



# TARGET SETTING





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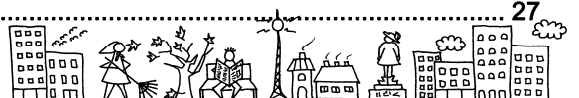
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## 1. INTRODUCTION

The next step is to prepare the strategic programme and an action plan. The strategic programme is the document that sets long-term targets and measures for the agreed priorities. It is based on the baseline review and its evaluation to find the priorities to focus on during the following management cycle period.

A common vision should be found which has a long-term orientation for a period of 15-20 years, balancing the environmental, social and economic dimensions. Developing a common vision in a participatory process will contribute to acceptance of the IMS among a wider audience. Find its point of departure in the priorities and make it reachable and inspiring.

Describe the priorities by using indicators as the main tool of communication within the IMS. Based on indicators, formulate measurable and time-related targets, which balance and integrate the environmental, social and financial resources. If data are missing in the baseline review, include measures to create these reference data and the corresponding indicators in the strategic programme.

Develop an action plan with a perspective of 1-3 years which is broken down from the strategic programme. The action plan displays short-term targets derived from long-term targets and sets out measures to fulfil both. The action plan also clearly defines the allocation of human and financial resources as well as the responsibilities for implementation.

Participation and cooperation are keys to success. Hence, the involvement of all relevant stakeholders is essential for target setting and action planning.





## 2. PRIORITY SETTING

The priority setting is the level of developing a common vision for the future development of the city. This takes its reference in the scope of the management system and is based on the findings of the baseline review. Since not all challenges can be addressed at a time, the integrated management system supports cities to set priorities accordingly.

Resources and common goods are used as categories to structure the selected priority issues in the strategic programme. For both, we need to define indicators and targets that allow for monitoring progress and performance.

### 2.1. DEVELOPING A VISION

One of the most important pillars of local sustainable development is a common vision for the future development of the city. Establish the vision as a mission statement developed in a participatory process that would provide a long-term orientation for a period of at least 15–20 years.

By clearly balancing the interests of the ecosystem, the economy and human societies in the vision, all three dimensions of sustainability – i.e., economic, environmental and social dimensions – are taken into account. To do so, a common understanding of sustainable development is of key importance.

The priorities form an integrated section to the strategic programme, and the mission statement is of utmost importance for being able to set the priorities. Without it, the process of developing the strategic programme and the action plan would lack a clear picture of the local government's priorities.

### 2.2. DEFINING SCOPE

The cities are facing numerous challenges in trying to reach sustainable development. A strategic approach to overcome these sustainability challenges would encounter cross-cutting issues, such as energy efficiency, greenhouse-gas emission and other issues relevant to mitigating climate change, surface-sealing, conservation of natural habitats (ecosystems), preparedness in regard of consequences of climate change (e.g. flood prevention). Such an approach is supposed to have significant advantages over the more “traditional” theme-oriented approach, focusing on environmental media individually, such as air, water, land and soil, and related problems (e.g., air pollution, noise, water pollution, waste).

Challenges are identified from different sources. The current legislation is identifying issues that local government must handle. The protection of the environment is subject to several EU directives and affects cities in EU member states. The integrated management system guarantees that the local government takes note of and complies with all legislation relevant to environmental or sustainability issues. However, in order to develop sustainable cities, ambitions must go beyond current legal requirements





There is a broad consensus on the types of challenges to include in an integrated approach to managing the urban area. Importantly, they are not limited to those challenges for which the local government is legally responsible. Local government acts as a ‘community leader’, coordinating and stimulating action for the whole urban area. This approach is similar to initiatives such as Local Agenda 21.

However, many Local Agenda 21 action plans focus on most local environmental issues (street litter, graffiti, noise) and many local governments’ sustainability programmes aim at issues which they have immediate opportunity to act on (e.g., energy efficiency of public buildings). No doubt these are important issues to act on, but other more strategic issues such as cutting down the entire city’s greenhouse gas emissions presumably achieve more significant environmental improvements and definitely need to be addressed.

In order to be able to tackle the complex set of challenges efficiently, it is advisable to split the sustainability issues into smaller and more easily accessible aspects that affect one or several natural resources or common goods. These aspects can be attributed to one or several indicators.

The strategy-oriented approach follows the principles of sustainable development as outlined in the Aalborg Charter for local sustainable development. It points at the Aalborg Commitments as the appropriate framework for integrated management.

Accordingly, the EU Working Group on Environmental Management Plans and Systems (2005) proposed the adoption of a set of fourteen objectives grouped under five broad environmental issues, which are directly derived from the Aalborg Commitments.

Broad environmental issues	Objectives
I.1 Policy integration & environmental governance	O1. Raise the level of understanding & involvement amongst citizens & other stakeholders about environmental performance of the city O2. Achieve compliance with EU environmental legislation relevant for urban policy O3. Ensure full integration of environmental objectives in urban sectoral policies & programmes.
I2 Protection of the natural environment	O4. Reduce pollution to air, water & soil O5. Promote biodiversity & extend & care for designated nature areas & green spaces O6. Reduce primary energy consumption & increase the share of renewable energy.
I3. Sustainable management of natural resources	O7. Avoid & reduce waste & increase reuse & recycling O8. Reduce the rate of land consumption for development & prevent urban sprawl O9. Reduce the need for transport
I4. Environment & Health	O10. Reduce inequalities in health caused by environmental factors
I5. Climate change & Global environmental responsibility	O11. Reduce greenhouse gas emissions O12. Reduce city’s negative impact on global environment O13. Implement principles of environmental justice O14. Reduce exposure to environment-related risks

**Source:** TSUE, *EU Working Group on Environmental Management Plans and Systems* (2005) [http://ec.europa.eu/environment/urban/pdf/fin\\_rep\\_urban\\_emps.pdf](http://ec.europa.eu/environment/urban/pdf/fin_rep_urban_emps.pdf)





### 2.3. SETTING PRIORITIES

The integrated management system supports priority setting and creates consensus on the following actions. Since not all challenges can be addressed at a time, the integrated management system supports cities to set priorities accordingly.

Use resources and common goods as categories to structure the selected priority issues in the strategic programme. For both, we need to define indicators and targets that allow for monitoring progress and performance.

The fundamental steps of this phase are the following:

1. *Plan the process of priority setting:* Who will review the findings of the baseline review? How? In which way will stakeholders be involved? Who will define, agree and approve the list of priorities?
2. *Base priority setting on a comprehensive analysis of the current situation of the city* (i.e., the baseline review): have you considered the findings of the baseline review as the main source?
3. *Reflect the results of the baseline review:* Is the baseline review highlighting the importance of specific issues? Does it provide information on the roles of various actors in the urban area?
4. *Assess relevance and importance of each aspect:* have you given highest priority to aspects of non-compliance with legislation? The most important step is the comparison between the current situation of sustainability aspects as identified in the baseline review and compliance with European (see box below), national and regional legislation.
5. *Compare yourself:* In the event of missing legal standards, you can make use of the “state of the art” approach. Have you compared your situation to others, in accordance with the cities’ ambitions, “good practices” or national or regional average?

Based on these reflections, a list of priority areas will be agreed by the coordination board, taking into account the input of further stakeholders.

Support can be given by benchmarking approaches which allow for comparison between different cities. However, opportunities for benchmarking are now limited due to the lack of coherent monitoring mechanisms on the regional, national and European levels. Encouraging instruments are the online tools STATUS (link to [www.localtargets21.org](http://www.localtargets21.org)), which provide harmonised, comparable and meaningful indicators and targets for local sustainable development based on the Thematic Strategy on the Urban Environment and the Aalborg Commitments, and Local Evaluation 21 (see [www.localevaluation21.org](http://www.localevaluation21.org)), a self-evaluation of the local government’s process and performance for local sustainable development.





## 2.4. IDENTIFYING SIGNIFICANT ASPECTS

For each of the prioritised aspects, describe the significant challenges for reaching sustainable development. This is perceived as a second layer of prioritisation. Challenges may arise from meeting legal requirements as well as from local environmental and social problems related to specific issues (e.g., energy, water, land use, transport, planning and design, and health).

However, these aspects are unrated: the evaluation of whether they must be considered a problem will result from SWOT analysis of the baseline review. The analysis will clarify, whether or not the aspect is qualified to threaten quality and the availability of natural resources as well as social common goods. Aspects which are considered risks to continuous local sustainable development require response and should be handled within the strategic programme.

Response is seen in two ways:

1. Legal compliance: if the community does not comply with the legal standards and requirements for the specific aspect (Clean Air Directive etc.), it should be tackled with highest priority.
2. Continuous improvement of the environmental and social situation/quality: if the city does comply with legislation, it should aim at:
  - Maintaining the good framework conditions against difficult trends and/or
  - Improving the local context

**The main EU environmental legislation affecting Member States cities:**

- Air Quality Framework Directive
- Drinking Water Directive
- Urban Waster Water Treatment Directive
- Bathing Water Quality Directive
- Water Framework Directive
- Environmental Noise Directive
- Waste Framework Directive
- Integrated Pollution Prevention and Control (IPPC) Directive
- Seveso II Directive
- Habitats Directive
- Environmental Impact Assessment (EIA) Directive
- Strategic Environmental Assessment (SEA) Directive
- Environmental Information Directive.







## 4. PARTICIPATORY INDICATOR SELECTION AND TARGET SETTING

Once it is decided, which aspects should be given priority and which environmental resources and social common goods are affected, express these by using indicators.

Based on indicators, measurable and quantified targets for the priority areas can be agreed. Furthermore, monitoring of progress and success of measures can be carried out, and the evaluation of results and achievement will be feasible.

### 4.1. SELECTION OF INDICATORS

The main philosophy behind the integrated management system is that a sustainable city is more than simply a city with a clean environment. In order to make real progress towards new and better monitoring practices, it may therefore be necessary to identify integrated indicators for local sustainability, i.e., indicators that reflect the interaction between environmental, economic and social aspects. The indicators would describe inter-linkages between consumption or degradation of resources and common goods as well as the accomplishment of human well-being. These indicators would present the economic efficiency to perform this transition – our economic activities.

This comprehensive perspective suggests defining and agreeing on indicators applying a cross-sectoral and more integrated approach. Therefore, conducting the process of indicator definition as a participatory process should be considered. This may be valuable as justification for third-party reviews, to provide background information on indicators to stakeholders, politicians and experts, or assist the orientation of new employees.

#### **Selection of resources and indicators City of Växjö, Sweden**

The City of Växjö came to a selection of the resources for its system through a participatory process. After brainstorming on local environmental issues with the coordination team, political parties and external stakeholders, the issues were summarized into six resources: clean air, good built-up environment, climate stability, high environmental awareness, fresh water and biodiversity. Afterwards, a working group was established for each resource, which led to the process of indicator selection.

Furthermore, the environmental management system in Växjö has a clear linkage to Agenda 21. The indicators were chosen on the basis of the goals in the Agenda 21 strategy. The participation strategy of Local Agenda 21 is, at the same time, the participation strategy for the local management system.





### Indicator selection in Projekt21 (Germany)

Supported by ICLEI-Local Governments for Sustainability, 11 pilot local governments from the German Federal State of Rheinland-Pfalz developed focused answers to the key challenges to sustainable development faced by their respective communities. The participating local governments are Birkenfeld, Göllheim, Hauenstein, Ingelheim am Rhein, Kaiserslautern, Kandel, Koblenz, Neuerburg, Osthofen, Wörrstadt and Zweibrücken.

In the initiative's first phase, each participating municipality prepares a sustainability report based on common goals and a standardised but flexible set of indicators. The indicators are chosen to reflect the key question of sustainability: how do we ensure a high standard of living for the individual without endangering the common goods of our environmental resource base and social equity? Based on the report, and with the participation of local stakeholders and decision-makers, action programmes are developed and targeted at those areas that most need attention. Workshops with the participation of relevant stakeholders in society shall help to set long-term objectives and respective targets as well as measures to reach these targets as promptly, efficiently and precisely as possible.

Based on regular updates of the sustainability report, further action plans can be developed for areas where major conflicts between the needs of the society and the protection of common goods are indicated.

[<http://www.iclei.org/europe/projekt21>]

By completing an indicator sheet for each individual indicator, it is easier to keep track of how and why the indicator was chosen, where data can be found, how it is measured and how often, etc.

Common goods	Water, Soil, Air	Land	Global responsibility	Equal opportunities	Social infrastructure
<b>Needs</b>					
<b>Housing</b>		Developed land per inhabitant	Low-energy buildings	Ratio of house rent to income	
<b>Mobility</b>	Proportion of low-emission cars		Proportion of public transport in all distances		Minimal distance to important facilities
<b>Income</b>	Proportion of organic farms	Number of jobs per ha of industrial real estate		Number of women in leading positions	People receiving unemployment or social benefits
<b>Procurement</b>	Municipal solid waste per inhabitant		Turnover of fair-trade products		Day care for children acc. to age
<b>Leisure &amp; Education</b>		Protected natural areas in ha	Energy consumption of recreational facilities	Immigrant members in clubs	

From an operational point of view, the selection of indicators for all sustainability dimensions appears different. Firstly, have a close link to the Local Agenda 21 Process. Secondly, the open structure of this issue allows for a debate on areas of human needs and aspirations.





However, it is crucial under all circumstances to integrate the selection of all indicators and allow for the participation of all relevant actors in order to guarantee the consistency of the whole process.



**Check that...**

- The indicator is expressed in a way that is clearly recognizable with regard to which parameter it monitors.
- The data that is required to support the indicator is readily available, adequately documented and updated regularly.
- The selected indicators are supported by data or the necessary calculations, or surveys can be carried out.
- It is possible to estimate the development of the indicator for the coming year on the basis of trends and scenarios.
- Indicators are comprehensible and reproducible by non-experts.
- The indicator is providing a representative picture of conditions, pressures on the urban environment or society's responses.
- The set of indicators is concise, simple and easy to interpret.

**Read more:**

**about indicators (See report on indicators online [www.localmanagement.eu](http://www.localmanagement.eu))**

**Example:**

**Indicator Information Sheet (Annex 1)**

**Example:**

**Indicator characteristics in ecoBUDGET of the city of Kaiserslautern (Annex 4)**

**Example:**

**Indicators of ecoBUDGET of the city of Kaiserslautern (total budget) (Annex 5)**

## 4.2. TARGET-SETTING

Once indicators have been selected, the next stage is to define the desired value of the indicator at the end of the time frame set earlier: in other words, to set a target. Having a target gives something concrete to strive for. The indicator is what is measured to check whether the target is reached, and only what gets measured gets managed. The integrated management system applies both strategic, long-term targets (10-15 years) in the Strategic Programme and operational, short-term targets (1-3 years) in the Action Plan. The targets both set limits for resource consumption and aim at a desired quality of life within the city. Long-term and short-term targets are defined in comparison to a reference or base year, which can of course be different from indicator to indicator. The base year usually depends on data availability. This framework of long- and short-term targets prevents local government from losing sight of the route to sustainable urban development.

Mention the motive for the establishment of a target clearly in respective documents. Furthermore, collect and prepare visions and goals already agreed in the city as input for the Strategic Programme. Carrying out a participatory target setting process also provides support in developing implementation partnerships for local sustainable development.





### Political debate on target setting – The City of Bologna, Italy

In Bologna, both the EMS at the beginning and the EMS at the end of the year were ratified through a political majority (and not through unanimous vote) in the City Council. The four hours of political debate in the council were on the budget itself, and not on the EMS (*ecoBUDGET* system). In particular, the opposition party had no objections on the concept of *ecoBUDGET*, but rather on the definitions and targets set within the budget, as well as the measures to be implemented. The major criticism cited by politicians of the opposition parties was that the targets in the environmental budget were not set high enough to actually improve the local environment.

Some politicians raised concerns about a lack of community involvement and participation, with the possible danger of marginalization of the environmental budget vis-à-vis the financial budget.

Furthermore, political proposals have been made for establishing clear links to the existing financial budgeting process and the social balance of the City of Bologna. The interdependence of these three spheres call for a comprehensive overview needed to take account of environmental, economical and social perspectives in order to affect the transition to a more sustainable development. The Bologna example highlights how the selection of targets and respective measures to achieve them is of fundamental importance. The management system offers a platform for discussions on setting the objectives and targets and thereby increasing the importance of prior issues in Local Government.

Assess the long-term targets regularly evaluated within an (internal and/or external) audit. Ensure political debate on whether they have proven to be suitable or unmotivated, or if a new situation requires new ambitious targets for local sustainable development.

The results should be taken into consideration when preparing the subsequently following strategic programme or action plan. Of course, the definition of a new long-term target has to be undertaken every time the long-term target has been achieved, and in any case when the due-date for target-attainment has been reached.

Choosing the short-term targets for the action plan derived from long-term targets is the next stage. Before setting the short-term targets, the previous year's value (if available) or reference value ought to be taken into account in order to find the right orientation.





**Example: How to establish long-term and short-term targets. Excerpt from Environmental Budget Balance – City of Bologna**

RESOURCE	Indicators	Reference year value	Value 2001	Value 2003	Short term target (2003)	Mid-term target (2005- 2010)	Short-term target evaluation	Comments
AIR QUALITY	Concentration of PM10 (µg/m <sup>3</sup> )	64 (2000)	53	45	45	40 (2005)		The concentration of PM10 was affected by extraordinary meteorological events
	Distance to mid-term target	-	46%	79%	79%	100%		
	Concentration of benzene (µg/m <sup>3</sup> )	9,7 (2000)	10,3	8,4	10,0	5 (2010)		The concentration was principally affected by extraordinary meteorological events (rain). Furthermore, the trend is influenced by natural renewal of motorcycles
	Distance to mid-term target	-	-13%	23%	-6%	100%		
BLUE CLIMATE	Concentration of nitrogen Oxides (NO <sub>x</sub> ) Stalingrado monitoring station (g/m <sup>3</sup> )	79 (2000)	88	94	-	40 (2010)	-	In the last few years monthly fluctuations occurred, but annual concentration is to be considered almost constant
	Distance to mid-term target	-	-23%	-33%	-	100%		
	Energy production from renewable resources (MWh)	71.986 (1997)	81.990	89.834	87.300	188.000 (2010)		The completion of short term measure was delayed (Frullo). Completion attainment of about 80%
	Distance to mid-term target	-	9%	15%	13%	100%		
BLUE CLIMATE	Extent of urban district heating (equivalent)	10.895 (1997)	29.961	32.205	30.800	33.700 (2010)		Some medium term measures (not mentioned in the Master Budget) have already started and their effect is the data (Ecocity)

**4.3. PARTICIPATORY TARGET-SETTING**

Develop an achievable set of targets with input from a wide variety of actors. A target that has involved some form of consultation is likely to have greater legitimacy within the city. Therefore, developing an achievable set of targets requires input from a wide variety of actors. Include actors such as:

- Politicians to guarantee legitimisation and durable support for target achievement.
- Input by citizens who have a stake in the relevant issue.
- Expert assessment of the severity of the problem to be addressed and of overall factors, such as those related to the variability of social and economic conditions on the local or national level.
- Input from a range of different officers (from different sectors) in estimating what is realistic to achieve within a defined time period, based on research and past assessments of comparable programmes.
- Consideration in agreement with politicians of available programming resources as well as resources for monitoring and evaluation over the agreed time period.
- The involvement of other public and private sector organisations that may be affected by or affect target-setting.

The complexity of the process is evident. The motivation and skill required by the target developer (generally an officer and not a politician) is high, as adequate procedures, training and structures must be set up.





Read more: Further information about target setting can be found at: [www.localtargets21.org](http://www.localtargets21.org)

### Participatory target-setting in Ludwigsburg (Germany)

The City of Ludwigsburg (Germany) established a participatory process for the City Development Plan. In the beginning, workshops with key decision-makers were arranged, and telephone interviews with citizens were carried out, in order to get ideas about the themes for the City Development Plan. In the continued process, Ludwigsburg arranged two *Future Search Conferences* involving citizens and other key stakeholders from all sectors of society. The conferences were visionary and dialogue-oriented and led to recommendations and suggestions for visions, strategic targets, projects and measures. The outcomes of the conferences were being assessed by the administration. The city council overwhelmingly accepted the visions and strategic targets in 11 field of activities for the future development of Ludwigsburg.

## 4.4. SETTING ACHIEVABLE AND REALISTIC TARGETS

Set achievable and realistic targets– not too high and not too low. Make the vision of the future ambitious but keep in mind that stakeholders (and the sustainable environment, too) demand concrete and pragmatic results. Targets are generally a compromise or trade-off between what is envisioned and what is feasible.

The DG Environment/INEM Toolkit for SMEs suggests the objectives to be “SMART”. SMART stands for:

- **Specific:** Focus on important performance factors; avoid broad expressions such as ‘being more environmentally friendly’.
- **Measurable:** Remember: what has not been measured cannot be managed. Consequently, objectives must be quantitative in order to be measured. Choose measurements carefully to gain feedback on progress.
- **Achievable:** If your objectives are set too high it is unlikely that they will be realised and this will demotivate those involved. You should also avoid setting too many goals.
- **Realistic:** On the other hand, if objectives are set too low, you may not be reaching your full potential for action.
- **Time-bound:** Objectives should always include a time limit to enable you to decide if they have been met.

### What comes first – the chicken or the egg?

- How ambitious do you want to be?
- Should you select “comfortable” targets in order to celebrate success or is it better to set more ambitious targets that can give more of an impulse and stimulate sustainable development of the community?
- Do you first define the action plan or do you first establish the long-term targets?
- Do you already use agreed plans and projects, often decided before the implementation of the management system or new measures?

There is no general answer to these questions. Each city has to decide on the “philosophy” of its management system and on who/what is leading the process.





## 5. DRAWING UP THE STRATEGIC PROGRAMME

The strategic programme is the document that sets out the long-term targets and measures for agreed priorities for urban area of local government. It is a special long-term overarching steering document which contains the principles overlying the strategic approach of the local government, covering the intended means of achieving the ongoing programme. It draws from lessons learned, fine-tuning the approach to ongoing programmes, making allowance for changes in what is a dynamic environment, and incorporating new thinking and initiatives.

It is be created in direct response to the analysis carried out in the baseline review, and forms the final result of the process from setting priorities to agreeing on targets. The strategic programme comprises the presentation of the findings of the above-mentioned activities and defines the long-term vision to sustainable development focusing on priority areas, structured according to affected resources and significant aspects, using indicators and time-related targets and measures. During the third step of the IMS, it is presented to and approved by the city council.

### 5.1. TIME FRAME

The strategic programme defines the long-term vision for the status of the city in 10–15 years with objectives in different fields for the similar period. This is a term long enough to allow for significant progress with even quite slow issues but close enough to allow a realistic assessment of what is actually achievable. The strategic targets are to be set out as a programme for 3-5 years and should be updated along with the repetition of the full management system, i.e. every 3-5 years. A full revision of the strategic programme might be carried out even earlier if events or changes suggest so. The updating of the strategic programme could possibly be coordinated with other local government planning decisions.



## 5.2. PRESENTATION

During the third step of the IMS the strategic programme is to be adopted by a city council decision. The success of the integrated management system depends to a great extent on how seriously the strategic programme is accepted as a tool for political management. Council discussion, debate and opinion-forming in preparation of the city council decision are therefore central aspects of the procedure.

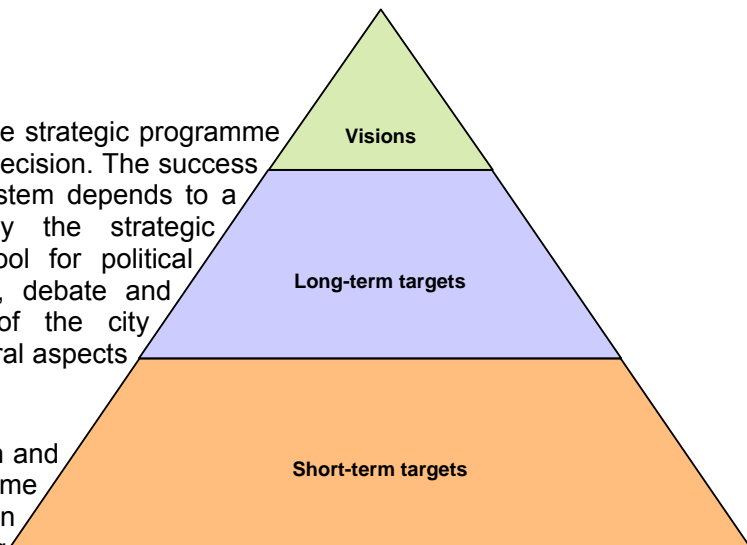
It also implies that the presentation and wording in the strategic programme are important issues to consider in creating commitment and attracting

the interest of the politicians. It is recommended not to present the document to the city council as an excessively detailed, comprehensive work but to display the overall priorities, indicators, targets and measures.

The actual design of the programme can differ. There are numerous examples from cities on the design of strategic programmes. These examples can be derived from cities using different types of management systems.

**Example:**

**A content table of a Strategic Programme (Annex 3)**





## 6. DRAWING UP THE ACTION PLAN

The action plan is the short-term operationalisation of the strategic programme. The action plan displays the short-term targets broken down from the long-term ones in the strategic programme. The action plan sets out the plan of measures to be taken to reach the short-term measurable targets which lead to the fulfilment of the long-term targets in the strategic programme.

### 6.1. TIME FRAME

As pointed out previously, the action plan is starting the short-term measures in order to reach the long-term targets set out in the strategic programme. As such, it requires an annual update and a continuous follow-up to ensure its implementation.

### 6.2. RESPONSIBILITIES

Appoint administrative responsibilities and schedules based on the city council decision and in accordance with business directives following the agreement in the coordination team. Agree on measures to be carried out by external stakeholders by establishing partnerships with stakeholders and with neighbouring municipalities to increase the possibilities of reaching targets for the urban area.

#### **Don't put the responsibility on the coordinators!**

If the responsibility for the action plan rests mainly with the Coordination Team, there is a risk that the whole management system will be the construction and concern of the environmental co-ordinators alone. By investing the departments as stakeholders in the management system development, you improve your chances for a broad-based commitment within the organisation. Furthermore, external legitimacy for activities and targets can be gained involving other stakeholders, e.g., citizens and local companies. For example, citizens could feel being responsible citizens and the private sector could use the tool to a greater extent.

### 6.3. PRESENTATION

The structure of the action plan should follow the order of resources, indicators and short-term targets broken down from the long-term targets in the strategic programme i.e., the measures, responsibilities and deadlines. A screening of already agreed measures should be initially carried out. Draw up new measures that would support the targets. Furthermore, include information of measures to be taken by various stakeholders in the city which support the achievement of the targets. Include information about potential contributions needed for the implementation in terms of financial and human resources.





The action plan ought to be elaborated so as to provide a framework to follow up on the measures that have been carried out during the implementation phase. However, keep in mind that the action plan may need further revision after the ratification by the city council.

As in the case with the strategic programme, various cities have different ways of designing and presenting their action plans.

### **Final revision of draft Strategic Programme and Action Plan(s)**

Before its discussion and approval by the council, the following should be reviewed:

- Are the environmental targets in accordance with the degree of relevance of the environmental issues, i.e., are they a fitting tool for the measurable reduction or prevention of harm being done to the environment?
- Are the targets measurable to the greatest extent possible?
- Can the reference data for the monitoring procedure be collected in the long term?
- Can the qualitative targets be assessed using qualitative indicators (questionnaires, etc.)?
- Have competencies and responsibilities been established and approved?
- Have the resources been established?





## 7. STAKEHOLDER INVOLVEMENT

The issues to be managed in the urban environment can be classified as either:

- issues that are fully controllable by the local authority (e.g., the energy efficiency of local authority offices, public libraries); or
- issues which local government can influence but over which it does not have direct control (e.g., the amount of waste recycled by private households, use of the car in the city).

Focus on both aspects in order to achieve significant improvements in the environmental performance of the urban area.

Local governments may have the competencies to achieve many concrete results (e.g., new waste water treatment plant, waste management facilities), but it is clear that most resources are consumed by people living in the city rather than by the city authority itself.

A significant part of improving the environmental performance of the urban area will involve local governments which stimulate, influence and support changes in the behaviour of citizens, businesses and commuters. They each have a responsibility to minimise their own environmental impact. An integrated approach to managing the urban environment as a whole can ensure that efforts are focused on the most important and urgent issues and that these initiatives are as coordinated and as efficient as possible.

### 7.1. SEEKING PARTNERSHIP AGREEMENT

Improving the environmental performance of the urban areas requires coordinated initiatives on the part of all stakeholders in the city. However, as resources will be limited, an assessment of the working value of each stakeholder should be conducted. Investing a great amount of time with stakeholders that cannot lend support in the direction planned is not worthwhile.

For some cities, businesses are extremely important in environmental terms (e.g., port cities or cities with major manufacturing industries). Good cooperation with these businesses can encourage them to go beyond the legal minimum standards. Major employers can also be encouraged to develop sustainable transport plans for staff to reduce transport by private cars. Smaller businesses can be encouraged to make environmental improvements through the provision of support or small grants. These can often reduce operating costs.

Local NGOs and Agenda 21 -groups can also be useful sources of expertise and data. As political organisations, they may be critical of local governments' proposals. Citizens are key stakeholders and have a strong role in helping to implement the local plans.





This means that at the beginning of the action plan development, there is a need for partnership agreements. In order to ensure a smooth handover and avoid negative affects on the experts' group work, make sure that all activities and measures are well-documented. Furthermore, ensure that the roles, responsibilities and contributions of partners are clearly assigned. Then the preliminary process flow document and time schedule with responsibilities can be formally ratified by the city council. Perform this step completely at the beginning of the action plan development in order to transfer general informal agreements into a formal resolution. As the discussions/agreements have already taken place well in advance, the council majority resolution is more a formality at this stage.

## 7.2. INFORMATION AND PUBLIC CONSULTATION

As has been emphasized in the previous sections, communication and involvement are crucial parts of this step in defining priorities and setting targets, but also for ensuring partnership agreements to implement actions that lead to the fulfilment of targets. Equally important is to inform the wide public about the targets and the action plan.

## 8. WHAT IS NEXT?

Seen in a broader context, the strategic programme and action plan can be considered as a motor for management in general. They provide local governments with a way to ensure continuity, structure, and procedures. They provide general knowledge and an overview of the performances of local governments as well as what efforts have already been made, where the improvements will take place and which activities and processes give rise to the most environmental impacts.

The strategic programme can be fuelled with other sustainability efforts and activities in order to emphasise and facilitate management on other organisational levels and perspectives. For example, it could be linked and combined to other tools (SEA, Agenda 21) in the local government context and then presented to the council for discussion and ratification. This will lead to an increase in efficiency, cost savings and a solid point of departure for a more comprehensive management which will benefit the council's ratification.





## 9. CHECKLIST

### Objectives

Procedures to check and correct activities are a crucial part of every management system – also within the Integrated Management System.

One of the minimum requirements is the yearly Internal Audit conducted by the coordinator or coordination team and an Internal Auditor. This Internal Auditor needs to be independent from the coordination team and should be a person from another strategic department, a (neighbouring) municipality or an external consultant or verifier. Of overall importance is that the auditor or auditing team have a solid foundation in the 'expert knowledge' necessary to conduct integrated management and sustainability aspects.

The internal audit emphasises:

- determining whether the direct and indirect environmental /sustainability/climate change issues and their evaluation are up to date
- determining whether the Strategic Programme is up to date
- comparing present status and realisation/implementation of the Action Plan(s)
- comparing present status and progress towards resp. achievement of environmental /sustainability/ mitigation and adaptation targets
- checking whether the laws and regulations of relevance to environment /sustainable development and climate change have been updated and are being followed through
- checking the management system functions (organisation, documentation, internal and external communication, monitoring and reporting)
- checking update, adherence to and implementation of the training plan for employees

The following checklist emphasises on the first Internal Audit and includes also questions related to the implementation of the integrated management system, not relevant after the realisation of the first cycle.





	Aspects which should be fulfilled	Status Internal Audit
1	Establishment of a clear vision of the local sustainable development responding to climate change	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
2	Clear priority setting based on the results of the Baseline review	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
3	Establishment of the Strategic Programme (10-15 years perspective)	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
4	Strategic Programme structured according to sustainability aspects selected	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
5	Strategic Programme includes quantified long and medium-term targets (target year)	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
6	Targets of the Strategic Programme are set in a participatory process including all relevant stakeholder	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
7	Targets of Strategic Programme are supported by meaningful key data and indicators	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:





	Aspects which should be fulfilled	Status Internal Audit
8	Key data and indicators of Strategic Programme are available on a long term basis.	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks
8a	Lacking key data/ indicator will be collected in the future (= measure in the corresponding Action Plan)	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks
9	Strategic Programme comprises reference values (base year)	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks
10	Action Plan or Action Plans for all priority aspects with measurable aims, concrete measures and assigned responsibilities established (1-3 years perspective).	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
10a	Action plan comprises allocation of roles & responsibilities for implementation	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
11	All relevant stakeholders informed about the ongoing consultation processes to develop the Strategic Programme and Action Plan (s)	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:
12	Public information and consultation on the development of the Strategic Programme and Action Plan (s) carried out	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> pending Remarks:







## INTERNAL AUDIT REPORT: STRATEGIC PROGRAMME

<b>Overall evaluation:</b>
<b>Strengths:</b>
<b>Weaknesses:</b>
<b>Recommendations for improvement</b>





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**Annex 1: Indicator Information Sheet**

<b>Name of indicator:</b>	<i>(Trivial name)</i>
<b>Resource:</b>	<i>(indicate the resp. resource)</i>
<b>Indicator characteristic:</b>	
• <b>Definition</b>	<i>(How do you verbally define the indicator?)</i>
• <b>Unit</b>	<i>(What is the unit of measures / physical unit?)</i>
• <b>Target direction</b>	<i>(Describe the desired/intended direction of the indicator development: What is a "good development?")</i>
<b>Reasoning for inclusion in Strategic Programme:</b>	
- <b>Why is the indicator /issue important for our municipality</b>	<i>(Describe the reasons, why the indicator and the issue was selected for inclusion in strategic programme. Why is it important? There are several levels: hard factors (e.g., fire risk, costs, health) .... soft factors ... city marketing. It is not sufficient to just say: It's good for sustainability. Why is it good?)</i>
- <b>What does use of indicator aim at?</b>	<i>(Describe your aims! E.g. just an intention, increase sensitivity / raise awareness, change behaviour, implement technical measures, set up action plan...)</i>
<b>Data situation:</b>	
<b>Basis data</b>	<i>(What sort of basis data do you need to apply for the indicator? Eg. Number of inhabitants, city area ...)</i>
<b>Origin / Source(s)</b>	<i>(What are the sources for data? And who owns the data, eg. local authority, private company, state /regional agency? What costs are related to accessing data sources?)</i>
<b>Competence within the administration / Responsibility</b>	<i>(Who owns competence for the indicator? Who is responsible in the administration / in your office?)</i>
<b>Update interval / Frequency</b>	<i>(How often is an update available? Continuously, daily, monthly, annually?)</i>
<b>Measuring method(s)</b>	<i>(What measuring methods need to be applied? Direct measure/monitoring, estimate, survey?)</i>





<b>Data manipulation</b>	<i>(What data manipulation is needed? E.g. aggregation, data reduction, assumption/estimation, modelling, calculation)</i>		
<b>Distinction of indicator analysis:</b>	<i>(Describe advantages / disadvantages of the indicator, limits to application and / or interpretation?)</i>		
<b>Links to other indicators in Strat. Programme:</b>	<i>(Describe relationship to other indicators in strategic programme, e.g. indicators that allow for analysing additional aspects: Example: Greenhouse gas emission is linked to number of trees, modal split, area of sealed surface, energy consumption....)</i>		
<b>References:</b>	<i>(Indicate any references...)</i>		
<b>Further comments:</b>	<i>(If there are any...)</i>		
<b>Template records:</b>			
- <b>Date of completion</b>	<i>(Indicate date)</i>	<b>Responsible:</b>	<i>(Indicate responsible officer)</i>
<b>1. Date of revision</b>	<i>(Indicate date)</i>	<b>Responsible:</b>	<i>(Indicate responsible officer)</i>





**Annex 2: From issues to resources to indicators**





**Annex 3: Example of Strategic Programme Contents Table**

<b>I</b>	<b>Introduction</b>
<b>II</b>	<p><b>Strategic Programme Overview</b></p> <ul style="list-style-type: none"> <li>▪ Table with resources/ indicators/ targets</li> <li>▪ Brief presentation of individual resources respectively indicators, and targets in the Strategic Programme</li> </ul>
<b>III</b>	<p><b>Comments</b></p> <p>Detailed description of each indicator following a special, uniform and standardised systematic.</p> <ul style="list-style-type: none"> <li>▪ <b>Relevance of the indicator</b> Relevance concerning the environmental situation, the impacts on human physical health, sustainable urban development etc.</li> <li>▪ <b>Definition</b> Exact description of the indicator and the scale unit</li> <li>▪ <b>Derivation of objectives</b> Fixed mid-term targets and estimated budgets should be comprehensible.</li> <li>▪ <b>Data basics</b> Data origin, topicality and quality of used data</li> <li>▪ <b>Actual stage and comparative value</b> <i>Part of the table of indicators and targets in order to have a better overview and handling of the report; graphical presentation</i></li> <li>▪ <b>Differentiation</b> Spatial and/or sectoral differentiation of the themes of the Strategic Programme, in case that it is both reasonable and possible</li> <li>▪ <b>Measures</b> Implemented measures in the former cycle and their impacts on the values, planned measures and their expected implication</li> <li>▪ <b>General action possibilities of Local Government</b> <i>Local Government has the ability to regulate, consult/foster and act as a role model. Listing the action possibilities for every indicator can help to offer impulsion and proposals for the future.</i></li> </ul>
<b>IV</b>	<p><b>Action Plan</b></p> <ul style="list-style-type: none"> <li>▪ Table with actions planned according to indicators/ targets</li> </ul>





**Annex 4: Example for indicator characteristics in ecoBUDGET of the city of Kaiserslautern**

**Resource:** Air

**Indicator:** Concentration of Ozone

Characteristic of indicators:	
Definition	Ozone is a gas trace which occurs naturally in the atmosphere. Chemically, it is a very escharotic form of the element oxygen, which consists unlike the latter not of two, but of three oxygen atoms. (O <sub>3</sub> ).
Illustrations	<p>Ozone is considered as the main component and essential part of the so-called summer smog, which forms itself on very hot days from air pollution and from the effect of sunlight whereby releasing other substances such as peroxide, nitric acid, nitrates and aldehydes. The pre-substances of ozone are predominantly emitted by road traffic, but also by the industry and private households and are eventually released through biogenic processes mainly in the forests.</p> <p>Due to the dominant influence of wheather conditions on the ozone creation, the long-term trend depends very much on the yearly changing wheather conditions. Apart from that there are also influences through the development of the pre-ozone substances. To fully achieve the air-quality targets, there have to be further efforts to reduce the pre-ozone substances from all sources drastically. In the areas engineering, fiscal policy, transport planning, consumer education etc. all methods have to be used, to utilise the potential for emission reduction. Besides the Federation and the country (legislation, administrative measures, voluntary commitments, financial incentives) it is also the city of Kaiserslautern that took action about the local traffic policy.</p>
Unit of indicators	days / year with > 110 µg ozone / m <sup>3</sup> air (8-h-average)





<p><b>State of data:</b></p>	
<p>Origin</p>	<p>ZIMEN-measurements (Central Immissions monitoring network) of the State Office for Environmental Protection and Trade Supervsion Rheinland-Pfalz; monitoring station: Kaiserslautern, town-hall</p>
<p>Responsibility</p>	<p>State Office for Environmental Protection and Trade Supervsion Rheinland-Pfalz,</p>
<p>Update</p>	<p>City Council Kaiserslautern, Environmental Protection Department Monthly</p>
<p>Comments</p>	<p>It is very difficult to allocate ozone-emissions to specific polluters. Primarily, a single municipality can hardly influence ozone-emissions locally. There is a striking difference of ozone-long-term values between the monitoring stations in city areas and in those very much higher ones in forest areas. The higher level of air pollution in the cities causes the ozone to find reactants continually, and during the night it gets completely decomposed. Whereas in forests and rural regions the air is cleaner, therefore the ozon levels do not drop as rapidly at night and in winter; thus accordingly higher day- yearly average values can be identified.</p>
<p><b>Short/Long-term Targets:</b></p>	
<p>Long-term Target 2004</p>	<p>13 days / year with &gt; 110 µg ozone / m<sup>3</sup> air (8-h-average)</p>
<p>Middle-term Target (Target year)</p>	<p>Until the year 2010, the limit of 110 µg Ozon/m<sup>3</sup> air, can only be exceeded on five days max. per year. On a long-term basis, the exceedance of the limit value is to be avoided completely.</p>
<p>Comments for Target Value</p>	<p>Due to health protection purposes: For long-term exposure, the threshold value of ozone is at 110 µg/m<sup>3</sup> (average value, which is calculated by means of the eight-hour average value four times a day).</p>
<p>Literature for Reference</p>	<p>22. BImSchV</p>





**Annex 5: Indicators of ecoBUDGET of the city of Kaiserslautern (total budget)**

<b>Resource/ Indicator</b>	<b>Base Value (Basis year)</b>	<b>Current Value 2002</b>	<b>Long-Term Target 2004</b>	<b>Long-term Target (Target Year)</b>
<b>Air</b>				
<b>Ozone close to floor</b> days / year with > 110 µg ozone / m <sup>3</sup> air (8-h-average)	20 (1996)	13	13	<= 5 (2010)
<b>Particles</b> days / year with > 50 µg PM10 / m <sup>3</sup> air (24-h-average)	5 (2001)	9	2	0 (2005)
<b>Greenhouse effective gases</b> to CO <sub>2</sub> -equivalent/inhabitants and year	17,51 <sup>1)</sup> (1990)	15,13	12,54	8,76 (2010)
<b>Natural gas operated vehicles</b> Number	7 (1998)	190	274	600 (2013)
<b>Silence</b>				
<b>Traffic Noise</b> Number of citizens, who live at noise polluted streets and railroads	2)	2)	---	---
<b>Aircraft Noise</b> Number of events with noise pollu- tion per month with > 74 dB(A))	435 (1995)	612	374	0 (2015)
<b>Water</b>				
<b>Use of Potable Water</b> l/citizens and day	121,7 (1996)	123,6	119,8	115 (2010)
<b>Content of Phosphate in sewage plant run-out</b> kg / day	37,8 (1999)	37,2	max. 46,4 <sup>3)</sup>	No further increase <sup>3)</sup>
<b>BSB5 in sewage plant run-out</b> kg O <sub>2</sub> / day	252 (1999)	447	max. 464 <sup>3)</sup>	No further increase <sup>3)</sup>
<b>CSB in sewage plant</b> kg O <sub>2</sub> / day	1324 (1999)	2084	max. 1855 <sup>3)</sup>	No further increase <sup>3)</sup>
<b>Water Quality</b> Length in m with water quality II and more	26400 (2002)	26400	32400	65202 (2015)





<b>Soil/Land</b>				
<b>Re-sealing of surface (land-use)</b> ha / year	ca. 6 (2002)	ca. 6	ca. 8	---
<b>Old deposits</b> Share of unused land to total surface area of old deposits in %	2)	2)	---	---
<b>Raw materials/Energy</b>				
<b>Electricity consumption of private households</b> kWh/inhabitants/year	1587 (1996)	1699,5	1592	1482 (2012)
<b>Gas consumption of private households</b> kWh/inhabitants/year	6425,7 (1998)	6115,3	5998	5550 (2012)
<b>Electricity consumption of municipal institutions (heat currently excluded)</b> Mio. kWh/year	7,60 (1995)	6,76	6,37	6,00 (2008)
<b>Municipal consumption of heat energy</b> Mio. kWh/year	43,68 (1995)	40,82	36,17	35,00 (2008)
<b>Quantity of Domestic Waste</b> kg/inhabitants./year	230,8 (1995)	235,7	213,2	163,3 <sup>4)</sup> (2010)
<b>Quota of recycled waste of private households</b> %	42,7 (1997)	45,5	47	55 (2011)
<b>Landscape/Living space</b>				
<b>Compensation- and Substitutional measures</b> Proportion of implemented to stated compensation and substitution measures in %	30,5 (2001)	40,6	85	100 (2005)

**Comments:**

- Value was calculated.
- There are no values available yet.
- No further increase with current degree of connection.
- Country average (2001)

