



Electric, Electronic and Green Urban Transport Systems – eGUTS

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D4.3.1 Local Action Plan Guide Annex1: Terms of reference

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ABBREVIATIONS and DEFINITIONS

MUNICIPALITY	Municipality is a civic administrative body with some degree of control over a specific geographic area - it operates in an urban settlement whether it is a city, town or a grouping consisting of several units.
EV(s)	Electric vehicle(s)
LAP	Local Action Plan
KPI(s)	Key Performance Indicator(s)
PEV(s)	Personal Electric Vehicle(s)
SEAP	Sustainable Energy Action Plan
SUMP	Sustainable Urban Mobility Plan
ToR	Terms of Reference

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Introduction

Planning policies place local plans at the heart of the planning system, so it is essential that plans are in place and kept up to date. Local plans should set out a vision and a framework for the future development of the area, addressing needs and opportunities in relation to specific aspects of society (housing, the economy, community facilities, infrastructure etc.) as well as a basis for safeguarding the environment and adapting to climate change.

This document – “The terms of reference” (ToR) defines all aspects of how policy makers (a team established for preparation of Local Action Plan) should conduct all necessary steps/phases in order to define and prepare the eMobility Local Action Plan for the municipality. It provides a definition of the objectives, roles and responsibilities of contributors (team) and resources to be used for activities for the preparation of the eMobility Local Action Plan. When finalizing eMobility Local action Plan authors (working group) need to make sure that the final version of eMobility LAP is:

- **complete:** it lists all the actions steps to be sought in all relevant parts of the community (business, government, schools etc);
- **clear:** It is apparent what is to be done by when and who is responsible;
- **up-to-date:** it reflects current works and it anticipates newly emerging opportunities and barriers;

before submitting it to City Council for adoption.

1 Specific Objectives of eMobility Local Action Plan

E-mobility Local Action Plan is a structured and scheduled municipal plan to promote and advance electric mobility in specific municipality. The plan details short- and long-term measures, allocates responsibilities for actions completion and for involvement of key stakeholders. At its core, e-mobility local action plan is concrete implementation plan expressing commitment of a municipality to implementation of electro-mobility actions.

Development of an eMobility Local Action Plan starts with **review of existing strategic documents** of the municipality and identification of **measures already outlined and/or defined** in these documents. These measures are then translated into concrete actions with clearly defined time frame, budgets, funding sources and responsibilities. Municipalities can also opt to define new measures/actions that do not stem directly from adopted strategic documents but could be a part of municipality's vision and interest for development of its transport system, changing the way its personnel travels, introducing e-vehicles in municipality owned fleets or supporting/joining initiatives of other public or private stakeholders. Not only does the eMobility Local action Plan define the actions including time frames, budgets and funding sources but it also has to incorporate monitoring process using accessible and verifiable indicators. Furthermore, the plan has to provide a benchmark against which to measure progress. The more concrete steps an Action Plan contains the better – pre-defined budgets, clear allocation of responsibilities and progress monitoring will ease implementation of the eMobility Local Action Plan.

The main objective of the local action plan is to identify and detail specific actions to be implemented. In short local action plan deals with four major elements:

1. Specific tasks: what will be done and by whom?
2. Time horizon: when will it be done?
3. Resource allocation: what specific funds are available/needed for specific activities?
4. Monitoring: how will the progress be monitored and by whom?

Municipalities have different starting points and motivations for LAP development can be versatile thus also the results will vary – there is no "one fits all" eMobility Local Action Plan. Local circumstances and goals should always affect the way an Action Plan turns out to be. Here described methodology for development of eMobility Local Action Plan is rather generic allowing municipalities to adapt it to local priorities and local context.

To make an Action Plan binding, it should be approved in an official municipal decision making process.

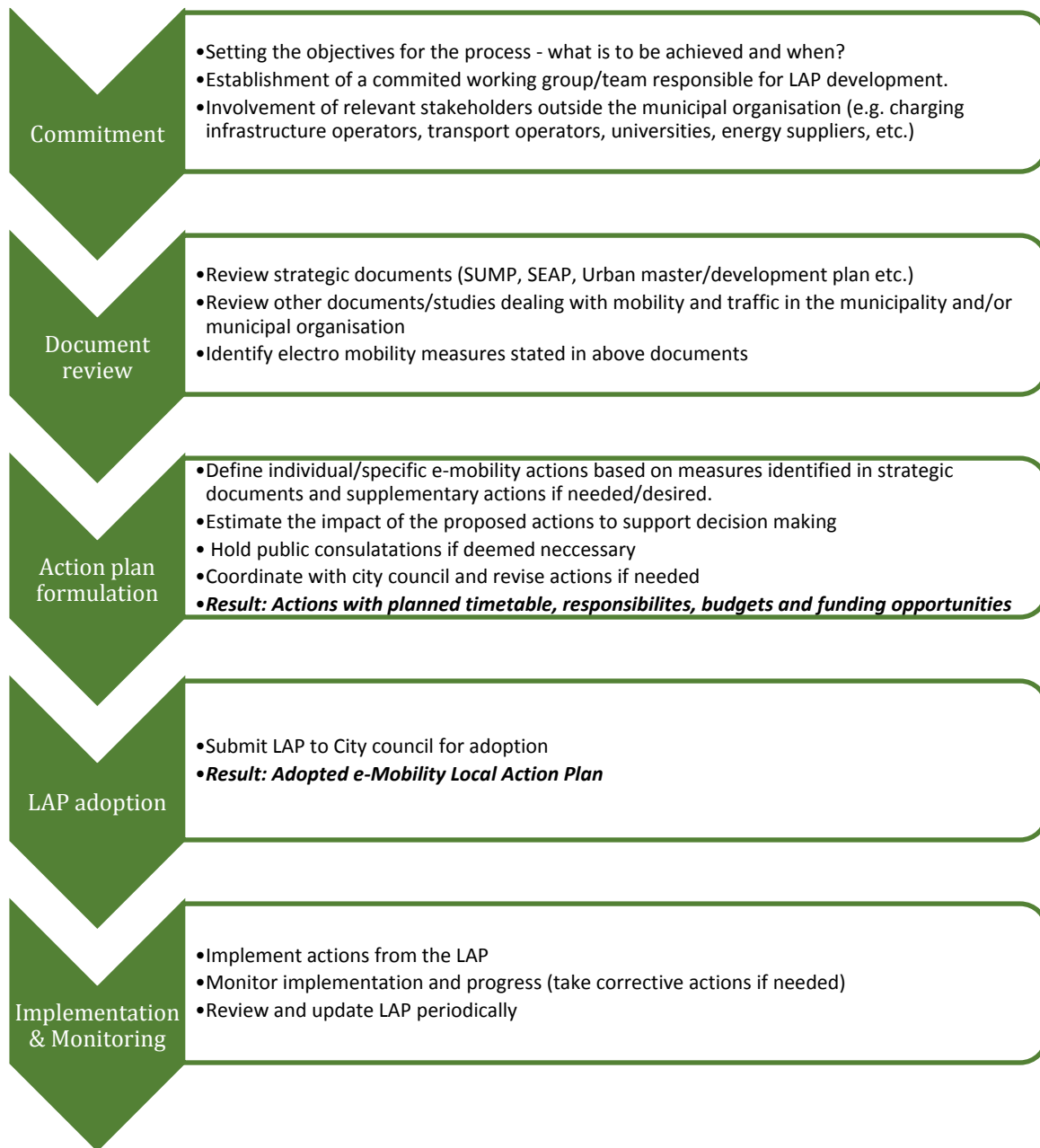
2 Local Action Plan development process

Systematic approach to eMobility LAP development facilitates the process and makes it more transparent. The methodology described henceforth should be used as a guideline and can be customized to specific needs of each individual municipality (phases can be added but we strongly advise against omitting any of the described steps).

In the first place, the municipality has to commit itself to the process of LAP development and lead its preparation. The LAP development team/working group needs to be appointed and it should consist of municipality's personnel with participation of external members (representatives of any interested stakeholders). Once the team/working group is established, it has to review all strategic documents of the municipality in order to identify eMobility measures and plans already specified in various strategic documents adopted by the city council. Additionally the team/working group can identify and nominate other/supplementary actions. Based on identified measures concrete and specific actions need to be pinpointed, including timetable, budgets, funding, responsibilities and monitoring. The list needs to be re-examined and evaluated in terms of feasibility, priority and time. The revised list is then submitted to city council for adoption and official approval. With this, the implementation of the LAP is officially entrusted to municipality and its departments appointed in LAP. As part of each action monitoring has to be specified and needs to be implemented after LAP adoption. With LAP adoption the work of the LAP development team/working group is done. Yet the team/group can continue – the municipality can authorize the team/group to monitor the LAP implementation and/or to periodically review and update the LAP.

LAP development process and its phases/steps are detailed in subsequent diagram and subchapters.

Diagram 1: LAP development phases (based on eMobility Works [1])



Each of the steps/phases shown in the **Diagram 1** are detailed in following subchapters.

1. Commitment

LAPs need to be developed by a dedicated working group made up of municipal staff and of other/external members. A major benefit of having external members in this group rather than solely council members and/or municipal staff is that political risk can be reduced. Some of the ideas generated during the LAP development process may be controversial or may require significant financial or human resources. Ideas are often more acceptable to the community if suggested by a neutral group consisting of a variety of community stakeholders. Thus the external members of the working group should be perceived as added value to the process even though it is not mandatory to include them.

Municipal staff members of the LAP working group need to:

- have extensive knowledge of strategic and other documents adopted by municipality,
- have good understanding of municipality's development plans,
- have experience in local government formal procedures and
- be open minded and enthusiastic.

It is recommended that at least one elected official should serve LAP working group to act as a liaison between the group and municipal council.

External members of LAP working group can be representatives of any interested stakeholders however, it is advisable to choose from stakeholders with background in electric mobility or potential users of measures to be proposed for eMobility Local Action Plan. Stakeholders can include representatives of:

- local business and industry, including industry associations, business improvement associations, unions, financial institutions, and regional economic development authorities, among others;
- utility companies;
- public transport authorities;
- educational institutions (primary, secondary and post-secondary schools, universities and research centres, and so on);
- community and non-governmental organizations;
- local media; and
- interested residents.

Municipal staff can invite identified organizations to participate in discussions of ideas and priorities, or to take part in a LAP working group meetings that will guide the plan's development, or both. A direct invitation from a senior manager or local councillor will often elicit a better response from stakeholders.

What does the LAP working group do?

A LAP working groups functions include:

- identification of municipality's vision, mission statement, goals and objectives;
 - identification of municipality's priorities and needs;
 - assessment of the quantity of resources available (human, financial, etc.) and potential partners;
 - preparation of a draft list of potential short-, medium- and long-term actions/measures;
 - development of an implementation plan;
 - cooperation with City Council;
 - familiarity with procedures and processes for document adoption by City Council;
- and optionally*
- *monitoring and evaluating individual projects and periodically reviewing the entire plan.*

Understanding municipality's and **community's vision on electro mobility** is starting point for LAP working group activities. Comprehension of this vision should help in consolidating the opinions and perspectives of the group or in clearing up any miscommunications or misconceptions.

When setting up the LAP working group it is essential that **objectives are clearly set**. The main objective of the LAP working group is obviously development of LAP however more specific objectives need to be set. The LAP working group needs to:

- define time frame in which the LAP is to be submitted to city council,
- define roles and responsibilities within working group:
 - o appoint chairperson,
 - o appoint person for liaison to city council,
- fix a working plan to be followed.

Working plan for development of LAP should be written down in form of simple document stating responsibilities of members, time plan and milestones to be reached. It serves as a reminder and guide for LAP development process.

Before the LAP development process starts, working group should **understand the adoption process to be followed in order to have LAP adopted by City Council**. There might be special procedures to adhere to, departments to be involved, statements to be prepared, public consultations to be held etc. It is of utmost importance to have all answers to the key question: **"What needs to be done to formally adopt a Local Plan?"**

The answer with all requirements needs to be taken into consideration at the time of preparation of working plan. Understanding of City Council adoption procedures should ease the adoption process.

2. Document review

Once the LAP working group has been established and has adopted its work plan, review of municipal strategic documents and other documents that (can) contain eMobility related measures is to be done. When reviewing the documents it is very important to **identify all eMobility related measures** that can consist of (but are not limited to):

- charging infrastructure (public and/or private)
- public transport (electric vehicles in public transport)
 - e-buses,
 - trolleybuses,
 - e-vans,
 - trams,
- electric vehicles in municipal fleets (integration of electric vehicles in municipality operated/owned fleets),
- e-rental Stations and e-stock
 - bicycles,
 - pedelecs,
 - e-cars,
- other e-mobility related measures
 - parking preferences for e-vehicles,
 - exemptions from restrictions (e.g. access to historic city centre for e-vehicles),
 - e-vehicles sharing schemes,
 - any other e-mobility related measures.

Sustainable Urban Mobility Plan – SUMP

The first document to be **reviewed is Sustainable Urban Mobility Plan – SUMP**. SUMP typically encourages a shift towards more sustainable modes to a certain extent through an integrated set of technical, infrastructure, policy-based, and soft measures to improve performance and cost-effectiveness with regard to declared goals and specific objectives. It might be titled differently, regardless of the name the documents typically deals with following topics [2]:

- (a) Public transport
- (b) Walking and cycling
- (c) Intermodality
- (d) Urban road safety
- (e) Road transport (flowing and stationary)
- (f) Urban logistics
- (g) Mobility management
- (h) Intelligent Transport Systems

The document does not necessary address all topic specified above, it may only consider selected few. Regardless of the title and scope of the document, it is necessary to review it and to identify eMobility

related measures it envisions. eMobility related measures can be stated in any of the above topics so it is vital that SUMP is reviewed in details.

As a rule SUMP's also define monitoring, reviewing and reporting activities in order to monitor implementation of it. SUMP's indicators and targets should be clearly defined together with monitoring plan and this needs to be translated to LAP. This means that identification of eMobility related measures ought to include also identification of indicators and targets related to measures in question. These identified indicators and targets serve as an input to eMobility Local Action Plan.

It might happen that SUMP is under development. In this case, it is recommended to work in parallel and in close cooperation with SUMP development team. In such manner, measures to be envisioned in SUMP can be already embodied into eMobility Local Action Plan.

Sustainable Energy Action Plan – SEAP

The next document to be reviewed is Sustainable Energy Action Plan – SEAP [4]. This document deals with actions and opportunities for reaching CO₂ emission reduction. It contains concrete measures aimed at reducing the CO₂ emissions and final energy consumption by end users.

The main target sectors of SEAP are buildings, equipment/facilities and **urban transport**. SEAP may also include actions related to local electricity production (development of photo voltaic, wind power, combined heat and power, improvement of local power generation), and local heating/cooling generation. In addition, SEAP most likely covers areas where local authorities can influence energy consumption on the long term (as land use planning), encourage markets for energy efficient products and services (public procurement), as well as **changes in consumption patterns** (working with stakeholders and citizens). With SEAP review special attention should be given to sections dealing with transport. Typically actions can include (but are not limited to) reducing the need for transport, increasing the attractiveness of public transport, cycling and walking, pricing (low congestion zones) and parking management as well as actions for reducing municipal and private vehicle fleet emissions. All these transport related actions need to be examined in order to identify those actions related to eMobility that need to be transferred and further dealt with in eMobility Local Action Plan.

Similarly to SUMP's, SEAP's likewise define short/medium term actions. For each of the actions named in SEAP following specifications are typically stated:

- description,
- department responsible, person or company,
- timing (end-start, major milestones),
- cost estimation,
- estimated energy saving/increased renewable,
- energy production,
- estimated CO₂ reduction.

For each of the eMobility actions to be transferred into eMobility Local Action Plan the above specifications are to be taken into account and incorporated into eMobility Local Action Plan. The same goes for monitoring specifications when/if stated in the SEAP.

Other (strategic) documents

Besides SUMP and SEAP municipalities for certainly have adopted other strategic documents that can contain eMobility related actions/measures. Thus, it is important that strategic documents of each municipality be thoroughly reviewed. Range of strategic documents adopted by each municipality can differ hence it is important that members of the LAP working group already possess thorough knowledge of these documents and can speed the review process.

Typically strategic documents to be reviewed include (but not limited to):

- Urban master development plan,
- Development strategy,
- Spatial plan,
- Touristic development strategy.

Besides strategic documents municipalities can have available other documents/studies dealing with mobility and transport in the municipality and/or municipal organisation (e.g. plans for electric vehicles in municipal fleets). It is important that all these documents are reviewed and eMobility related actions identified.

3. Action plan formulation

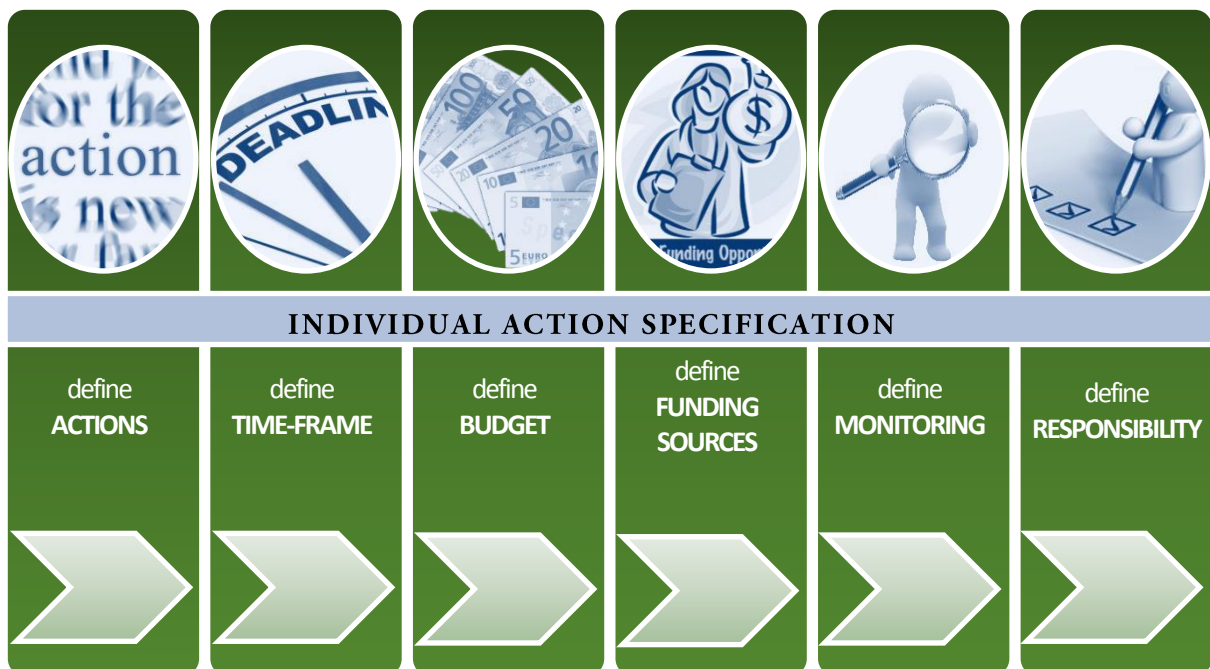
For the detailed formulation of eMobility Local action Plan working group needs to define individual/specific e-mobility actions based on measures identified in strategic documents and supplementary actions if needed/desired. For each of the proposed actions, impact (financial, environmental etc.) needs to be estimated. The estimated impacts are of particular importance for decision making process.

Each eMobility Local action Plan should provide clear and precise answers to following questions:

- What is to be achieved now and in the mid/long term?
- What actions or changes will occur?
- Who will carry out these actions?
- How long the implementation of each action will last and by when each individual action is to be finalized?
- What resources (i.e., finances, staff etc.) are needed to carry out each of the action?
- Who is responsible for each action?
- What is estimated impact? And how to assess it?

Providing answers will result in actions with planned timetable, responsibilities, budgets and funding opportunities. With this in mind all actions identified in reviewed documents need to be defined in detail. The same goes for supplementary actions (actions not originating from strategic documents) if identified. For each and every action to be included in eMobility Action Plan detailed specifications are needed. Majority of those might be already available in original strategic documents and can be used without altering (even though these specifications need to be checked).

Diagram 2: Approach to actions' specifications



For each action, crucial specifications are shown in following table:

Table 1: Detailed specification of each action as integral part of local action plan

Action/project name	Short name of the action/project
Strategic document identification	Reference to (strategic or other) document in which described action/project stems from. As reference the name of the document (including reference to specific parts of this document, i.e. priorities) and year of adoption should be stated
Action/project description	Description of the action explaining main objectives and characterizing the action in sufficient details.
Timeframe	Definition of the timeframe (start/end) for action/project implementation and completion. For more complex actions/projects, individual phases and milestones to be defined.
Costs estimation/budget	Cost estimation for action/project implementation to be defined. The more precise the estimation, the better. If the action/project is complex, the cost estimation need to be done for each phase. If cost-benefit analysis (CBA) is available, information contained therein can be used.
Financing Sources	Financial sources are to be defined, for complex actions/projects financial sources should be defined for each phase. Financial sources need also to display time component alongside amount needed.
Potential risks and barriers	Identify potential risks and barriers that might prevent/delay the implementation (e.g. delays in obtaining building permits, insufficient grid capacity...)
Mitigation measures	Foresee mitigation measures for identified risk and barriers, envisage alternate solutions.
Estimated impact	Estimated impact of the action/project to be described, preferably quantifiable indicators are stated (<i>e.g. in first six month of operation the charging stations will attract on average 10 users per day stimulating increase of registered PEV</i>). Preferably financial, environmental and/or transport related impact of proposed actions/project should be estimated in order to support decision making process in the city council (<i>e. g. the action will result in reduced CO2 emissions of 51 tonnes equalling approx. 1.000 vehicles less per day in city centre</i>). With expected impacts clearly stated, it will be easier for city councillors to decide if the proposed action/project should be part of the eMobility Local Action Plan or not.
Action/project holder/responsible department	For each action/project municipality's department responsible for action/project implementation must be appointed. The department is to be in charge of implementation and will monitor its progress and deviations from plan. The department need to have competence and power to propose and implement corrective actions.

Project custodian	If possible, the municipality should appoint person in charge – it can be directly by name or it can be by function (e.g. head of XY department). Project custodian is in charge of action/project implementation and is monitoring its progress. In case of deviations the custodian proposes/implements corrective actions and reports on action/project progress. The custodian should also be overseeing the financial part of the implementation.
Monitoring and follow-up	Monitoring of each action/project should be defined in form of Key Performance Indicators (KPIs) and target values (defined also in time), type and manner of monitoring (what and how will it be monitored), monitoring periods (time-frame) should be set. In case of more complex actions/projects milestones to be monitored must be specified. Time and form of monitoring reports should be specified. Monitoring reports should be delivered to city council or designated municipality's department. If follow-up actions can be specified, they should be mentioned here.

It is strongly recommended that once specifications of each actions are prepared a visual representation of actions in time is included in the eMobility Local Action Plan. This makes it easier for reader to apprehend the actions in time. The same goes for E-Mobility Action Plan Summary (appendix 1 to LAP template) summarizing the most important contents and action list from LAP.

The **content and quality of eMobility Local Action Plan need to be monitored throughout the document development process**. Still the final LAP should be checked for quality and for presence of all relevant information. The quality check can be done internally by working group or externally.

Public consultations

Before proposing the eMobility Local Action Plan for official adoption to City Council, municipality can opt to hold **public consultations** [3]. LAPs are often more successful when the public feels a sense of ownership in the process and when the final action plan respects and considers their views and opinions. Once a list of priority actions has been developed, the working group may wish to consult with the larger audience/group of key stakeholders before going to the general public. Consultations can be divided for each group of proposed actions (public charging infrastructure, public transport, electric vehicles in municipal fleets, eRental – eStations and eStock, other measures) or can consider the draft plan as a whole. In either case, members of the public can be given several opportunities to comment on the various initiatives and their proposed implementation. Outcomes of public consultations are not to be neglected but should be integrated into LAP where and if relevant, well founded and feasible. Quite often, communities want to jump in and “do it all.” The municipal government that can start all of its initiatives right away is rare; it is far more common for the municipality not to know which initiatives to tackle first and public consultations can help municipality to narrow selection of initiatives. It may also happen that public consultations add new ideas to the set making the final choice harder. Providing a mix of short-, medium-, and long-term actions for public consultation can often help to prioritize a long list into a handful of key action items. The feedback provided during the period of public comment should be nevertheless incorporated into the final version of the LAP.

Throughout the preparation of the eMobility Local action Plan **coordination with City Council is of vital importance**. Once actions are defined and agreed with City Council the plan should be finalized and final revision by the work group needs to be done before proposing the eMobility LAP to City Council for adoption.

4. LAP adoption

The official adoption of the e-Mobility Local Action Plan is the final stage of putting a local plan in place. The adoption process might be comprised of diverse and various procedures and processes that need to be followed. These should have been understood already at the beginning of LAP development in order to follow the procedures and to have all supporting documents in place if needed. The official LAP adoption process by City Council can be started and all required documents (together with supplementary document(s) where needed) are submitted.

The City Council will most likely check the quality of the plan and alignment with municipality's policies. If good cooperation and coordination between working group and City Council has been developed in LAP formation process, there should be no issues or only minor modifications will be requested. Otherwise City Council can request major modifications which need to be considered and LAP modification should follow requests made by City Council.

Once the e-Mobility Local Action Plan is officially adopted the implementation phase can then begin.

5. Implementation and monitoring

After plan adoption, the **implementation phase** starts. The Local Action Plan is an operational document and as such, it should specify in sufficient detail how each measure is to be implemented. Most likely, the implementation of each action will be delegated to appropriate municipality's department who will take over the responsibility for implementation and manage monitoring. It is crucial to implement measures/actions (deliver the goals) of the plan effectively and to apply appropriate monitoring to oversee the implementation and to manage risks. The delegated department should have the power to take corrective actions if needed. It is important to understand that a good eMobility Local action Plan does not automatically lead to good results. Broader monitoring arrangements specified in LAP need to be put into action to regularly check how much progress has been made towards achieving the objectives.

It is strongly advisable that the overall progress of LAP implementation is monitored centrally. The progress of LAP implementation should be periodically reported to City Council and communicated to general public and stakeholders. Monitoring should ensure that the results of plan implementation enable all actors to consider and make corrections where necessary (e.g. if targets are achieved, measures appear to be contradictory, etc.). Monitoring reports should include "hard" findings that show progress towards measurable objectives and indicators (e.g. reduction of particulate matter), as these will show you whether your measures have achieved what they were intended to. Reports should also include "soft" findings that refer to implementation experiences, fulfilment of overall goals, levels of awareness etc., as these will be invaluable if you wish to replicate or modify the measure in another location in the future.

Monitoring will help you:

- to keep track of progress towards achieving the objectives,
- to identify problems, bottlenecks and other challenges for on-time implementation,
- to regularly inform stakeholders and citizens about progress of measure implementation.

eMobility Local Action Plan is prepared for definite (explicit) time period in which measures should be implemented. But as the LAP should also make allowance for unexpected events, corrective actions and deviations, periodic review and update of LAP are fundamental. It is advisable that **LAP progress is reviewed periodically** (*e.g. person/department in charge of monitoring can review progress every six months*) and to **allow for LAP updates** at least once per year (it is not necessary to update LAP every year but the possibility should exist while it should also be possible to update the document more often if needed). If SUMP is already in place, LAP update should be done at the same time as the SUMP update.

At the time of LAP progress review and LAP updates new challenges for the **next eMobility Local Action Plan generation** can be identified. But before starting the work on the next generation of your eMobility Local Action Plan, the lessons learnt so far should be reflected. This can help to optimise the planning process and the measure selection in the future. Experience shows that each planning cycle helps to improve the expertise on urban mobility planning and to increase the effectiveness of the next planning round. A first analysis of challenges with the next eMobility Local Action Plan generation can influence the design of the new planning process. A further motivation for considering the direction of the next generation eMobility Local Action Plan is to aim for stronger integration with other policy areas.

3 eMobility Local Action Plan Template

The Template was developed as a model to be followed during LAP development. The template is coherent with the LAP development process described beforehand. But as municipalities have different starting points, motivations and goals the final local action plan will most likely deviate from the template. Accordingly, the template is not to be seen as rigid or fixed for it can be modified to suit the needs of each municipality. Local circumstances and goals should always affect the way an Action Plan turns out to be.

How to use the template?

The Template is to be used together with this LAP Terms of Reference (ToR). The ToR specifies in detail each of the chapters of LAP. At the same time, short explanation of content to be specified in each chapter is provided in Template. The Template can be adapted to some extent to suit municipality's needs (e.g. if the SEAP is not in place, the subchapter "*E-mobility Aims and Objectives identified in SEAP*" can be deleted).

4 References

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