# Policy Packaging: Theory, Methodology and the Practice

**Moshe Givoni**
Transport Research Unit
Department of Geography and Human Environment
Tel-Aviv University, Israel
&
Transport Studies Unit
School of Geography and the Environment
University of Oxford, UK

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

**Transport Research Unit**

# Transport Research Unit
## (Opened April, 2014)

"Strives to better understand the social, economic and environmental impacts of transport in time and space in order to promote sustainable transport policy"
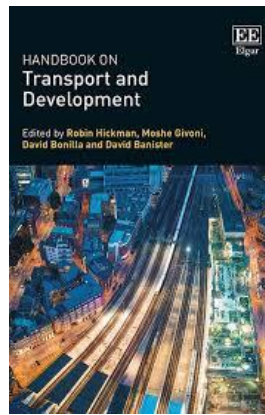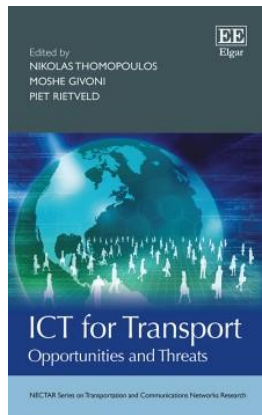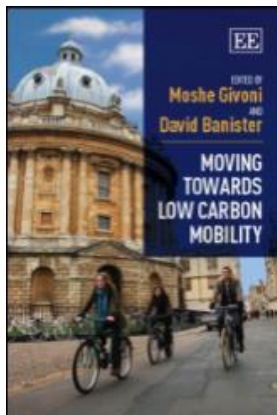
- Moving Towards Low Carbon Mobility (2013)
- ICT for Transport – Opportunities and Threats  (2015)
- Transport and Development (2015)

**Transport Research Unit**

# What is the problem with transport?



"Society is not balancing the benefits and costs of travel" (Bruun and Givoni, 2015: 29).
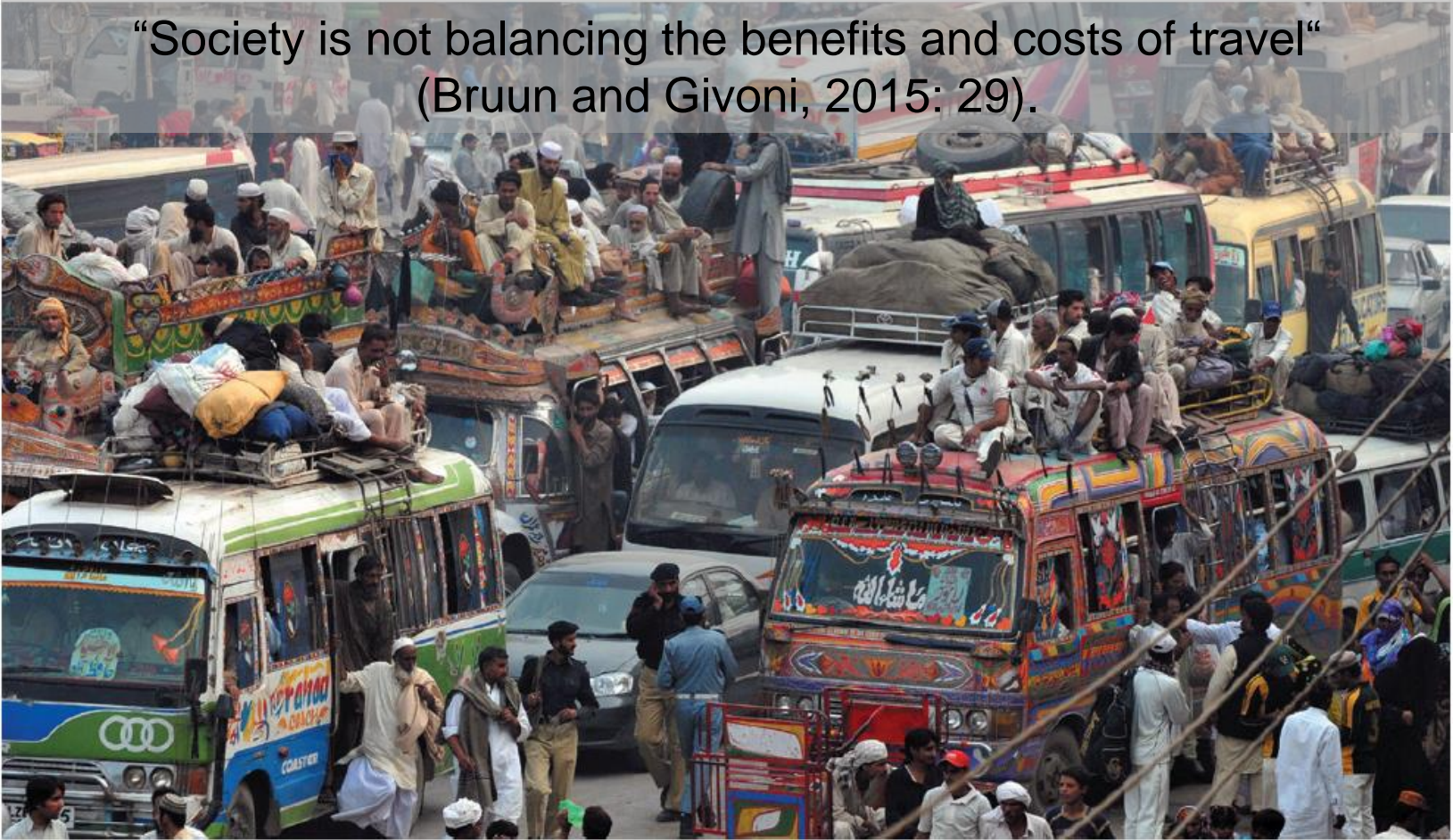
Cities such as Lahore in Pakistan can have traffic jams that last for hours.

ARIF ALI/AFP/GETTY

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

**Transport Research Unit**

# What is the problem with transport?



**"Society is not balancing the benefits and costs of travel"**
**(Bruun and Givoni, 2015: 29).**

# What is the (policy) solution?

**Improve**        **Shift**       **Avoid**

The E-Bone –
zero-emission bus

Modal-shift

Tele-commuting

We know what needs to be done ….

And still we seem to not be able to do it

Transport Research Unit

# Policy Packaging in (transport) Policy



(Salomon and Singer, 2011)

- The vast majority of these problems are multi-aspect in nature ('*Messy*' - Ney (2009) and '*Wicked*' - Rittel and Webber (1973))

- No one measure is likely to address a specific 'problem'

- Policy actions too often are not implemented and if implemented do not bring the desired results

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

Transport Research Unit

# Policy Packaging: the Theory (key ingredients)

**Policy measures: (instruments, tools): Primary and Ancillary**

Primary measure: Congestion charging
Ancillary measure: Hypothecation of the charge

**Effectiveness**:
Immediate (direct), Collateral (including Unintended effects), Net

Road expansion to relieve congestion (induced demand)

**Implementability**:
Transaction costs (barriers to implementation): financial, technical, administrative, legislative, public acceptability, political acceptability, etc.
Congestion Charging

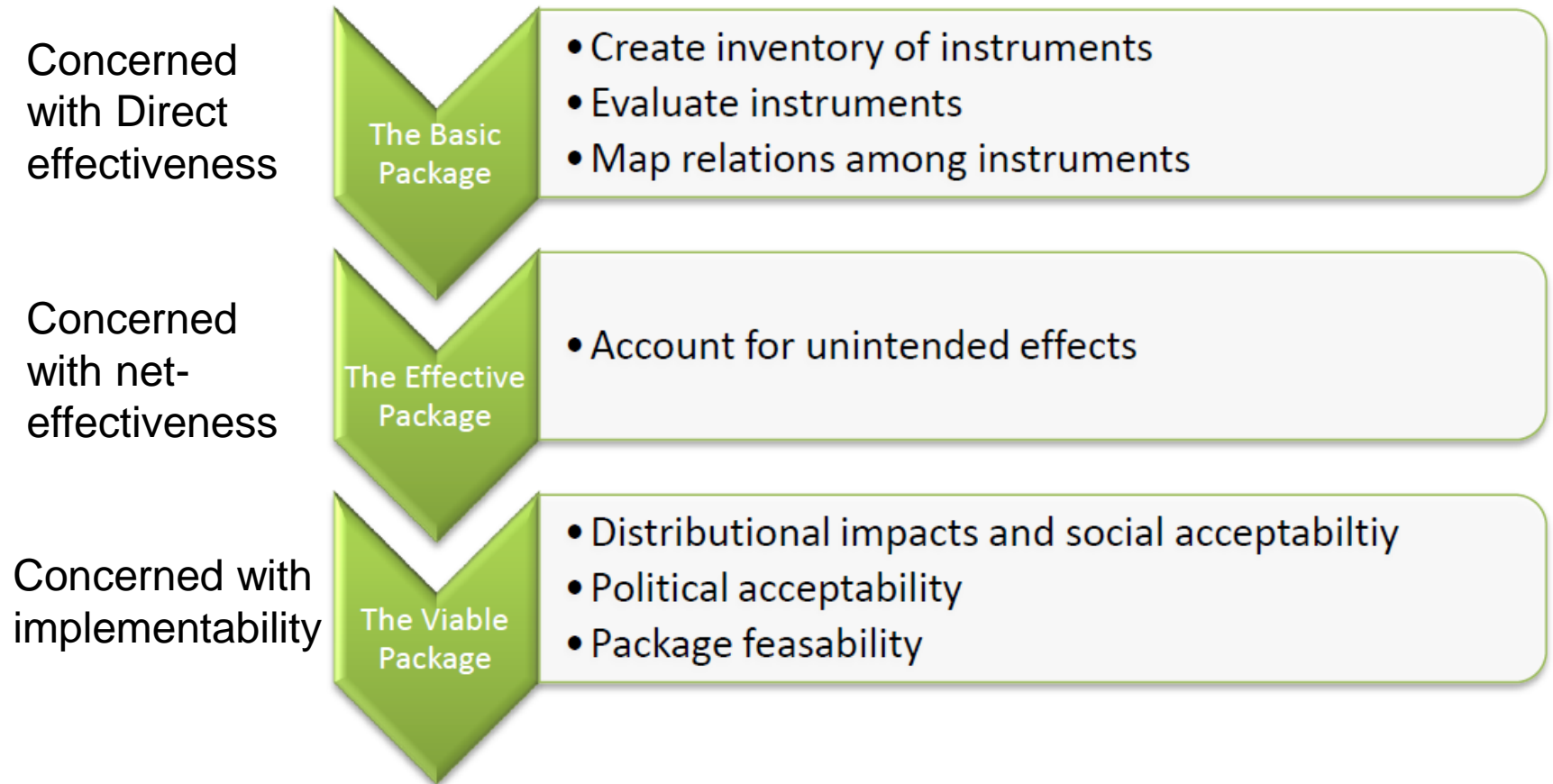## Efficiency

# Policy Packaging: the Theory (key ingredients)

Efficiency: The level of 'effectiveness', or desired change, achieved per implementation effort / transaction cost

Efficiency
(Effectiveness / implementability)

**Policy Package***: "a combination of policy measures designed to address one or more policy objectives; created in order to improve the effectiveness of the individual policy measures, while minimizing possible unintended effects and facilitating their implementation in order to increase efficiency"*
*(Based on Givoni et al., 2013).*

Primary measures

Ancillary measures

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

**Transport Research Unit**

# Policy Packaging: the methodology (and methods)

Concerned with Direct effectiveness

**The Basic Package**
- Create inventory of instruments
- Evaluate instruments
- Map relations among instruments

Concerned with net-effectiveness

**The Effective Package**
- Account for unintended effects

Concerned with implementability

**The Viable Package**
- Distributional impacts and social acceptabiltiy
- Political acceptability
- Package feasability

## Move to actual implementation!

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

**Transport Research Unit**

# Policy Packaging: the methodology (and methods)

Towards the Basic Package:

- Multi-Criteria Analysis of measures' characteristics

- Selection of "promising" measures

- Measures' relation-analysis

The relation matrix

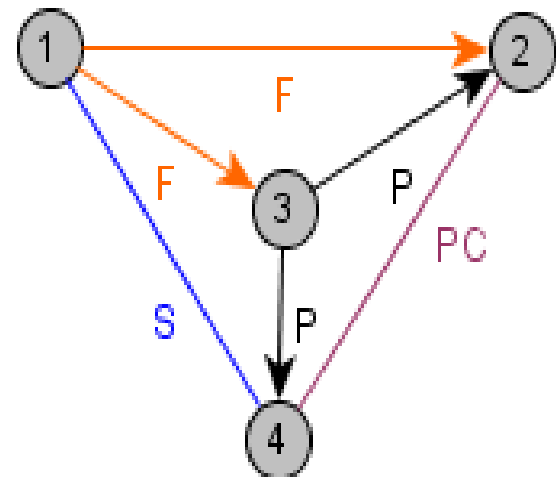| Ms. | 1 | 2 | 3 | 4 |
|-----|---|---|---|----|
| 1 | 0 | 0 | 0 | S |
| 2 | F | 0 | P | PC |
| 3 | F | 0 | 0 | 0 |
| 4 | S | PC | P | 0 |

0 – no relation
F – Facilitation
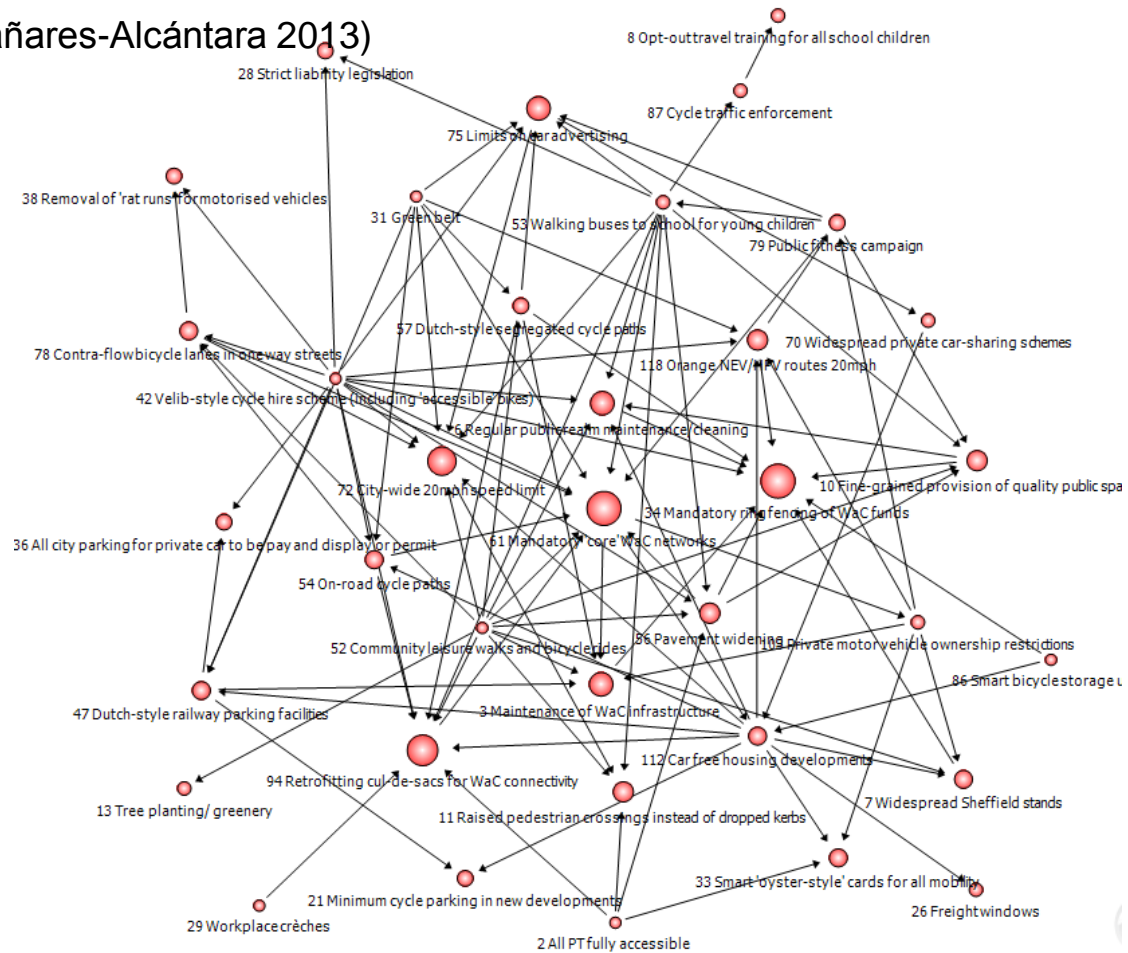S – Synergy
P – Precondition
PC – Potential Contradiction

# (policy measures') Network analysis
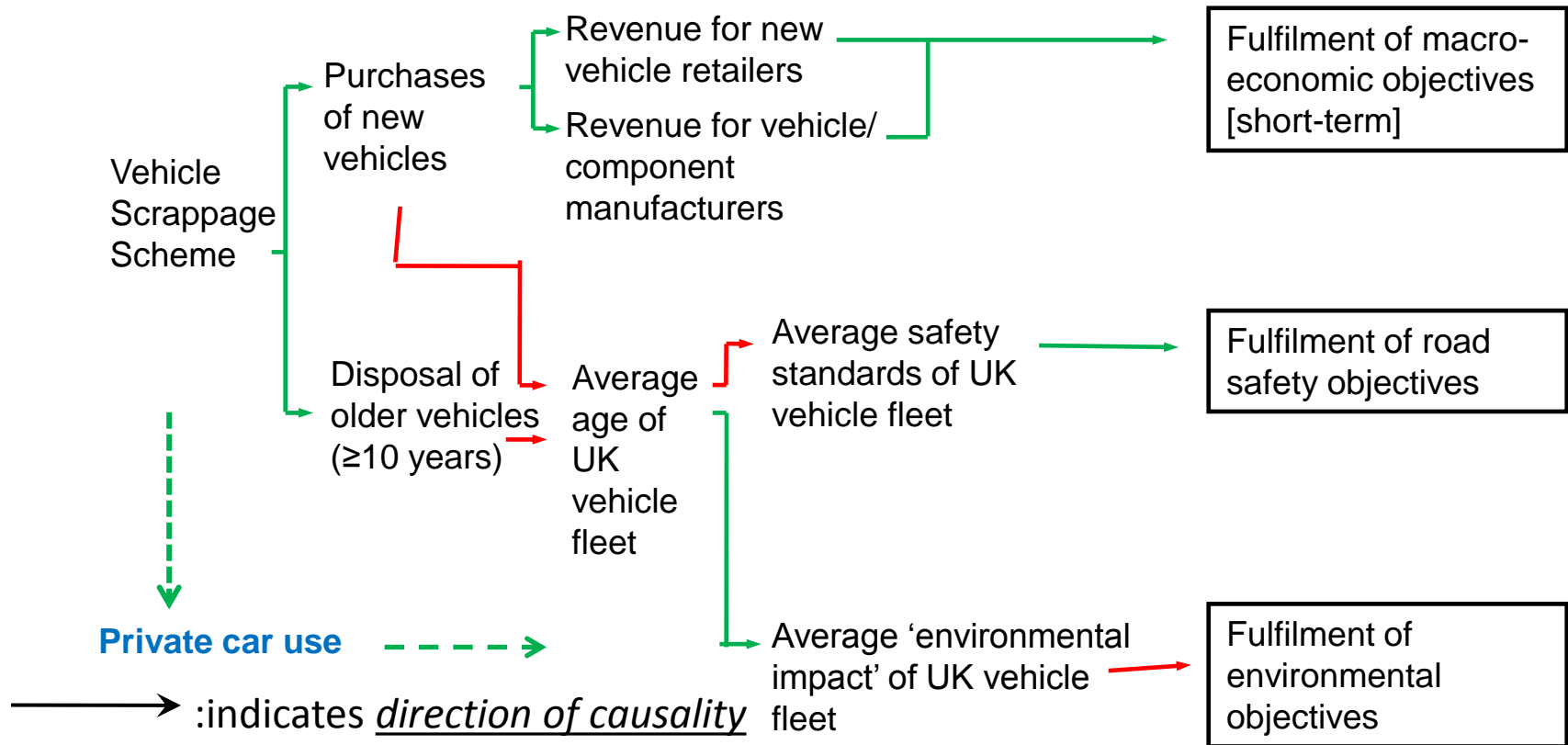
## Visualization of Facilitation network

(Taeihagh, Givoni, Bañares-Alcántara 2013)

# Policy Packaging: the methodology (and methods)

## Towards the Effective package: Identifying un-intended effects

Causal mapping (measure => target/objective)

Vehicle Scrappage Scheme
→ Purchases of new vehicles
  → Revenue for new vehicle retailers
  → Revenue for vehicle/ component manufacturers
    → Fulfilment of macro-economic objectives [short-term]

→ Disposal of older vehicles (≥10 years)
  → Average age of UK vehicle fleet
    → Average safety standards of UK vehicle fleet → Fulfilment of road safety objectives
    → Average 'environmental impact' of UK vehicle fleet → Fulfilment of environmental objectives

**Private car use** - - - - ➤

——➤ :indicates *direction of causality*
Green lines :indicate *positive* correlation
Red lines :indicate *negative* correlation

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

**Transport Research Unit**

## Policy Packaging: the methodology (and methods)

Towards the Viable package

- Mostly about "actors" (not instruments)
- Who needs to do what

Two broad aims:

- Assess and address the **acceptability** of the policy package
- Assess and address **implementation barriers** other than acceptability

Comprises three tasks:

1. Assess distributional impacts and social acceptability
2. Examine package feasibility
3. Evaluate political acceptability

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

**Transport Research Unit**

# PP to increase 'Servicizing' in Transport (Tel-Aviv)
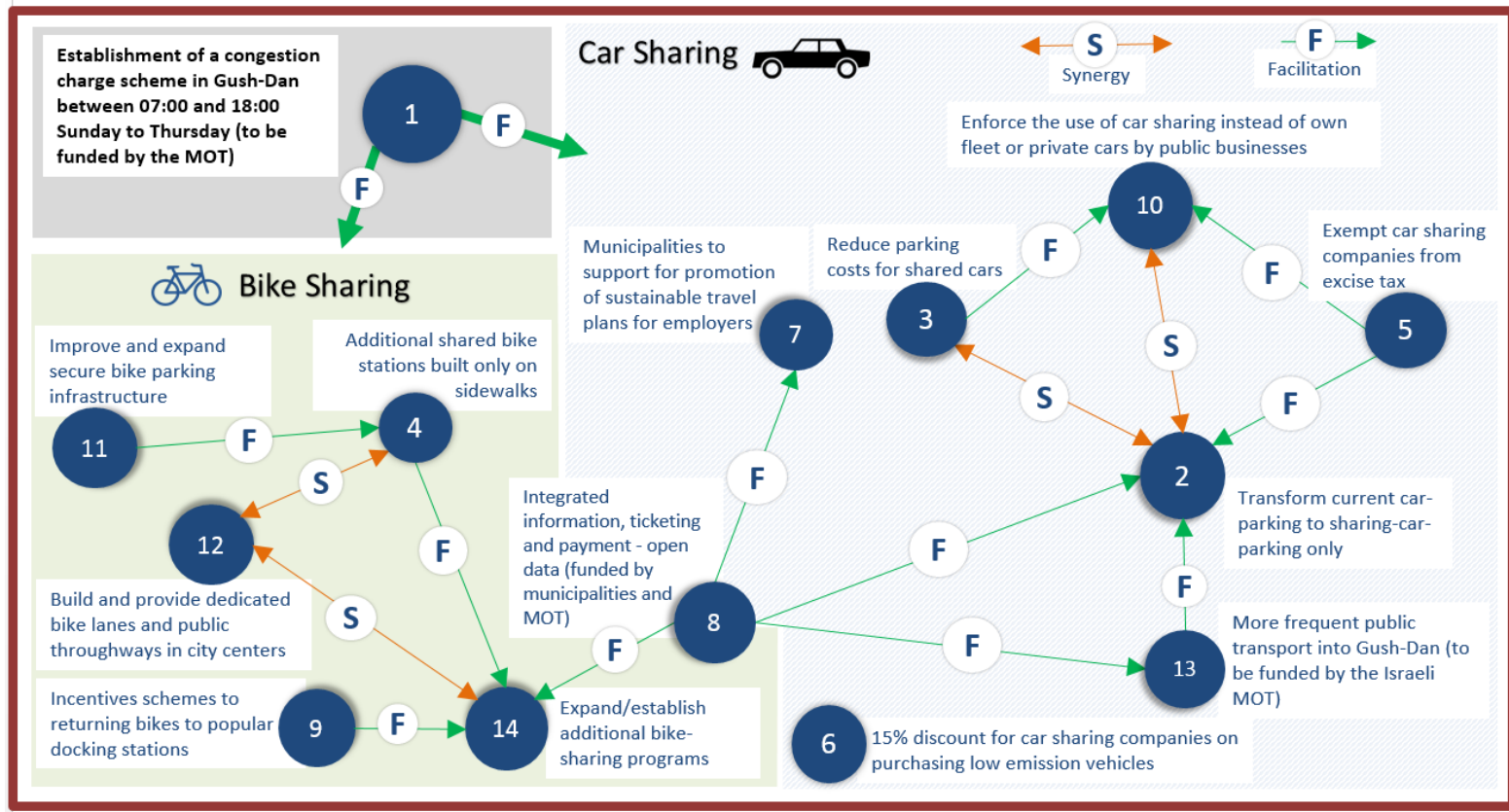


Main components: 1- Bike sharing; 2 – Car sharing 3 – 'Integrated information'; 4 – Congestion charge

# PP to increase 'Servicizing ' in Transport (Helsinki)

4. Reduce *parking costs* for car pools and shared cars

12. Public businesses to use car sharing instead of own fleet or private cars

3. Transform current car-parking to *sharing-car-parking* only

13. Private businesses: economic instruments (e.g. through lower VAT on shared mobility services)

1. Prohibit private car entry into the city centre at peak hours

6. Exempt car sharing from VED (vehicle excise duty) (affects everything)

19. **New Instrument:** Reducing the amount of kilometre allowance

2. **Revised Instrument:** Introduce congestion charging (reduced fee for car sharing)

9. Open data

5. Additional shared bike stations built only on car parks

14. Improving and expanding secure bike park infrastructure
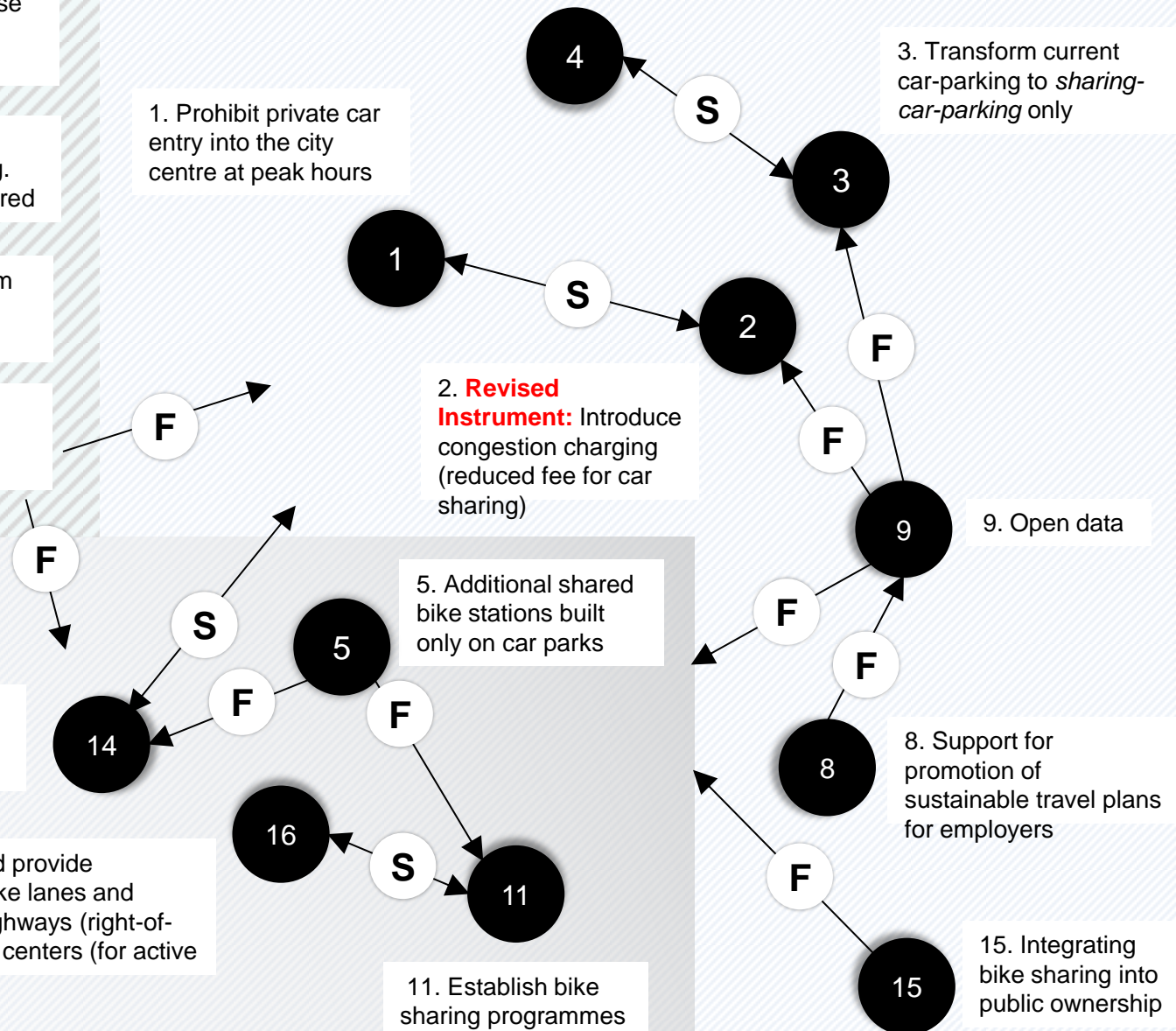
8. Support for promotion of sustainable travel plans for employers

16. Build and provide dedicated bike lanes and public throughways (right-of-ways) in city centers (for active mobility)

11. Establish bike sharing programmes
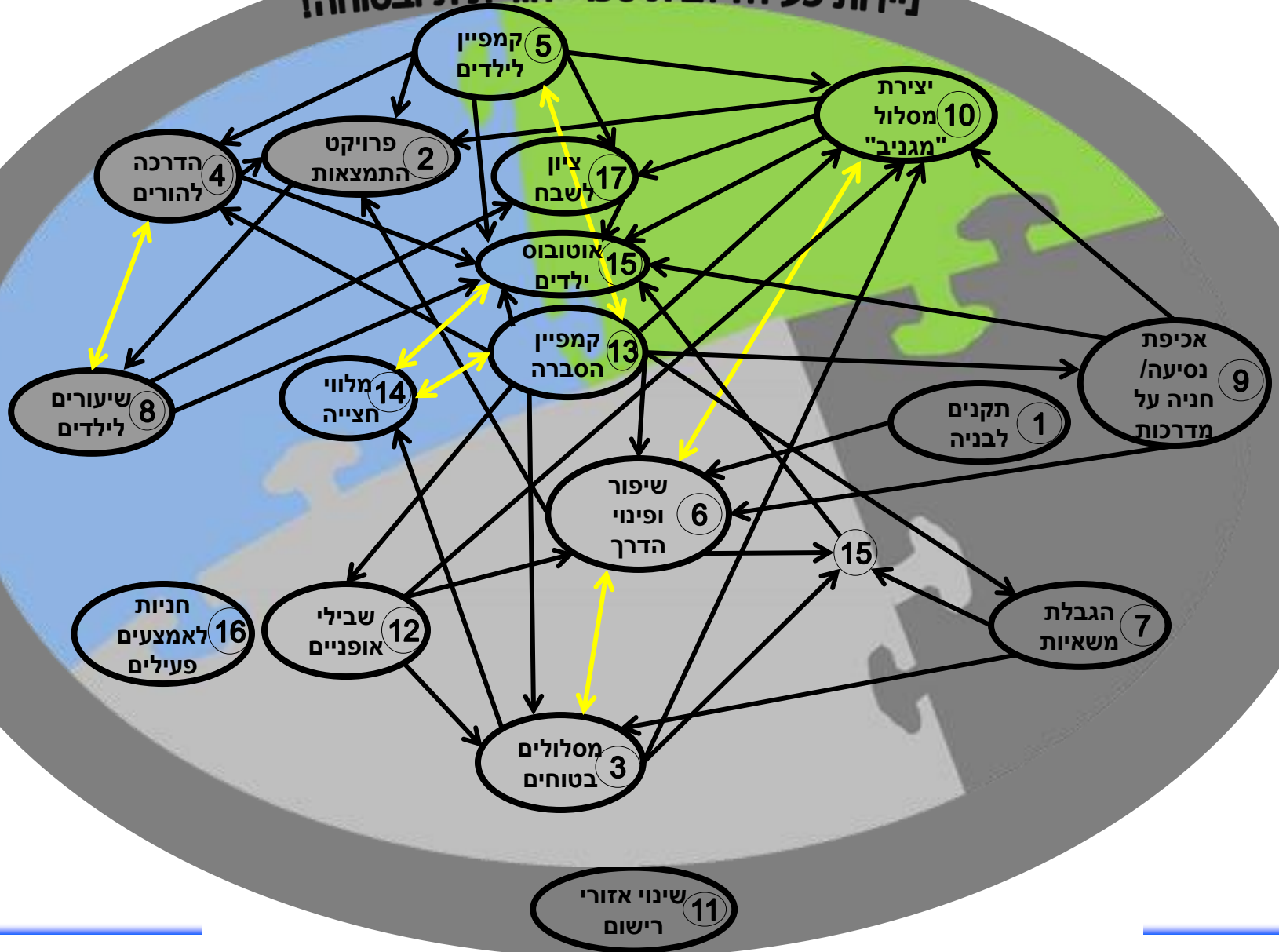
15. Integrating bike sharing into public ownership

SPREE

ניידות פעילה לבית ספר- חווייתית ובטוחה!

# What distinguishes a policy package from a list of policy measures?

1. The policy measures are considered (evaluated) together not only individually

2. The relations between policy measures are explicitly identified and accounted for

3. Implementability is duly considered – i.e. there is concern with efficiency

4. Efforts are dedicated to identifying and mitigating unintended effects

# When a Policy Package is needed?

**When a wicked problem has been identified!**

| Characteristics of wicked problems | Characteristics of policy packages |
|---|---|
| Wicked problems cannot be understood until a solution has been developed | Policy packages cannot be really assessed until implemented |
| Wicked problems have no stopping rules | Policy packaging have no stopping rules |
| Solutions to wicked problems are not right or wrong they are better or worse | Policy packages are not right or wrong they are better or worse |
| Every wicked problem is essentially unique and novel | Every policy package is essentially unique and novel |
| Every solution to a wicked problem is a one-shot operation | Every policy package is a one-shot (but long and dynamic) implementation operation |
| Wicked problems have no given alternative solutions | A specific policy package have no clear alternatives (but countless variations of it) |

(Givoni, 2014)

TEL AVIV UNIVERSITY אוניברסיטת תל אביב

**Transport Research Unit**

# Is Policy Packaging Practical?

To really advance policy packaging it needs to be tested in the field, in actual policy making, there is no real alternative.

<span style="color:red">Mixed evidence so far..</span>

"explain in simple words what is PP and what is its main aim?"

| Explanation of PP* |
| --- |
| "a more holistic approach to understand how policy should be…created, in order to achieve the most successful effect…" |
| "a standard, a protocol to develop or to formulate a set of measures that are aimed at achieving a specific goal and it is formed by a whole set of steps so it has to put in order the different measures and to set priorities between ones and others.." |
| "a collection of policy measures that work together more effectively than if they would be used one at a time, so they can enhance their effect" (then also mentioned the need to avoid implementing contradictory measures) |
| "a group of measures you should implement" |

\* Interviews with members of the SPREE project

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

Transport Research Unit

# Policy Packaging

Conclusions (so far):
- A policy package is more a notion than a precise product

- A notion perused with a clear step-by-step guidelines

- The process is more important than the outcome (it can't be sourced out to, for example, consultants)

Questions (that intrigues me):
- Is "Policy Packaging" different from "Policy Mixes"?

- Can policy packaging assist in, contribute to a socio-technical transition (to Low Carbon Mobility)?

TEL AVIV אוניברסיטת
UNIVERSITY תל אביב

**Transport Research Unit**

# Thank you!

givonim@post.tau.ac.il

Key references:

- Bruun E. and Givoni M. (2015) Six research routes to steer transport policy. Nature 523: 29-31.

- Justen A., Fearnley N., Givoni M., Macmillen J. (2014) A process for designing policy packaging: Ideals and realities. *Transportation Research A: Policy and Practice*, 60: 9-18.

- Givoni M. (2012) Re-assessing the Results of the London Congestion Charging Scheme. *Urban Studies*, 49(5): 1089-1105.

- Givoni M. (2014) Addressing transport policy challenges through Policy-Packaging. *Transportation Research A: Policy and Practice*, 60: 1-8.

- Givoni M., Macmillen J., Banister D., Feitelson E. (2013) From policy measures to policy packaging. *Transport Reviews*, 31(1): 1-20.

- Taeihagh A., Bañares-Alcántara R., Givoni M. (2014) A virtual environment for the formulation of policy packages. *Transportation Research A: Policy and Practice*, 60: 53-68.

- Taeihagh A., Givoni M., Bañares-Alcántara R. (2013) Which policy first? A network-centric approach for the analysis and ranking of policy measures. *Environment and Planning B*, 40: 595-616.

TEL AVIV UNIVERSITY אוניברסיטת תל אביב

Transport Research Unit