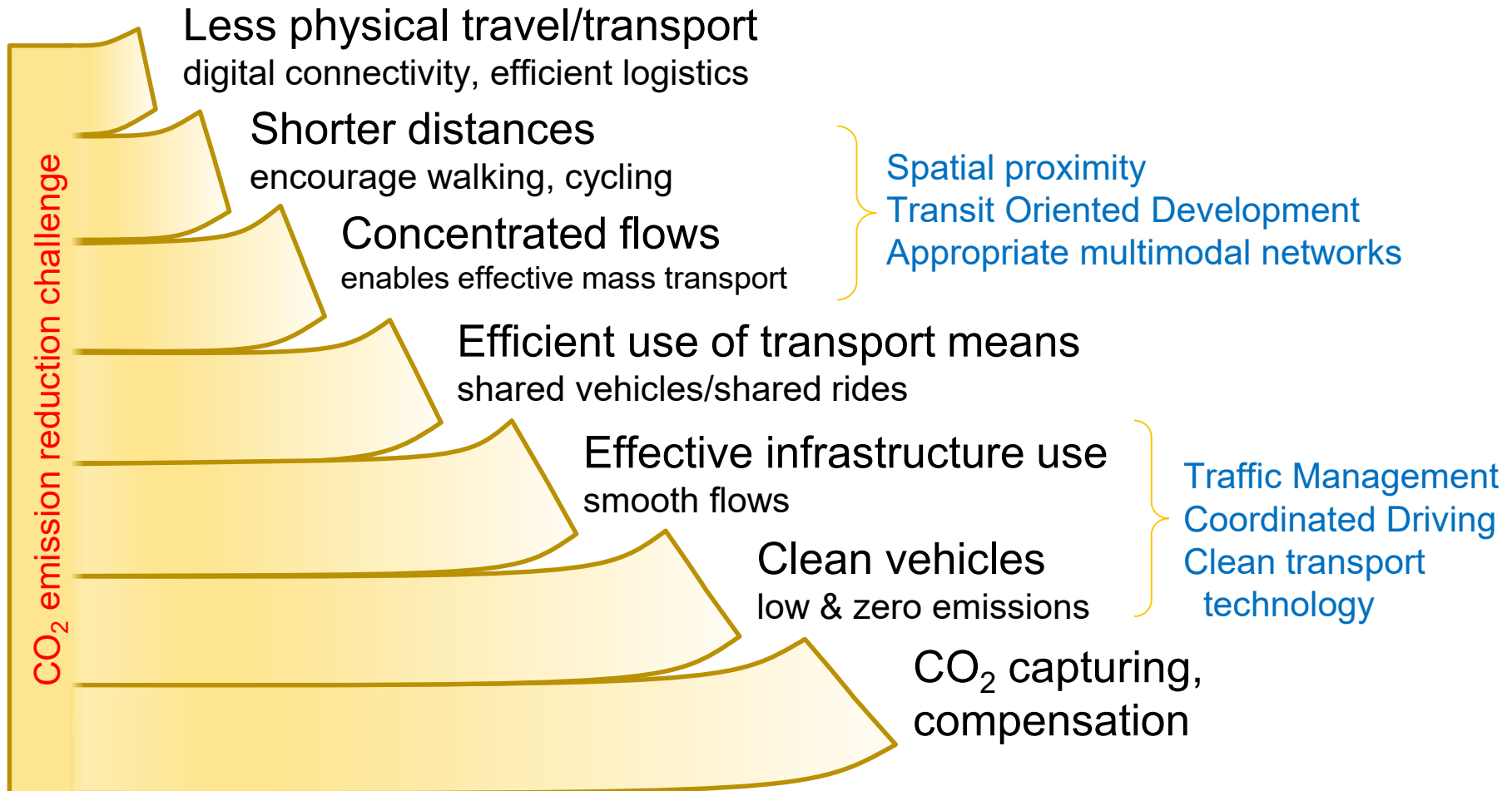Department of Transport and Planning

10 June 2020

Structured approach to arrive at action plans

Successive Steps / Cascade Approach

Inspiration

CliMobCity 2050 — Interreg Europe

CO_2 emission reduction challenge

Less physical travel/transport
digital connectivity, efficient logistics

Shorter distances
encourage walking, cycling

Concentrated flows
enables effective mass transport

Spatial proximity
Transit Oriented Development
Appropriate multimodal networks

Efficient use of transport means
shared vehicles/shared rides

Effective infrastructure use
smooth flows

Clean vehicles
low & zero emissions

Traffic Management
Coordinated Driving
Clean transport
 technology

CO_2 capturing, compensation

Inspiration

10 PRINCIPLES FOR SUSTAINABLE URBAN TRANSPORT

spatial   transport

1. Planning dense and human scale cities
2. Develop transit-oriented cities
3. Encouraging walking and cycling
4. Controlling vehicle-use
5. Optimizing the road network and its use
6. Implementing transit improvements
7. Managing parking
8. Promoting clean vehicles

- Communicating solutions
- Approaching the challenges comprehensively

source: https://www.sutp.org/en/resources.html (numbers 1 - 8 added)

Inspiration

10 guiding principles for sustainable transport 'our cities ourselves'*

2050 CliMobCity Interreg Europe

[spatial] [transport]

1	Walk the walk:	pedestrian facilities
2	Powered by people:	bicycle facilities
3	Get on the bus:	high quality public transport
4	Cruise control:	car if necessary, but less space, parking restrictions
5	Deliver the goods:	clean, small, quiet, safe vehicles
6	Mix it up:	no separation of functions
7	Fit it in:	not expanding but spatial concentration
8	Connect the blocks:	in favour of walking and biking
9	Get real:	keep unique places
10	Make it last:	sustainable materials and maintenance

Note: some variants of this scheme exist

Inspiration

1. Walk the walk

- All trips begin and end with walking.

- Streets that are designed to prioritize pedestrians can also improve health, economic activity and safety

New York Herald Square

Source stepwise approach:
W. Hook (2011)

Inspiration

2. Powered by people

- The more cycle use on the streets, the safer they become. When a good bicycle network is established, people continue to bicycle regardless of age, wealth or weather.

Source stepwise approach:
W. Hook (2011)

Inspiration

3. Get on the bus (or tram, metro, …)

- Comfortable safe, high-speed public transit provides the next best option to walking or cycling

An example is the BRT (Bus Rapid Transit): Stops are aligned with the vehicle

Curitiba, Brazil

Payment on the stop

Boarding and Alighting at any door

Separate lane

Source stepwise approach: W. Hook (2011)

Inspiration

4. Cruise control

- Managing traffic includes getting smart (using technology), helping cars slow down, paying for the privilege, and re-routing traffic.

Vehicle type	2003 vs 2002	2005 vs 2004	2006 vs 2002
All vehicles	-14%	-2%	-16%
Four or more wheels	-18%	-3%	-21%
Potentially chargeable	-27%	-3%	30%
- cars and minicabs	-33%	-3%	-36%
- vans	-11%	-3%	-13%
- lorries and other	-11%	-4%	-13%
Non-chargeable	+18%	-4%	+16%
- licensed taxis	+17%	0%	+13%
- buses and coaches	+23%	-4%	+25%
- powered two-wheelers	+12%	-9%	0%
- pedal cycles	+19%	+7%	+49%

London congestion charging effects

2-to-1 public opposition to congestion charges turned to 2-to-1 support after voters saw how a 20% drop in traffic led to a 30-50% reduction in traffic delays. Stockholm, Sweden.

Stockholm congestion charging

Inspiration

5. Deliver the goods

- Sustainable cities will be cleaner, quieter, and safer by creating exo-zones, slow speed zones, and regulating the times and places where goods can be delivered

Regulate delivery times and size of vehicles in city centres to lower emissions and congestion. Paris, France.

Photo: La Petite Reine

Photo: DPA/Landov

The low emission zone, or Umweltzone, in many German cities restrict polluting lorries from entering. Only vehicles with a red, yellow or green sticker could enter the zone in 2009.

Source stepwise approach:
W. Hook (2011)

Inspiration

6. Mix it up

- Energize public space with mixed-use development and ground floor activities.
Mixed use means you are closer to everything and places are safer and livelier during all hours.

San Francisco

Madrid

Inspiration

7. Fit it in

- Density around transit stations and within the city rather than at the outskirts.

Rotterdam

PT node
(train, bus, tram, metro)

PT node
(train, bus, tram, metro)

Den Haag
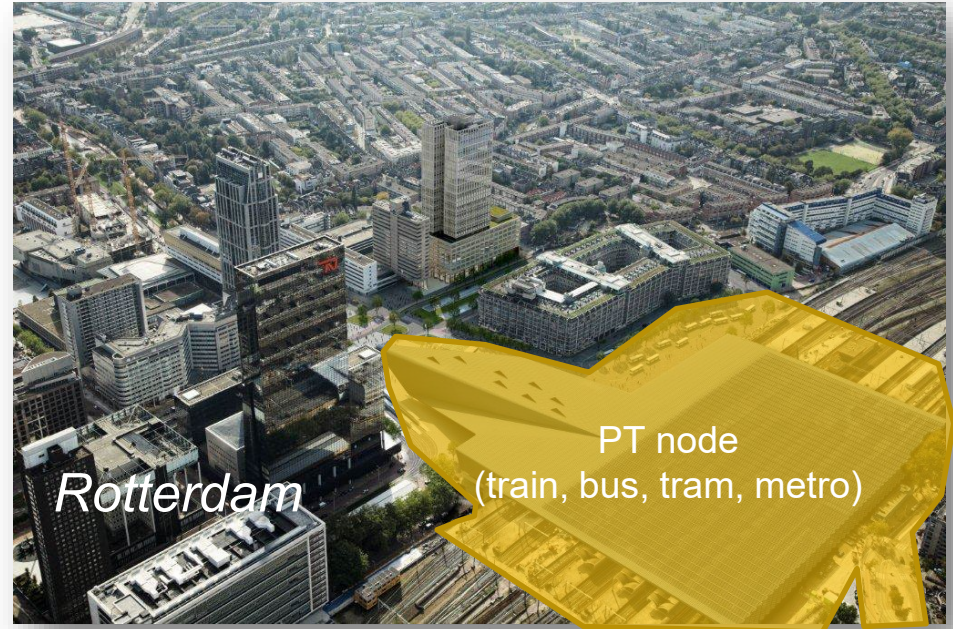
Source stepwise approach:
W. Hook (2011)

Inspiration

8. Connect the blocks

- Maximize the connectivity of walking (and biking!) trips with small block sizes and permeable blocks and buildings and shortcuts.

Source stepwise approach:
W. Hook (2011)

Inspiration

9. Get real

- Distinguish by preserving and enhancing the natural, cultural, social, and historic assets of the place.
  Identity and cultural heritage becomes a competitive advantage.

Inspiration

10. Make it last

- Build for the long term.
- Sustainable cities bridge generations.
  They are memorable, malleable, built from quality materials and well maintained.
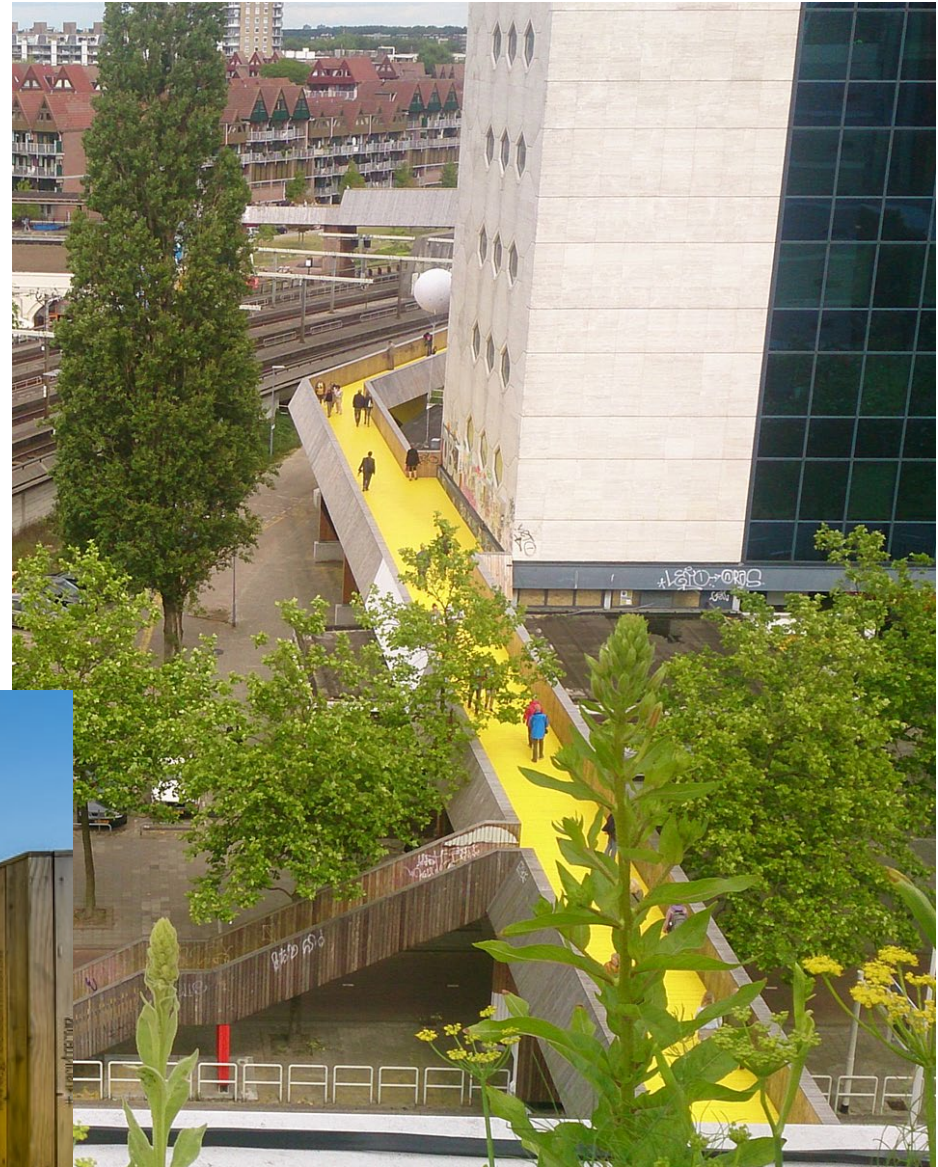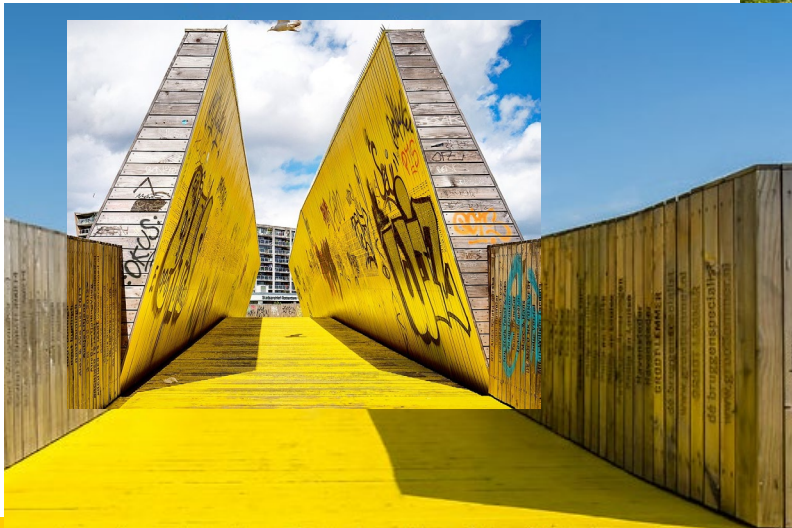
Successive Steps approach

To take home / conclusions:

- Similar step-by-step approaches
  (with slightly different details)
- Both spatial and transport aspects

- Integrated approach is necessary
  because different steps influence each-other

- Different types of policy actions needed
  to achieve the results

Structured approach to arrive
at action plans

Implementation in policy plans:
- **handles: push – pull (– press)**
- **integrated approach**

Pull – Push (- Press)
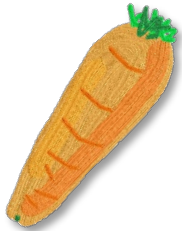
Pull measures – the 'carrot':

- Enlarge behaviour options
- Does not make car use* less attractive in an absolute sense

Push measures – the 'stick':

- Restrictive
- Makes car use* less attractive in an absolute sense

Inviting,
Persuasive,

(Press measures – the 'string'):

- (En)forcing
- No legal way around

Compulsory

* As an example, applies to all 'undesired' transport options

Source (adapted): Steg, Linda. (2007). Sustainable Transportation. IATSS Research. 31. p58-66.

Examples of 'pull' policies

Improve alternatives: (attracting, rewarding)

- More, better, more attractive and convenient walking & cycling routes, tracks

- Car pool lanes

- Better quality public and intermodal transport: (vehicles, services, interchanges/P+R)
cheap, clean, comfortable, convenient (also regarding information), fast, frequent, reliable, safe, weatherproof

- Positive communication
(for instance, referring to health, environmental quality)

Derived from: Stradling, Stephen & Meadows, M. & Beatty, S.. (2000). Helping drivers out of their cars Integrating transport policy and social psychology for sustainable change. Transport Policy. 7. 207-215

Examples of 'push' policies

Increase costs:

- Raise fuel prices (via taxes)
- Raise parking fees
- Introduce tolls by place and/or time

Make less attractive:

- Lower speed limits
- Reduce (public) parking spaces
- Restrictions in new road building
- 'Propaganda'

Examples of 'press' policies

Remove availability:

- Prohibit car* access in place and/or time (car bans in city centre, specific roads)
- Eliminate parking places

Utrecht

Montréal, Canada

Pull – Push (- Press)

- Pros and cons of push and pull measures

Push (and Press)	Pull
May elicit reactance	Does not elicit (direct)** reactance
Associated with negative affect and attitudes	Associated with positive affect and attitudes
More effective in activating car* use reduction goals	Less effective in activating car* use reduction goals
Lack of public support	Public support high**

*   As an example, applies to all 'undesired' transport options
** Although some people might consider investments 'waste of tax-payers money'

Source (adapted): Steg, Linda. (2007). Sustainable Transportation. IATSS Research. 31. p58-66.

Pull – Push (- Press)

Potential

- (Some of the) revenues of 'push' measures can be used for implementing 'pull' measures

- A 'push' resulting in a modal shift can help to make alternative modes – specially PT - more efficient

Challenge to use push / pull / press measures in a well-tuned combination, a re-inforcing loop

for instance: entrance limitations, parking fees in combination with improved PT, intermodal transport etc.

Pull – Push (- Press)

Pitfalls

- Undesired modal shift: Bike/Walking → Public Transport

- Modal shift to waling, biking, public transport can also result in *better* quality of car system
  (less road traffic … less congestion)

- Overall reduction in accessibility
  (in terms of quality or price)

- Undesired *'distribution effects'*
  different groups of people (age, income, ethnicity, abilities…)
  could be affected differently

Integrated Approach

Need for an *integrated* approach:

- to re-inforce individual measures
- to spend funds effective and efficiently
- to prevent undesired effects

Balanced and integrated development of all transport modes

Horizontal and vertical integration

Integrated Approach

SUMP MAIN CHARACTERISTICS

Long-term vision and clear Implementation plan

Participatory approach

Balanced and integrated development of all transport modes

Horizontal and vertical integration

Assessment of current and future performance

Regular monitoring, review and reporting

Consideration of external costs for all transport modes

Sustainable Urban Mobility Planning

Preparing well

Starting Point: "We want to improve mobility and quality of life for our citizens!"

1.1 Commit to overall sustainable mobility principles
1.2 Assess impact of regional/national framework
1.3 Conduct self-assessment
1.4 Review availability of resources
1.5 Define basic timeline
1.6 Identify key actors and stakeholders

1. Determine your potential for a successful SUMP

2. Define the development process and scope of plan
2.1 Look beyond your own boundaries and responsibilities
2.2 Strive for policy coordination and an integrated planning approach
2.3 Plan stakeholder and citizen involvement
2.4 Agree on workplan and management arrangements

3. Analyse the mobility situation and develop scenarios
3.1 Prepare an analysis of problems and opportunities
3.2 Develop scenarios

Milestone: Analysis of problems & opportunities concluded

Rational and transparent goal setting

4. Develop a common vision
4.1 Develop a common vision of mobility and beyond
4.2 Actively inform the public

5. Set priorities and measurable targets
5.1 Identify the priorities for mobility
5.2 Develop SMART targets

6. Develop effective packages of measures
6.1 Identify the most effective measures
6.2 Learn from others' experience
6.3 Consider best value for money
6.4 Use synergies and create integrated packages of measures

Milestone: Measures identified

Elaborating the plan

7. Agree on clear responsibilities and allocate budgets
7.1 Assign responsibilities and resources
7.2 Prepare an action and budget plan

8. Build monitoring and assessment into the plan
8.1 Arrange for monitoring and evaluation

9. Adopt Sustainable Urban Mobility Plan
9.1 Check the quality of the plan
9.2 Adopt the plan
9.3 Create ownership of the plan

Milestone: SUMP document adopted

Implementing the plan

10. Ensure proper management and communication
10.1 Manage plan implementation
10.2 Inform and engage the citizens
10.3 Check progress towards achieving the objectives

11. Learn the lessons
11.1 Update current plan regularly
11.2 Review achievements - understand success and failure
11.3 Identify new challenges for next SUMP generation

Milestone: Final impact assessment concluded

Implementation in policy plans

To take home / conclusions:

Pull, Push, Press: handles for policy action

Need for integrated approach:
- to re-inforce individual measures
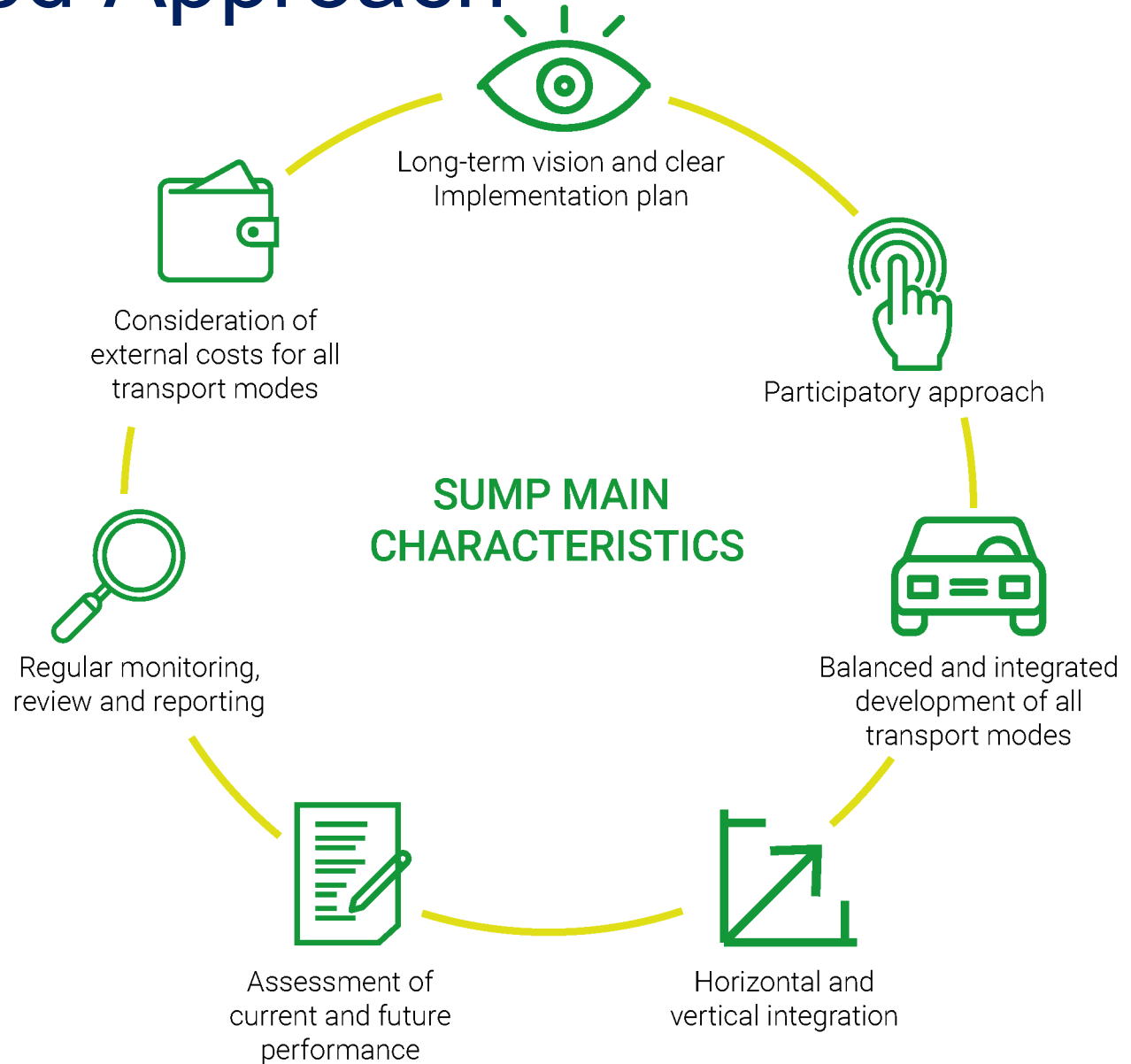- to spend funds effective and efficiently
- to prevent undesired effects

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Thank you!

Questions Welcome

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