



SUMPS-UP

SUMP2.0 Topic guide: Electrification in sustainable urban mobility planning

6th European Conference on Sustainable Urban Mobility Plans
Session D2: Accelerating alternative fuels, vehicles and infrastructure deployment

17-06-2019

Groningen, Netherlands

Thomas Mourey, Polis

(With Wolfgang Backhaus, Rupprecht Consult)

Why this guide?

- **Emerging topic/technology which is increasingly implemented in cities...**
... still with some uncertainties and challenges
- **Electric mobility not covered in a SUMP guide, yet**
- **Electric mobility**
 - Specific planning challenges: different infrastructure (i.e. location, management/operation), different network of stakeholders, etc.
 - Adapted to the urban context: relative short distances, possibility of dense network of charging points
 - Complementary with other alternative fuels (and future guides?)



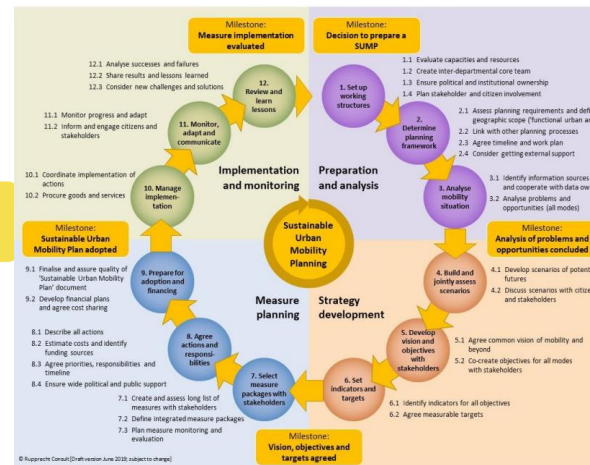
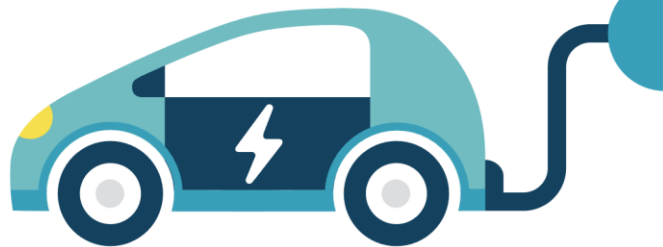
Electrification in sustainable urban mobility planning

Planning for electric road mobility solutions in urban areas in a SUMP context

Objective of the guide

Support authorities in planning electric mobility solutions as an integral part of a SUMP process.

- Guiding mobility planning authorities in how the electrification of road transport can adapt to the eight main SUMP principles and can be integrated in the different steps of the SUMP cycle.
- Not a technical guide for the deployment of Alternative Fuels Infrastructure (AFI)

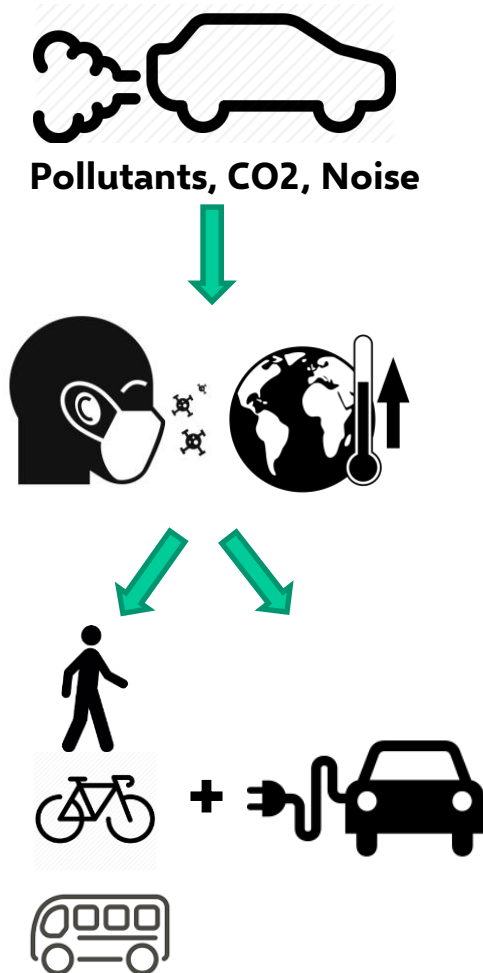


What is in this guide?

- **Introduction: why electric mobility?**
 - Decrease emissions: pollutants, greenhouse gas and noise
- **SUMP principles**
 - Raising questions on how electric mobility can adapt to themes such as institutional cooperation, citizens involvement, monitoring and evaluation, etc.
- **SUMP Cycle**
 - Electric mobility in the (new) SUMP cycle.
 - Providing answers to questions raised (previous section)
 - Highlighting some key steps
 - Including specific paragraphs on the planning for charging infrastructure
- **Guidance on:**
 - Captive fleets (public transport, urban freight, taxis, shared mobility)
 - Accompanying measures: UVAR and communication & promotion

- 
- +
 - City examples
 - EU project examples
 - References to other SUMP guides
 - References to EU directives

The approach



- Cities must tackle some serious problems related to urban traffic, including the emissions of pollutants, greenhouse gases and noise
 - These emissions are (for a large part) produced by vehicles engines
 - These emissions have impacts on human health, climate change and quality of life.
 - **Solution**
 - Modal shift (to e.g. active mobility, public transport and shared mobility)
- AND
- Decrease the emissions of road vehicles – including electric mobility
 - **Therefore, electric mobility is a tool, not the objective.**
 - **Because of the link with other sustainable mobility components, electric mobility must be integrated in sustainable urban mobility planning context.**

Electric mobility and the SUMP principles

**Involve citizens
and relevant stakeholders**

**Arrange for monitoring
and evaluation**

**Develop a long-term vision and
a clear implementation plan**

Assure quality

**Assess current and
future performance**

**Develop all transport modes
in an integrated manner**

**Cooperate across
institutional boundaries**

**Plan for sustainable mobility
in the 'functional city'**

Electric mobility and the SUMP principles

- **Raising questions - e.g.:**
 - Which institutions and departments must be involved in electric mobility planning?
 - How do institutional structures in local/regional authorities need to change to address planning for electric mobility?
 - How should authorities should engage with relevant stakeholders and citizens? In which framework?
 - How can cities facilitate/organise a participatory dialogue about a topic with still uncertainties and low levels of awareness?

**Involve citizens
and relevant stakeholders**

Arrange for monitoring
and evaluation

Develop a long-term vision and
a clear implementation plan

Assure quality

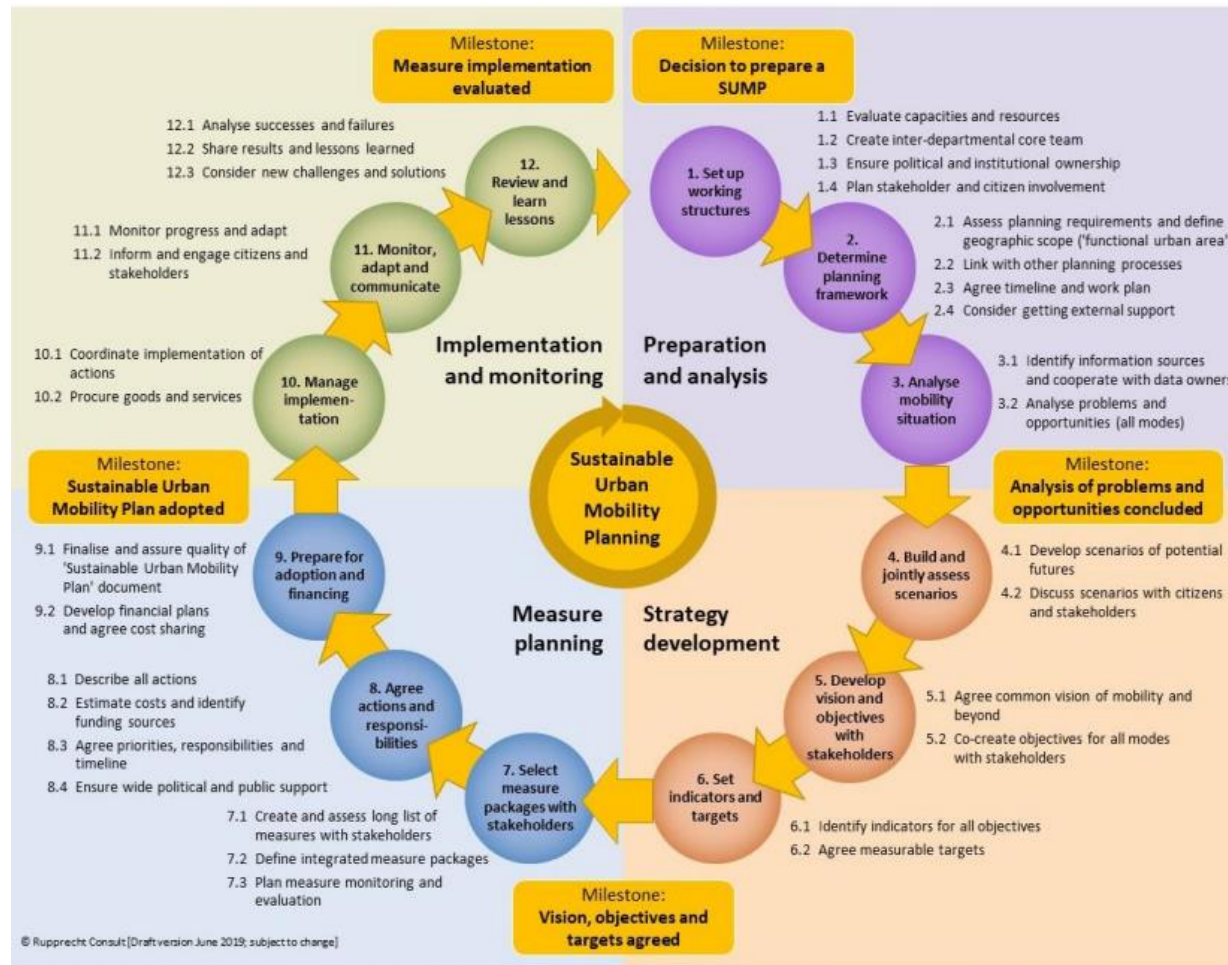
Assess current and
future performance

Develop all transport modes
in an integrated manner

**Cooperate across
institutional boundaries**

Plan for sustainable mobility
in the 'functional city'

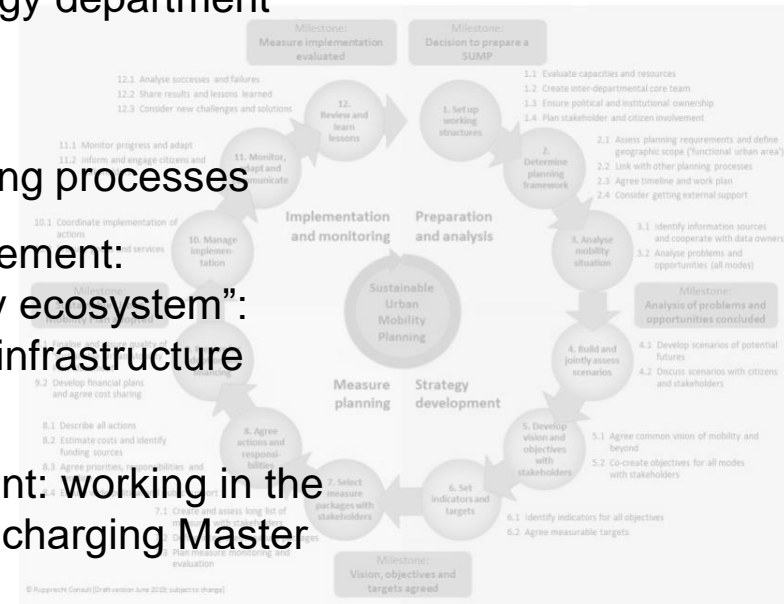
Electric mobility and the SUMP cycle



Electric mobility and the SUMP cycle

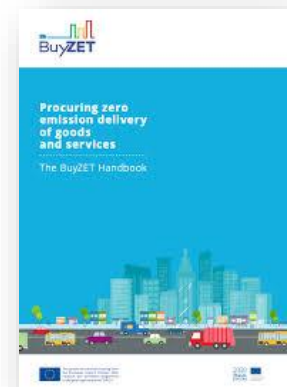
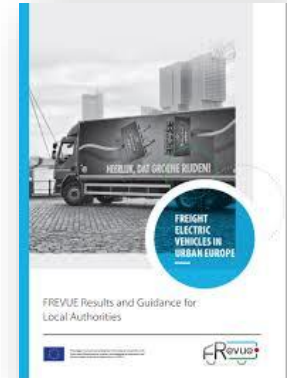
• Answers and (possible) solutions

- **Step 1.1** Inter-departmental team: include energy department and possibly environment (and others)
- **Step 2.2** Link with other planning processes: converging/merging SUMP and SECAP planning processes
- **Step 1.4** Plan stakeholders and citizens involvement: identification of the stakeholders of the “energy ecosystem”: energy producers, energy providers, charging infrastructure providers/managers, etc.
- Horizontal solution for stakeholders engagement: working in the framework of a sub-strategy, e.g. Stockholm’s charging Master Plan or Barcelona’s electric mobility strategy.
- **Step 11.2** Inform and engage citizens: Work with a clearly recognisable framework (e.g. Amsterdam’s logo), contact person(s) and involve early adopters, local EV associations.



Example of guidance: planning for urban freight

- **Specific areas of electric mobility**
- **Less strictly related to SUMP cycle**
- **Focus on captive fleets**
 - (in)direct influence of planning authorities
 - Contribute for a large share of traffic emissions
- **Examples of guidance (measures and regulations)**
 - **Economic and financial advantages:** exemption of payment of road charging schemes, free parking
 - **Regulatory and operational measures:** preferential treatment in traffic limited zones, longer (un)loading time windows, (un)loading areas reserved for EFVs.
 - **Charging infrastructure:** Public (fast) charging stations in combination with a priority reservation system
 - **Leading by example:**
 - Electrifying the public fleets of service vehicles (waste collection, service vehicles, etc.)
 - Deliveries with zero-emission procurement (example of Oslo/BuyZET)



Potential improvements

- **Provide more/clearer responses to the questions raised in the guide**
- **Better coordination with other guides**
- How to integrate reference to e.g.:
 - Harmonisation with SECAP (energy)
 - UVAR
 - Parking
 - Health and transport
 - Procurement
- Chapters, short summary, annex, reference, other?
- **Clear reference to other alternative fuels**
- **More city/project examples and references to existing documents**
- **Missing topics/chapters?**
- **Any other idea?**

How to contribute?

- **Topic guide (n.9), available on Eltis:**

<https://www.eltis.org/guidelines/second-edition-sump-guidelines>

- **Your comments are much welcome!**

- **Online form:**

https://qeurope.eu.qualtrics.com/jfe/form/SV_9HmxUtbWcJ6bHQF

- **Direct contact:** Tmourey@polisnetwork.eu



Electrification in sustainable urban mobility planning

Planning for electric road mobility solutions in urban areas in a SUMP context

Thank you!

Any questions?

Thomas Mourey (Tmourey@polisnetwork.eu)
With Wolfgang Backhaus (Rupprecht Consult)

