12. Integrated Environmental Management

12A. Present Situation

Vision, Strategy:
Describe if the city has a clearly defined, widely understood and supported environmental vision for the municipality, for example as part of a broader commitment to urban sustainability.

Is this vision reflected in different strategies and action plans, which include objectives and targets for individual sectors? Please list the most important strategies and plans and indicate their relationship to the overall vision.

Have your vision and the corresponding strategies been endorsed and implemented by the city council? Is there a dedicated budget for implementing the environmental vision?

Management, monitoring and evaluation:
Which stakeholders have participated in the development of the city's environmental vision and associated strategies and action plans? (e.g. contribution of civil society and citizens). What have been the practical arrangements for this?

How are the management structures of your city organised, and what management tools are used, to achieve your environmental objectives and targets? For example management circles, obligatory sustainability impact assessments of policy proposals, project structures, skills promotion, periodic evaluations, etc.

Describe the system of monitoring and reporting.

Leadership
Is the city (administration) leading by example in environmental behaviour? Describe your activities regarding environmental management systems, green public procurement, skills development, etc.

Does your city cooperate with other authorities at different levels or other organisations (regional, national, EU, international) on environmental issues? Which of these cooperation activities or projects has your city initiated or acted as leading partner? Please also refer to your participation in European funded projects and to your commitment to international initiatives, charters, etc. (Agenda 21, Aalborg Commitments, Covenant of Mayors, C20, Climate Alliance, ICLEI, EUROCITIES, etc.)

List any disadvantages resulting from historical, geographical and/or socio-economic factors which may have influenced this indicator area.

991 words

Vision of Ljubljana 2025: sustainable city
is the cornerstone of the city’s development. It is reflected in all strategies which enhance it further in sustainability terms (the most important):

- Environmental Protection Programme 2007-2013 (EPP) (revised version 2014–2020),
- Sustainable Energy Action Plan 2020 (SEAP),
- Sustainable Mobility Plan 2020 (SMP),
- Electromobility Strategy 2020,
- Urban Master Plan 2030.

These documents were adopted by the Ljubljana City Council (LCC), and have funds defined for implementation (budget, PPP, state, EU). They bind us to implementation and regular reporting to the LCC. We publish reports on the websites of public companies, institutes and the City website.
The sustainable development of Ljubljana and the surrounding area is an integral part of regional strategies:

- The strategy of the **Regional Development Agency for the Ljubljana Urban Region (RRA LUR)** (established by the City) promotes the sustainable development of **26 municipalities in the region**.
- The City is the owner (87.32%) of **Public Holding Ljubljana (JHL)**, which includes the companies **Energetika Ljubljana (JPE)** and **Termoelektrarna Toplarna Ljubljana (TE-TOL)** (city’s energy production and supply), **Ljubljanski potniški promet (LPP)** (public transport), **Snaga** (waste) and **Vodovod-Kanalizacija (VO-KA)** (water, wastewater). They implement the city’s vision and the sustainable EU goals.
- Through the **Strategy for developing and marketing tourism in Central Slovenia 2012-2016** we promote sustainable tourism, the countryside, green spaces, and reduce traffic.

**Management, monitoring, evaluation**

In formulating documents we cooperate with local, regional and national stakeholders (citizens, city districts, non-governmental organisations, industry, professional circles, university, state, etc.) at workshops, presentations, round tables, exhibitions, public debates and the public gathering of proposals. Before their adoption we present the draft documents to the public once again.

| Table 1: Key phases and steps in the process of drafting the Municipality Environmental Protection Programme (OPVO) and those in charge of it. |
|---|---|---|
| **Phases and steps in the process** | **Those in charge** | **Public circles** |
| Preliminary preparations |  |  |
| decision on elaboration | mayor, city council |  |
| formation of an operational group project task | entity responsible for drafting OPVO |  |
| appointment of project group | drafted by the responsible entity, confirmed by the mayor |  |
| decision on provider | proposed by the responsible entity, signed by the mayor |  |
| Public participation |  |  |
| public participation plan | drafted by the responsible entity, confirmed by project group |  |
| implementing public participation website | responsible entity |  |
| announcing process in public |  |  |
| appointment of advisory group | proposed by project group, confirmed by mayor | ✓ |
| Making of the OPVO draft |  |  |
| summary of situation analysis and assessment of trends | drafted by the responsible entity, confirmed by the advisory group | ✓ |
| vision and principles | advisory group | ✓ |
| priorities | advisory group | ✓ |
| plan of measures | advisory group | ✓ |
| document draft | responsible entity | ✓ |
| Public discussion and adoption |  |  |
| public discussion about the OPVO draft | responsible entity | ✓ |
| adoption of OPVO | city council |  |
| Implementation |  |  |
| monitoring of the OPVO implementation | responsible entity and advisory group | ✓ |
| evaluation and supplementation of programme | responsible entity and advisory group | ✓ |

Source: Recommendations of the Ministry of the Environment and Spatial Planning for drafting municipal environmental protection programmes 2007. The national recommendations stem from our Environmental Protection Programme 2007-2013, which was the first such document at the national level.
Public participation in the process of drafting documents increases the prospects of their realisation, contributes to quality, eliminates points of conflict, yields additional information from the market, creates new allies, etc.

Examples:

- The **EPP2007-2013** was co-framed with the above-listed public groups. As part of the “Ljubljana is you!” project, we set up a web application through which individuals contribute proposals that will be a guide for the new **EPP2014-2020**.
- Our **3D Urban planning application** is among the first in the world, which interactively shows planned projects in three dimensions: it includes those responsible, the providers and stakeholders in the city’s spatial planning.
- In the European sustainable mobility project “Mobilisation of citizens for high-quality living” (CIVITAS ELAN), as a project coordinator, together with the partners we strengthened the involvement of the general public (130 events). The suggestions obtained from professionals and the public were taken into account in the **SMP and Electromobility Strategy**.
- The **Civic Initiative Section** through expert advice enables residents the highest level of dialog and helps in dealing with various problems and initiatives (2009-2013: 20,760 initiatives, 27% environmental, 80% fulfilled).

**Management Structures**

The **City Supervisory Board** oversees the use of budget funds. The **LCC, Mayor and user authorities** are bound to its recommendations and provide implementation reports.

The LCC decides on city matters and adopts acts. It has 5 commissions and 13 committees, which adopt, discuss and propose measures. Of the 13 committees, the work of 11 deals with sustainable development.

The **Mayor** proposes the budget, ordinances and other acts within the competence of the LCC, which he represents. He proposes the organisation, the administration working area, and defines the jobs layout in the administration. For example he defined the **Energy Manager** (responsible for SEAP implementation), the **City Manager** (heads the city centre revitalisation project) and the **Cycling Coordinator** (Integrated Cycling Strategy).
All public institutions and companies (106) are sustainably active. Together, we fulfill the vision: we cooperate in projects, in designing strategies, informing the public. We co-finance the companies operation.

17 districts (directly elected representatives of citizens) participate in the preparation of development programmes; the budget and other materials adopted by the LCC, and propose environmental projects.

Sustainability impact assessments of policy proposals are part of obligatory environmental reports and strategic documents (experts from various sectors participate). Some expert guidelines are co-financed with EU funds.

Promoting skills

Environmental concern is part of the employee code of conduct. We take part in education courses and promote sustainable development skills. We provide comments on legislation and propose new acts.
Table 2: Active participation and representation of colleagues from the Environmental Protection Department at courses, expert consultations and conferences.

<table>
<thead>
<tr>
<th>In 2011</th>
<th>In 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>◆ Numerous expert meetings at home and abroad as part of the EU project CIVITAS ELAN</td>
<td>Consultation “Slovenia reduces CO2: good practices” – adaptation to climate change</td>
</tr>
<tr>
<td>◆ International cooperation in the UHI project at expert meetings in Bologna, Modena and Stuttgart</td>
<td>Seminar on “Record sheets and reports on waste”</td>
</tr>
<tr>
<td>◆ Participation at the expert meeting in Brussels on the topic of Green Capital of Europe</td>
<td>Presentation of the decree on green procurement and the Legal Protection in Public Procurement Procedures Act</td>
</tr>
<tr>
<td>◆ Participation at the Environmental Forum EUROCITIES, Genoa</td>
<td>Free expert consultation – Carbon footprint and energy efficiency</td>
</tr>
<tr>
<td>◆ Water Days symposium 2011, Portorož</td>
<td>“Slovenia without waste” conference</td>
</tr>
<tr>
<td>◆ Workshop as part of preparing the Strategy for Slovenia’s transition to a low-carbon society by 2050</td>
<td>Conference on “Ground management in urban areas”</td>
</tr>
<tr>
<td>◆ Energetika.NET strategic energy conference</td>
<td>Scientific meeting: FOREST and WOOD</td>
</tr>
<tr>
<td>◆ Energy for the Future conference</td>
<td>Conference: Financing energy projects through public-private partnership in Slovenia – contractual provision of energy savings</td>
</tr>
<tr>
<td>◆ Consultation “How without a new energy act in 2012”</td>
<td>“Slovenia reduces CO2: good practices” – School ecogardens</td>
</tr>
<tr>
<td>◆ Conference on carbon footprint, Umanetera</td>
<td>International meeting as part of the Covenant of Mayors</td>
</tr>
<tr>
<td>◆ Workshop on tools for predicting and communicating about air quality</td>
<td>Tour of Škocjanski zatok</td>
</tr>
<tr>
<td>◆ Seminar on “public-private partnerships with EU funds”</td>
<td>International conference “Benefits and challenges of public-private partnership to improve energy efficiency”</td>
</tr>
<tr>
<td>◆ Integrated waste management</td>
<td>Environmental symposium – Thermal treatment of waste in Slovenia – what way forward?</td>
</tr>
<tr>
<td>◆ International Conference Bioscience and Society</td>
<td>Requirements and rules of the Decree on Green Public Procurement</td>
</tr>
<tr>
<td>◆ Monitoring the state of forests in Slovenia</td>
<td>Expert consultation: volunteering in nature conservation</td>
</tr>
<tr>
<td>◆ International conference on Reviving Landscapes</td>
<td>Environmental meeting 2012 – Efficient with water?</td>
</tr>
<tr>
<td>◆ Managementschool</td>
<td>European energy manager</td>
</tr>
</tbody>
</table>

Leadership

◆ We are the first Slovenian public institution with EMAS. The Environmental Protection Department joined the certification process on a pilot basis, and as part of the project City administration under one roof all other municipal departments will follow.
We are one of five European capitals to have gone a step further. In a special study (2011 in the project “Ljubljana, smart city” together with the Jožef Stefan Institute and Siemens) we elaborated two scenarios to reduce CO₂ emissions by 50% and 80% until 2050. We can achieve them both.

We received the national title “Planet Earth-Friendly Municipality” in 2012 and 2013 (energy savings, forests, waste management, raising public awareness).

We reduced the number of city administration locations from 21 to 11 and contributed to better EE and to reducing paper-based administration (2007). We are installing energy-saving systems, combining IT solutions and automating procedures. Since 2012 we have been using the unified IT system for financial and accounting operations, HR records and labour costing.

**Green public procurement**

Since 2011 we have implemented green procurement at a level of 70%.

Our green procurement includes:

- electricity
- food, beverages, agricultural food products and catering services,
- office and sanitary paper products,
- office IT equipment,
- refrigerators, freezers, washing and dishwashing machines, air conditioners,
- buildings construction, energy refurbishing of buildings,
- furniture,
- cleaning agents, services,
- vehicles.

The green procurement national decree has no precisely defined oversight mechanisms, so we have sent in concrete proposals for its supplementation.
European financed projects, international initiatives and charters

We cooperate with numerous stakeholders: ministries, the Slovenian Environment Agency, the Nature Protection Institute, the Slovenian Forest Service, the Slovenian Foundation for Sustainable Development, the Agriculture and Forestry Chamber, the Transport, Energy and Spatial Planning Inspectorate, the Community of Protected Natural Areas of Slovenia, the Slovenian Academy of Sciences and Arts, the University of Ljubljana, etc.
<table>
<thead>
<tr>
<th>Table 4: Some European projects and initiatives to international initiatives and projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Some of the major European-financed projects</strong></td>
</tr>
<tr>
<td><strong>Project</strong></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>EuroMediterranean Project on Green Growth and Sustainable Development</td>
</tr>
<tr>
<td>European Project on Cross-Border Cooperatives</td>
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<tr>
<td>European Project on Cross-Border Environment</td>
</tr>
<tr>
<td>European Project on Cross-Border Infrastructure</td>
</tr>
<tr>
<td>European Project on Cross-Border Social Cohesion</td>
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<tr>
<td>European Project on Cross-Border Economic Development</td>
</tr>
<tr>
<td>European Project on Cross-Border Health and Social Services</td>
</tr>
<tr>
<td>European Project on Cross-Border Education and Training</td>
</tr>
<tr>
<td><strong>Some European projects in which the City Administration, public companies and institutions play a leading or coordinating role or are involved</strong></td>
</tr>
<tr>
<td><strong>Project</strong></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>European Project on Cross-Border Environmental Protection</td>
</tr>
<tr>
<td>European Project on Cross-Border Tourism and Cultural Heritage</td>
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<tr>
<td>European Project on Cross-Border Energy and Transport</td>
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<tr>
<td>European Project on Cross-Border Trade and Investment</td>
</tr>
<tr>
<td>European Project on Cross-Border Telecommunications</td>
</tr>
<tr>
<td>European Project on Cross-Border Water Management</td>
</tr>
<tr>
<td><strong>Some international initiatives and projects in which we are committed</strong></td>
</tr>
<tr>
<td><strong>Project</strong></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>European Project on Cross-Border Environment</td>
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<tr>
<td>European Project on Cross-Border Tourism and Cultural Heritage</td>
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<td>European Project on Cross-Border Energy and Transport</td>
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<tr>
<td>European Project on Cross-Border Telecommunications</td>
</tr>
<tr>
<td>European Project on Cross-Border Water Management</td>
</tr>
</tbody>
</table>
12B. Implementation

Describe the organisational structure of the city administration and show how the environmental strategies are embedded in the organisation. Please include an organogram.

Which department or political body is the driving force behind the environmental vision?

What is the total budget of your city for the current financial year and how much is allocated for environmental activities? Is this budget increasing or decreasing?

Innovative instruments

Does the city use, in its environmental policy, innovative instruments like ‘nudges’: citizen participation in environmental enforcement, awareness-raising through social media, innovative financing, etc?

To what extent do you evaluate the progress of your policies / strategies / projects and do you adopt them according to findings?

398 words

The City of Ljubljana Organisational Structure

All bodies listed in the diagram are pursuing the Vision Ljubljana 2025. They are regularly implementing and proposing changes in their own field of sustainability.

Figure 2: Diagram of the City of Ljubljana
**Budget funds** in 2013 amount to €319 million, of which €175 million is allocated for sustainability (55%). These funds are increasing yearly.

**Innovative instruments**

For raising sustainable awareness we use websites, social networks and mobile applications (more than 40) based on two-way interactive communication. For them we received awards on the national, international and world scale.

Almost every major project is presented on social networks, or we have developed an interactive application for it (e.g. 3D Urban Planning, Ljubljana is you!).

**Other instruments:**
- User support centres, open days, free SMS services;
- Media presence, publications, etc.;
- Workshops, lectures for children;
- Awareness-raising actions (Clean-up campaign “For a More Beautiful Ljubljana” (since 2001) runs every year for an entire month, with the involvement of 13 tourism societies and 20,000 people; European Mobility Week and Car-Free Day (since 2001), European Sustainable Energy Week (since 2011)).
- International/national/regional fairs, conferences, festivals (some of the biggest):
  - Sustainable traditional international fairs at the Ljubljana Exhibition and Convention Centre (established by the City) (see Indicator 10A).
  - World Engineering Forum in Ljubljana on sustainable construction for people 2012: more than 70 countries.
  - In cooperation with the GoForeSight Institute, for the third year now we are organising the international conference Ljubljana Forum to promote opportunities for future sustainable development of cities and metropolitan areas of the South-East European region. Stakeholders from all spheres in Slovenia and abroad participate and attend.
- Public calls for sustainable development for NGOs and private individuals (energy, culture (degraded areas component), education (Ecoschools), sports (clubs are obligated to contribute to sustainable development), environmental protection, welfare (social entrepreneurship), etc.)

**Results of measures and satisfaction of residents**

We assess the progress of our policies based on sustainability studies, measurements of measures effectiveness, public opinion surveys, awards received. We adopt policies according to findings (e.g. SEAP).
<table>
<thead>
<tr>
<th>Table 5: Overview of effectiveness of measures in Ljubljana</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CO / SO2 / PM10 particles</strong></td>
</tr>
<tr>
<td>Baseline state 2003</td>
</tr>
<tr>
<td>CO (mg/m³), average annual (Ljubljana Belgrad measuring station)</td>
</tr>
<tr>
<td>SO2 (μg/m³), max. daily (Ljubljana Belgrad measuring station)</td>
</tr>
<tr>
<td>PM10 particles (μg/m³), average annual (Ljubljana Belgrad measuring station)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Connection of buildings in the City of Ljubljana to the district heating and natural gas distribution systems</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative from 1961 to 2012</td>
</tr>
<tr>
<td>In the case of new connection</td>
</tr>
<tr>
<td>Energy consumption (MWh)</td>
</tr>
<tr>
<td>CO2 emissions (tons)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Energy efficiency</strong></th>
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<tbody>
<tr>
<td>Baseline state 2007</td>
</tr>
<tr>
<td>Solar power plants - data for entire area of the City of Ljubljana</td>
</tr>
</tbody>
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<table>
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<tr>
<th><strong>Nominal power of street lighting</strong></th>
</tr>
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<tbody>
<tr>
<td>Baseline state 2008</td>
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<tr>
<td>9 MW</td>
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<table>
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<tr>
<th><strong>Waste</strong></th>
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<tbody>
<tr>
<td>Baseline state 2007</td>
</tr>
<tr>
<td>Organic waste collected (tons)</td>
</tr>
<tr>
<td>Organic waste (number of containers)</td>
</tr>
<tr>
<td>Separately collected fractions (paper, glass, plastic, etc.)</td>
</tr>
<tr>
<td>Number of collection points for paper, glass and plastic</td>
</tr>
<tr>
<td>Hazardous household waste (collected tons)</td>
</tr>
<tr>
<td>Waste collected in the collection centers (tons)</td>
</tr>
<tr>
<td>Bark waste (tons)</td>
</tr>
<tr>
<td>Share of unsorted waste (%)</td>
</tr>
<tr>
<td>Baseline state 2009</td>
</tr>
<tr>
<td>Share of landfill waste</td>
</tr>
<tr>
<td>Mixed municipal waste</td>
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</tbody>
</table>

<table>
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<tr>
<th><strong>Water</strong></th>
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<tbody>
<tr>
<td>Baseline state 2004</td>
</tr>
<tr>
<td>Quantity of wastewater treated in a secondary treatment phase (m³)</td>
</tr>
<tr>
<td>Share of buildings connected to the sewage system</td>
</tr>
<tr>
<td>Connected buildings at buildings</td>
</tr>
<tr>
<td>Water</td>
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</tbody>
</table>

<table>
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<tr>
<th><strong>Transport</strong></th>
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<tbody>
<tr>
<td>Baseline state 2005</td>
</tr>
<tr>
<td>Reduction in quantities of unsoil treated water</td>
</tr>
<tr>
<td>Water consumption per inhabitant (for 5 peripheral municipalities and Ljubljana)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Urban Planning and Environment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline state 2007</td>
</tr>
<tr>
<td>Environmental pedestrian zone in the city centre</td>
</tr>
<tr>
<td>Railway transport (no. of passengers)</td>
</tr>
<tr>
<td>Length of bus routes (km)</td>
</tr>
<tr>
<td>Number of passengers using LRT public transport at introduction of urban card and integration of new services</td>
</tr>
<tr>
<td>Distance from closest bus station (50% coverage in city)</td>
</tr>
<tr>
<td>Less than 100 m</td>
</tr>
</tbody>
</table>
Eurobarometer, the European Commission’s survey on the quality of life in 79 cities (in November and December 2012 522 Ljubljana residents were surveyed) indicated that:

<table>
<thead>
<tr>
<th>Area</th>
<th>Satisfied citizens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in the city</td>
<td>90% (14th place)</td>
</tr>
<tr>
<td>Public transport</td>
<td>78% (11th place)</td>
</tr>
<tr>
<td>Educational facilities</td>
<td>87% (1st place)</td>
</tr>
<tr>
<td>State of the streets and buildings in the neighbourhood</td>
<td>82% (5th place)</td>
</tr>
<tr>
<td>Public spaces (markets, squares, pedestrian areas)</td>
<td>85% (6th place)</td>
</tr>
<tr>
<td>Quality of the air</td>
<td>61% (12th place)</td>
</tr>
<tr>
<td>Noise level</td>
<td>73% (6th place)</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>87% (2nd place)</td>
</tr>
<tr>
<td>Green spaces (parks and gardens)</td>
<td>86% (9th place)</td>
</tr>
<tr>
<td>Ljubljana is committed to fight against climate change (EE, green transport, etc.)</td>
<td>64% (3rd place)</td>
</tr>
<tr>
<td>The place of living</td>
<td>95% (6th place)</td>
</tr>
</tbody>
</table>
Figure 3: The “Refurbishment of the Banks and Bridges of the River Ljubljanica” project – part of the ecological zone – was chosen from among 347 projects from 36 European countries for the main European Prize for Urban Public Space 2012. We have carried out comprehensive renovation of the city centre, shortening routes for pedestrians and cyclists.
Figure 4. “Access City Award 2012”: In competition with 114 European cities we ranked among the top eight and received a special recognition from the European Commission for improving access in transport and related infrastructure.
Figure 5: Through the Bicike(LJ) bikesharing system (2011), we are effectively establishing cycling infrastructure and reducing harmful emissions (national good practice initiative “Slovenia reduces CO2”). In October 2013 we have recorded above 1.5 million uses. The system includes 33 stands and 308 bicycles. The first hour of use is free, with free rides accounting for 98.40% of the total.
Green areas

- More than 20% of the entire City area is protected.
- More than 46% of the City is covered in native forest.
- We created 40 hectares of new parks and planted almost 2,000 new trees (2008-2012).
- Almost 75% of all surfaces in Ljubljana are green. For keeping them green, we were rewarded with the title Greenest Urban Municipality in Slovenia 2011.
### 12C. Future Plans

Describe the short and long term objectives for the integrated management of environmental policy and the proposed approach for their achievement.

Describe present and future flagship projects that demonstrate your commitment to an integrated management of the urban environment.

Demonstrate Public Awareness of this bid i.e. public consultation, available to read etc.

**753 words**

**Sustainable Local Action Plan 2020 for the Central Slovenia region**

was created as part of the project **EU2020 Going Local** in partnership with RRA LUR (2012). It incorporates recommendations for achieving the EU’s sustainable development goals (**estimate: traffic €9,600,000, EE €4,250,000, RES €1,350,000**).

### Sustainable mobility targets

- The SMP aims, by **2015**, to *increase walking by 20%, cycling by 40%, bus journeys by 50%, and to reduce the number of car journeys by 20%*. By **2020** we will improve the distribution of mobility: a third by public transport, a third by non-motorised means and a third by private vehicles.

- With its ten measures the **Electromobility Strategy (2013)** represents the starting point for developing and fostering electromobility. By the end of 2015 we plan to introduce pilot projects to promote the use of EV. The charging infrastructure construction will be pursued. Funds will be provided as part of the available budget funds.

- **Greening the city vehicle fleet**

  For 2014 the City administration is preparing a 5-year leasing of official vehicles (45 CNG vehicles).

  **By 2017 we will renew the LPP fleet with 80 CNG vehicles** (approx. **€29,000,000**; cofinancing: LPP, City of Ljubljana, EU). We will reduce PM10 emissions by more than 17tons a year. **We will upgrade existing stations and open an additional charging station.**

- We will introduce a **single ticket system in the LUR area** by September 2014. We are working on integration with the Slovenian railway operator.

- **LUR P&R Hubs Network**

  The project brings together 16 LUR municipalities (financially supported by EU). **we are planning a further 23 locations** (around **€48 million**).

**SEAP 2020, a modern concept of energy supply and use:**

- intensive introduction of RES technology and substitution of environmentally less suitable fossil fuels with RES or more acceptable energy products.
- improving EE at manufacturers, energy converters and among consumers.

**Effects:**

- reductions of final energy consumption in the use of heat in buildings and fuels in transport of **16%;**
more than 20% share of RES in final energy consumption;
with 30% CO$_2$ reduction we will exceed the Covenant of Mayors’ objective;
in 2013 we have started a project **Energy Retrofit of Public Buildings in the City of Ljubljana (EOL)**, co-financed through the ELENA technical assistance. With a grant amounting to €1,348,560 we will introduce a modern **energy management and prepare the baselines for investments in EE and RES projects for public buildings.** The EOL investments will be between €28–50 million, among other possibilities implemented through **energy contracting**. Project completion 2015.

**Being drafted**
we are preparing a new action plan with measures for air quality (with the state), an operational programme for noise protection and guidance on planning, planting and care of plants in public areas.

**City administration under one roof: sustainable development project**
According to the vision, we plan a a centralised EE building for the city administration, which currently operates at 11 locations across the city. The new building will eliminate unnecessary journeys by city and state officials, who will work under a single roof, and by all citizens, who will be able to obtain all services at one site. **The investment will have a positive impact on the environment, it will contribute to preserving cultural heritage and renewed use of brownfield area and will promote EE and sustainable mobility.**

**RES projects**
- At **RCERO Ljubljana (approx. €155 million), the biggest environmental project in Slovenia**, the trial operation of waste processing facilities starts in 2015, by the latest technological guidelines. **600,000 residents of 33 municipalities** will dispose just 20% of environmentally non-hazardous waste after recycling, while 80% will be reused as raw materials or energy products. The plant will be connected to the district heating system. Through energy recovery from waste we will generate electricity.
- **Waste to energy**: a project under the state jurisdiction (use of local RES to cogenerate heat and electricity). The facility construction with a capacity of 30MW$_{th}$ should be connected to the city district heating system.
- **Construction of the C0 connecting sewer and phase III of the Ljubljana Central Treatment Plant** (2013-2015, approx. €85 million, EU cofinancing) are one of the largest environmental projects in Ljubljana. This will enable the connection of new users to the public sewer system, optimisation of the system and processes, efficient use of facility capacities and greater energy self-supply.

**Informing the public**
We have set out evidence of awareness-raising and active involvement of the public in all stages of project implementation in 12A and 12B.

Public presentations, discussions (example: RCERO Ljubljana, Urban Master Plan) are compulsory before adopting strategic documents.

Another noteworthy example:
Table 7: At our request University Center for Spatial Sociology conducted a study on the quality of life in Ljubljana (2010). As part of a survey we asked respondents how certain planned urban projects would impact quality of life in the city. Below we give a few examples.

<table>
<thead>
<tr>
<th>Project name</th>
<th>Negatively</th>
<th>Neither positively nor negatively</th>
<th>Positively</th>
<th>Average of 1-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stožice sports, shopping and business centre</td>
<td>12.5%</td>
<td>21.2%</td>
<td>66.3%</td>
<td>3.60</td>
</tr>
<tr>
<td>The new “Emonika” railway station with shopping, residential, entertainment and business centre</td>
<td>7.6%</td>
<td>18.2%</td>
<td>74.2%</td>
<td>3.84</td>
</tr>
<tr>
<td>Construction of tram lines</td>
<td>10.4%</td>
<td>13.8%</td>
<td>75.8%</td>
<td>3.93</td>
</tr>
<tr>
<td>Underground railway tracks through the city</td>
<td>10.1%</td>
<td>17.7%</td>
<td>72.2%</td>
<td>3.90</td>
</tr>
<tr>
<td>Šmartinska District Partnership, which will link the city centre with the biggest shopping centre in Ljubljana</td>
<td>8%</td>
<td>24.1%</td>
<td>67.9%</td>
<td>3.78</td>
</tr>
<tr>
<td>Ilirška swimming complex in Tivoli</td>
<td>1.6%</td>
<td>9.9%</td>
<td>85.5%</td>
<td>4.22</td>
</tr>
</tbody>
</table>

12D. References

List supporting documentation, adding links where possible. Further detail may be requested during the clarification phase. Documentation should not be forwarded at this stage.

342 words

WEBSITES OF THE CITY OF LJUBLJANA AND PUBLIC COMPANIES:

- The City of Ljubljana on Facebook: [www.facebook.com/MOLljubljana](http://www.facebook.com/MOLljubljana)
- The Public Housing Fund of the City of Ljubljana: [http://www.jssmol.si/domov/](http://www.jssmol.si/domov/)
- Turizem Ljubljana institute: [http://www.visitljubljana.com](http://www.visitljubljana.com)
- Commercial Fairground: [http://www.visitljubljana.com](http://www.visitljubljana.com)

DOCUMENTS:

- Sustainable Urban Infrastructure Ljubljana – A View to 2050: [http://www.ljublanapametnomesto.si/ljubljana_2050](http://www.ljublanapametnomesto.si/ljubljana_2050)
- Local Action Plan of RRA LUR:
Strategy for developing and marketing tourism in Central Slovenia 2012-2016:
City budget: http://wwwljubljana.sismol/proracun/

PUBLIC UNVEILINGS:
http://wwwljubljana.sismol/mestna-uprava/oddelki/urejanje-prostora/javne-razgrihide/
City administration under one roof: http://wwwljubljana.sisizivljenje-v-ljubljani/v-srediscu/21157/detail.html

AWARDS:
Access City Award 2012: http://wwwljubljana.sismol/access-city-award-2012/
Slovenia reduces CO2: http://www.slovenija-co2.si/

INFORMING, ENCOURAGING AND INVOLVING A WIDE VARIETY OF PUBLIC GROUPS:
3D Urban Planning: https://urbanizem.ljubljana.si/lab/3durbanizem/3d.htm
TE-TOL mobile portal: http://www.youtube.com/watch?v=Zc9786Ev0Fc
Online Citizens’ Suggestions service: https://urbanizem.ljubljana.si/PobudeMescanov2/
JPE public call 2013:
Expert consultation:
Useful advice regarding sustainability:
http://www.jhl.sisites/default/files/upload/holding/datoteke/7-plus-1.pdf
My waste: http://www.mojiodpadki.simain
Open days: http://www.snaga.si/aktualno/dan-odprtih-vrat-na-snagi-petek-31-maj-ob-12-uri
Primavoda water website: http://www.primavoda.si/
Cevko water portal: http://www.cevko.si/
European Mobility Week: http://wwwljubljana.sisin/living-in-ljubljana/foocus/84286/detail.html
Mobility shops: http://wwwljubljana.sisin/municipality/news/76338/detail.html
Self-sufficient residential cell: www.ee.fs.uni-lj.sicelica
European Sustainable Energy Week 2012: http://wwwljubljana.sisin/mol/novice/78061/detail.html
Ljubljana Forum: http://wwwljubljanaforum.org/
Investment projects: http://ljubljanski.projekti.si/

EUROPEAN PROJECTS:
Bike Intermodal: http://www.transport-research.info/web/projects/project_details.cfm?ID=41604
BUILD UP Skills Slovenia: http://www.eaci-projects.eu/iee/page/Page.jsp?op=project_detail&prid=2522
CATCH_MR: http://www.rralur.si/aktualni-projekti/catch-mr/
CC-Ware: http://www.ccware.eu/
CC-Waters: http://www.ccwaters.eu/index.php?option=com_content&view=article&id=82&Itemid=103&56b00
CHAMP: http://www.champ-cycling.eu/en/The-Champs/Ljubljana/English/Ljubljana-local-UK
CIVITAS ELAN: http://www.civitasljubljana.si/
Ene.field: http://enefield.eu/stationary-applications/
INCOME: www.life-income.si
RAIL4SEE: http://rail4see.eu/about-rail4see/
RAILHUC: http://www.railhuc.eu/
SmartMEDParks: http://www.iat.es/2013/02/smart-med-parks-improvement-energy-efficiency-med/?lang=en
TURaS: http://www.rralur.si/en/projects/turas/
Second Chance: http://www.secondchanceproject.eu/static/ljubljana.php

OTHER PROJECTS:
Bicikelj(LJ): http://en.bicikelj.si/
RCERO Ljubljana: http://www.rcero-ljubljana.eu/index.html
List of new solar power plants: http://pv.fe.uni-lj.si/Seseznam.aspx