



European Green Capital Award 2020

Guidance Note

May 2017

www.ec.europa.eu/europeangreencapital

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1 INTRODUCTION

This guidance note should be read in conjunction with the Application Form for the European Green Capital Award 2020. The Application Form can be downloaded in English as per the application portal. The full application shall be written in one of the official languages of the European Union. However, submission of the Application Form in English is encouraged for the smooth and timely running of the assessment of the applications.

The Mayoral Declaration (Annex 5 to the Rules of Contest governing the European Green Capital Award 2020 competition) is available in English and must be completed, dated and signed and submitted in English. The signatory should be authorised by national law to legally represent the city.

1.1 EXPLANATORY NOTE ON INDICATORS

This note provides information on how to interpret the indicators and types of information cities must provide when applying.

The 2020 Award Application Form has four sections per indicator:

- A. Present Situation** - focus on describing the present situation (include data, numerical information, figures, graphics etc.), including relevant infrastructure and systems, the state of play with respect to environmental performance and information on governance arrangements and responsibilities;
- B. Past Performance** - focus on the measures implemented and associated trends for the last five to ten years;
- C. Future Plans** - focus on realistic and achievable plans, the objectives that these contain and the measures that will be used to achieve these;
- D. References** - for clarification purposes only.

Each section of the application form must be completed and shall adhere to the stated word limit given at the end of each individual section. Any words above the specified limit will not be taken into account and may leave application responses incomplete. Each section can include graphs, tables, diagrams and photographs. Text included in the body of graphics/tables will be included in the word count. Text within the captions and headings (titles) of graphics/images/tables will not be included in the word count, however, they must not exceed 15 words. All graphs etc. should be included within the application form itself. Appendices will not be accepted.

Applications must comply with the formal requirements set out in the Rules of Contest governing the European Green Capital 2020 Award competition. Applicants will only be assessed on the content of the application form. Incomplete application forms will not be assessed i.e. applications with missing indicator areas or missing sections within an indicator area.

Sections A, B and C are considered on an equal basis as part of the technical assessment and ranking will be based on the information provided in these sections. Section D - References; will be used solely for clarification/verification of data purposes. Experts are not required to read additional information.

Good Practices will be solely used for information purposes and will not be considered as part of the technical ranking but must be completed. Good practices submitted may be used by the Secretariat to produce Good Practices Factsheets for use on the European Green Capital website and/or the European Commission Urban Benchmarking and Monitoring Tool.

The Introductory section is for information purposes only.

Information to be included:

Include clear plans and objectives in the context of European legislation. Detail, where possible, your city's compliance/non-compliance with EU Directives and legislation.

It should be clearly noted if figures provided are for the city itself or incorporate a larger area/region.

Applicants should highlight integrated approaches to environmental management. The experts who will evaluate the application are only required to assess their primary and co-evaluator indicators. Where cross linkages between indicators/initiatives exist, they should be noted.

Where possible please identify active community groups/stakeholders within the city in the relevant indicator area and also highlight how you have engaged with these groups in the course of your policy development.

1.2 FORMAT OF THE APPLICATION

The format of the template of the application form must be adhered to.

All documents must be submitted in word document format and uploaded through the application portal. An additional PDF file may be provided if desired.

All word limits must be strictly adhered to. Any words above the specified limit will not be taken into account and may leave application responses incomplete. Text included in the captions, and heading (titles) of graphics/images/tables **will not** be included in the word count. These shall not exceed more than 15 words. Text within the body of graphics/tables must be submitted in an editable format (for purposes of the word count and translation). Text included in graphics/tables **will** be included in the word count. Please see below for a sample table.

Table X.X: Future potential of green roofs in City

	Potential area for roof gardens or Urban agriculture		Additional areas for extensive green roofs or habitats for biodiversity	
	Number of roofs	Total m ²	Number of roofs	Total m ²
Industrial buildings	21	21	21	21
Office and retail	32	32	32	32
Schools	43	43	43	43
Hospitals and care homes	54	54	54	54
Residential buildings	65	65	65	65
Mixed use buildings	76	76	76	76
Other buildings	87	87	87	87
Total	378	378	378	378

There is a limit of fifteen graphics/images/tables per indicator. Indicator 4 Sustainable Land Use, also requests an additional 3 maps in Section 4A. An additional three graphics/images/tables are allowed in the Good Practice section.

All limits for numbers of graphics/images/tables must be adhered to. Images which consist of multiple jpegs combining to form one image/subject may be accepted. If a number of images are grouped to demonstrate a particular theme then this would be considered acceptable. However, if not, they will be considered as separate individual images. Please see an example below of an instance in which multiple jpegs are accepted as one image (taken from the City of Nijmegen winning application for the 2018 Award).

**Figure 1: Nature Waal floodplains**

The Rules of Contest governing the European Green Capital Award 2020 competition, and in particular section 3 therein, stipulate that all candidates shall complete the common application form for **each of the 12 environmental indicator areas**. Applications which do not follow the requirements set in section 3 at pre-selection stage shall not be examined further.

Applicants are required to fill out all sections of the application form. Applications which are not fully answered shall not be examined further. In the event that a question cannot be answered, reasons shall be given in the corresponding section of the application form. The experts' assessment will include qualitative evaluations, and a peer review of each application. Considering that applicant cities compete against each other for the title of European Green Capital 2020, it is strongly suggested for applicants to submit acceptable/high quality content.

1.3 SUBMITTING AN APPLICATION

In order to submit a complete application form, the **Mayoral Declaration** (Annex 5 of the Rules of Contest) must be signed by the Mayor or highest ranking City Representative¹ and uploaded together with the **fully completed application form**. In the event that a section cannot be completed, reasons shall be given in the corresponding section of the application form.

In addition to the Mayoral Declaration as set out above, fourteen (14) individual files will be uploaded in total: one (1) City Introduction and Context, twelve (12) Indicators and one (1) Good Practices. The application form must be submitted in twelve individual files, **one file for each indicator area**. Each file must be a **word document** and labelled correctly e.g. Indicator 1_Hamburg, Indicator 2_Hamburg etc. The City Introduction and Context and Good Practices sections must also be uploaded in word as individual files and named City Introduction and Context_Hamburg and Good Practices_Hamburg etc.

Please follow the instructions as detailed on the website:

<http://ec.europa.eu/environment/europeangreencapital/applying-for-the-award/>

All queries should be directed to the Secretariat: info@europeangreencapital.eu.

The deadline for receipt of applications is at 16.00 CEST (GMT +2) 18 October 2017.

Please make sure that your application form is complete (as detailed above) by the time of submission.

1.4 TRANSLATION

The technical assessment process is conducted in English. The full application shall be written in one of the official languages of the European Union. However, submission of the application form in English is encouraged for the smooth and timely running of the assessment of the applications.

¹ Signatory must be authorized by national law to legally represent the city

If an application is submitted in a city's native language, the word count will be examined based on the original application, i.e. before it is translated into English. The word count shall be strictly adhered to regardless of the language in which the application is submitted.

It should be noted that the European Green Capital Award is conducted in the English language. It is advised that a native English speaker is consulted during the application process and/or before the application is submitted.

It shall be noted that the jury meetings are held in English. Cities shortlisted for the award and invited to the jury meeting shall present in English.

The winning city shall accept their award in English. Communication with the winning year shall be conducted in English.

2 INDICATOR AREAS

CITY INTRODUCTION AND CONTEXT

Use this section to provide an overview of the city and a context for the twelve indicator areas. It will act as background information for the experts and should set the scene for the application as a whole. Include any major local constraints, contentious infrastructure/environmental projects and initiatives. Where possible, please identify active community groups/stakeholders within the city in the relevant indicator sections of the application form. Although it does not form part of the twelve indicator areas and will not contribute towards ranking, this section must be completed to present a full application for assessment.

The Secretariat will carry out a detailed background check on applicants' compliance with European legislation and governance.

If the city is involved in a legal procedure under any European directive, or has been cited by the European Court of Justice, information on progress towards compliance should be provided.

Complete the twelve Indicators under the following sections:

- A. Present situation.** Describe the present situation, e.g. the relevant infrastructure and systems that are in place and the relevant state of play with respect to environmental performance. This section should also cover governance arrangements and responsibilities. Also, include information on any relevant disadvantages or constraints resulting from historical, geographical and/or socio-economic factors which may have influenced this indicator area. Quantitative information/data should be provided to support the description, including at the minimum, the specific data requested for each indicator;
- B. Past performance.** The aim of this section is to make clear how the present situation described in Section A has been achieved. This should describe the strategies, plans and measures that have been implemented over the last five to ten years. Comment on which measures have been most effective. Where available, quantitative information/data should be provided from previous (5-10) years in order to show recent trends;
- C. Future plans.** Describe the future short and long term objectives and the proposed approach to achieve these, including any additional strategies and plans. Include the measures adopted, but not yet implemented, and details for future measures already adopted. Emphasise to what extent plans are supported by political commitments, budget allocations, and monitoring and performance evaluation schemes;
- D. References.** List supporting documentation, adding links where possible. Further detail may be requested during the pre-selection phase. Documentation should not be forwarded at this stage.

2.1 CLIMATE CHANGE: MITIGATION

The EU has set targets for reducing its greenhouse gas emissions progressively up to 2050, set in the 2020 climate and energy package and the 2030 climate and energy framework. These targets are defined to put the EU on the way to achieve the transformation towards a low-carbon economy as detailed in the 2050 low-carbon roadmap.

The targets include the reduction in greenhouse gas emissions of at least 20% below 1990 levels, 20% of EU energy consumption to come from renewable resources, and 20% reduction in primary energy use, to be achieved principally by improving energy efficiency. Legally binding targets have been set for each Member State.

Whether or not national governments have established legal requirements or targets for local authorities on climate change, applicant cities will be expected to show that they are able to establish a CO₂ emissions baseline for a specific year using an internationally recognised methodology (providing specific references), identify the main sources of emissions, set achievable territorial targets aligned with EU objectives, take action to reduce emissions (justifying the decisions on the implemented policies and measures), and continuously measure and monitor their progress towards agreed targets year by year.

In reporting their actions on climate change, applicants should demonstrate awareness of the contribution of their city to implementation of these EU targets, highlighting strategies and measures which contribute to both meeting national obligations and their own objectives as a city with a vision of a low-carbon future.

Evaluators will look for demonstrable reductions of CO₂ emissions across a range of functions and sectors (including activities not under the direct control of the municipality), using complementary measures well-tailored to local circumstances and covering the whole geographical area for which the local authority is responsible.

When reporting on the specific indicators in Section 1A:

- Note that explanatory leaflets on their preparation are available within the Reference Framework for Sustainable European Cities²;
- The methodological approach used should be explained. Make clear whether or not this addresses both direct emissions (from sources within the city boundary) and indirect emissions (from goods and services provided outside the city but consumed inside the city). Mention the main sources of data and the sectors covered by each indicator, distinguishing between national and local information sources;

² <http://www.rfsc.eu/>

- Emissions from shipping and aviation should not usually be included in the calculations for transport;
- Report any EU-ETS installations located within your city but do not include their emissions in the calculation of the indicators;
- The measure for carbon content in electricity (tonnes CO₂ per MWh) should be based on consumption and should not include production. All the efforts of the city to reduce this parameter should be explained.

Cities have a key role in the mitigation of climate change. If the city has an integrated approach to mitigation of climate change, this section can be used to highlight in particular any smart ('win-win') measures undertaken or planned which help both to reduce emissions and improve resilience.

Green Infrastructure (GI) solutions form part of an overall climate strategy to help cities mitigate the adverse effects of climate change (see EU Strategy on Adaptation to Climate Change).

GI will also be a necessary adjunct to reducing the carbon footprint of transport and energy provision, mitigating the negative effects of land uptake and fragmentation, disaster risk mitigation and boosting opportunities to better integrate land use, ecosystem and biodiversity concerns into policy and planning.

2.2 CLIMATE CHANGE: ADAPTATION

Applicants are asked to describe their approach in response to the EU's Adaptation strategy. This point should include the works performed to identify and improve the adaptive capacity of the city (its ability to adjust to climate change, to moderate potential damages, to take advantage of opportunities or to cope with the consequences) and its vulnerability through, for instance the development of a comprehensive local adaptation strategy and/or integration of adaptation to climate change into existing relevant plans. If the city has an integrated approach to adaptation to the impacts of climate change this section can be used to highlight in particular any smart ('win-win') measures undertaken or planned which help both to reduce emissions and improve resilience.

Green Infrastructure (GI) solutions form part of an overall climate strategy to help cities adapt to the adverse effects of climate change (see EU Strategy on Adaptation to Climate Change).

Applicants are advised to take account of EU policy to mainstream climate adaptation across all policy sectors and may find it useful to refer to specific initiatives for cities such as Mayors Adapt.

2.3 SUSTAINABLE URBAN MOBILITY

The responsibility for urban mobility policies is shared with local, regional and national authorities. There are key European strategies that should be taken into account by applicant cities. These include the European Commission's Transport White Paper, 'Roadmap to a Single European Transport Area' (2011), which emphasises the need for clean urban transport and commuting, and sets goals to halve the use of 'conventionally-fuelled' cars in urban transport by 2030; phase them out in cities by 2050; and to achieve essentially CO₂ free city logistics in major urban centres by 2030³. The Commission's 2013 Communication 'Together towards competitive and resource-efficient urban mobility' emphasises the importance of the adoption of Sustainable Urban Mobility Plans (SUMP), as well as for more action on urban logistics, for smarter urban access requirements and for the coordinated deployment of Intelligent Transport Systems(ITS)⁴.

In the section on the Present Situation (3A), cities are encouraged to provide information (for both local passenger transport and urban freight transport) on:

- **Transport infrastructure**, i.e. that in place for public transport (e.g. rail, trams, trolley buses, buses and any water-based transport), cyclists (e.g. cycle lanes, bicycle parks, etc.) and pedestrians (i.e. the extent of pedestrianisation);
- **Vehicle numbers**, i.e. for different public transport types;
- **Mobility flows**, both within the city and to and from the surrounding region;
- **Infrastructure management tools**, including, for example, the use of ITS to optimise infrastructure use and to prioritise public transport, cycling and walking;
- **Existing modal shares** in the city for both local passenger and urban freight transport;
- **Alternative mobility schemes**, including public bicycle sharing schemes, car clubs, carpooling;
- **Use of alternative-fuel vehicles**, both in the city generally, and by the city authorities (including public transport operators) in particular. Information on the number of vehicles and the relevant infrastructure should be provided for gas (particularly biogas), biofuels, electricity and hydrogen, including the extent to which these fuels are renewable and sustainable;
- **Any relevant disadvantages or constraints of relevance to transport**, including those resulting from historical, geographical and/or socio-economic factors;
- **Governance arrangements and responsibilities**, including how the city works with any private (bus, rail and freight) transport operators. If a city has no responsibility over an area, it will be important to demonstrate engagement and co-operation with those organisations that have the responsibility.
- **Sustainable Urban Mobility Plans (SUMP)** – confirm if there is one in place for the city. In Section 3A, three indicators must be provided.

³ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0144:FIN:EN:PDF>

⁴ http://ec.europa.eu/transport/themes/urban/doc/ump/com%282013%29913_en.pdf

In Section 3A three indicators must be provided:

1. 'Proportion (%) of population living within 300 metres of an hourly (or more frequent) public transport service'. If the indicator cannot be provided from existing GIS or other data, please provide a best estimate. The data and calculation method for all figures should be described;
2. For all journeys under 5 km, proportion of these journeys undertaken by: i) car, ii) public transport, iii) bicycle, iv) by foot and v) other provide the modal split (%) of all journeys of under 5 km that start and/or end in the city:
 - Journeys made by car should include those journeys made as a passenger, as well as a driver;
 - For public transport, please include journeys by any type of public transport present in the city (e.g. buses, trams, trolleybuses, light rail and other rail services) even if these are privately-operated;
 - If 'other' forms of transport are used, please state what is covered by the figure presented for 'other'.

If it is not possible to supply the modal split for journeys of less than 5 km, please provide the 'Modal split (%s) of all journeys that start and/or end in the city';

3. 'Proportion of buses operating in the city that are low emission (at least Euro V)'; provide (or estimate) the share of buses in the urban transport fleet (owned by the city or region, or by private operators operating in the city or region) that have certified low emissions that meet at least the EURO V emissions standards (i.e. that meet either EURO V or EURO VI or equivalent).

Section 3B (Past Performance) should focus on the plans, strategies and measures that have been put in place to deliver the current situation. The relevant plan or strategy, including a Sustainable Urban Mobility Plan (SUMP) or equivalent, should be described, along with its underlying principles in order to demonstrate its consistency with a SUMP. This should cover all modes of transport, both passenger and freight, and demonstrate integration between transport and land use planning, and between different modes, in order to promote public transport, cycling and walking. It will also be important to demonstrate that attention is being paid to the needs of public transport users, cyclists and pedestrians throughout the whole city, not just in the city centre. Information should also be provided on how the city involved its citizens and other stakeholders in the development and implementation of the relevant plans, strategies and measures.

The section on 'Past Performance' should also include an overview of relevant measures that have been implemented, both to support the increased use of public transport, cycling and walking, and to discourage the use of the car and to make the remaining car use more efficient. It will also be important to set out the measures that have been implemented to improve the environmental performance of freight within the city, including diverting trucks from the city centre and the distribution of goods within the city. Measures to promote the use of alternatively-fuelled vehicles using sustainable fuels and energy sources should also be mentioned, as should the introduction and promotion of alternative mobility schemes, such as car sharing, car pooling and bicycle rental schemes.

Section 3C (Future Plans) should focus on the city's future plans, including relevant objectives, and the measures that are being, or will be, put in place to deliver these. Objectives should demonstrate the city's ambition in terms of delivering sustainable transport. Section 3C should cover similar issues to Section 3B (Past Performance), and demonstrate the city's continued commitment to implementing measures to develop its transport system in a sustainable direction with the full engagement of citizens and other stakeholders.

2.4 SUSTAINABLE LAND USE

The technical assessment of this indicator has three focal points:

1. Improving the living environment using green infrastructure and green urban areas;
2. Limiting urban sprawl and creating an urban environment suitable for a sustainable lifestyle;
3. Limiting, mitigating or compensating soil sealing, preferably with nature based solutions.

Green urban areas and green infrastructure⁵ (Communication on Green Infrastructure (COM (2013) 249)) can be more beneficial to society than merely serving aesthetics and recreation. Green infrastructure can be defined as a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of benefits to citizens in the urban environment. It incorporates green spaces, like parks, sports facilities and gardens, and also considers green rooftops, vertical gardens, areas allocated for urban farming, high-quality business parks and public spaces, biodiversity-rich communal gardens, green belts and metropolitan park systems and sustainable urban drainage systems.

- Public green areas (as per the table in Section 4A) are defined as:
 - Public parks or gardens/forests, for the exclusive use of pedestrians and cyclists, except green traffic islands or dividers, graveyards (unless the local authority recognises their recreational function or natural, historical or cultural importance);
 - Green open-air sports facilities accessible to the public free of charge; private green areas (agricultural areas, private parks, forests) accessible to the public free of charge.

The benefits of green urban areas or green infrastructure are very diverse, such as: improving the living environment by providing adaptation to the effects of extreme weather (heat, storm water), purification of air and water or noise reduction. In addition green areas provide benefits for public health by offering space for physical activity, peaceful places or stress reduction or social interaction. The design of green urban areas depends on what needs the areas need to meet.

A good application on this indicator describes what benefits of green areas are adding to the liveability of the city and makes clear that the green urban areas really meet the needs of the citizens. The quality of green and blue areas can be indicated in many ways (ranging from e.g. satisfaction of users, maintenance status, to accessibility or nature/recreation index). The indicator used for measuring and monitoring the quality of green and blue areas should be described.

Green areas are meant to create a healthy and sustainable living environment for the citizens. The distribution of green urban areas over the city and the accessibility of green to all groups of the cities is therefore important. Also the level of participation in planning processes dealing with the design,

⁵ http://ec.europa.eu/environment/nature/ecosystems/docs/green_infrastructure_broc.pdf

construction and maintenance is of importance, since it is closely related to the way the green areas are used and valued by the residents.

Urban sprawl and the spread of low-density settlements is one of the main threats to sustainable territorial development. By 2020, 80% of Europe's population is likely to live in urban and peri-urban areas. Urban design inspired by a sustainable land use concept is contributing to good living conditions for city dwellers and at the same time reducing the environmental impact of the urban fabric. This is usually best achieved through strategic urban planning following a more integrated approach to land management. Measures like short distances to services and facilities reduce the transport demand and promote walking and cycling; multi-apartment houses save energy for heating, cooling, reduce infrastructural needs and investments in green infrastructure meet the demand for spaces for recreational activities.

We are keen to know about new developments and where they are located. It is important to provide the relative proportion of greenfields, natural and semi-natural areas, and brownfield sites, where the construction of new buildings and/or commercial and industrial areas have taken place. The applicant should detail what these new developments mean to the densification in the inner-city or urban cores.

The 7th European Environment Action Programme (Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013) is promoting integrated approaches to planning, building and managing cities and urban settlements in a sustainable way, in which long-term environmental considerations are fully taken into account alongside economic, social and territorial challenges. The Programme underlines that environmental considerations including water protection and biodiversity conservation should be integrated into planning decisions relating to land use so that they are made more sustainable, with a view to making progress towards the objective of 'no net land take', by 2050.

Soil sealing is the permanent covering of an area of land and its soil by impermeable artificial material (e.g. asphalt and concrete), for example through buildings and roads. Green sites, including those parts of settlement areas not covered by an impervious surface, like gardens or sites covered by permeable surfaces should be excluded from the sealed surface area. If this information is not available, please estimate what part of the residential areas are sealed and what part are permeable surfaces, and use this factor in the calculations.

References include the Guidelines on best practice to limit, mitigate or compensate soil sealing (SWD (2012) 101 final/2) which collects examples of policies, legislation, funding schemes, local planning tools, information campaigns and many other best practices implemented throughout the EU and the EU brochure on soil sealing 'Hard surfaces, hidden costs' (2013).

Brownfield sites are derelict and underused or even abandoned former industrial or commercial sites, which may have real or perceived (soil) contamination problems. Bringing them to beneficial use, thus saving precious greenfield sites, normally requires coordinated intervention on the part of owners, local authorities and citizens living in the neighbourhood.

2.5 NATURE AND BIODIVERSITY

The technical assessment for Indicator 5 is designed to explore how much information each city holds for its natural spaces and biodiversity, how well it monitors and manages these assets and how it engages its citizens and stakeholders in improving their local biodiversity. A good application will include maps of habitats and sites, examples of habitat and species monitoring programmes, details of strategies, plans and projects for the management of ecological networks and key sites and priority species. It will show how the city collects its biodiversity data, protects habitats and species and involves its people in biodiversity education, decision making and practical actions. We are keen to learn what the city is currently doing, has done in the past and what plans it has for the future.

Applicant cities will be aware of the EU 2020 Biodiversity Strategy and especially of its target 1 on improving the status of all species and habitats protected under EU nature legislation. In addition, target 2 proposes that 'ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems'. The Europe 2020 Strategy also links to biodiversity through action on climate change.

To demonstrate that nature and biodiversity are protected there should be a description of the status of natural species (including trends in increase/decrease) and the status of protected habitats and other open spaces, both green and blue, which are used by wild species. A summary of city policies and the range of measures taken to protect, enhance and buffer biodiversity in the city should be given. The natural and semi-natural spaces may include nature areas, parks, school grounds, other grassed areas, woodlands, street trees, river corridors, water bodies and green roofs and walls.

It is expected that the city will have an action plan to promote local biodiversity which will contain these details. This plan will include objectives, measures taken and planned, and an explanation of how actions will be funded to achieve the city's aims.

Enhancing biodiversity may take the form of protection from harm and disturbance, increasing the size of natural areas or improving management. Conservation actions taken in compliance with the EU Nature Directives for habitats and species in Natura 2000 sites should be noted and whether they are subject to management plans. Policies and plans for other nature conservation sites, and the condition of those sites, should be included; these may include sites of national or local city level importance.

Other measures may include improving the connectivity between nature sites to permit migration, foraging and breeding. Special actions may be taken to favour particular species and habitats. Management of both green and blue spaces that employs ecological methods and safeguards species from ecotoxicological products should be noted.

Article 12 of the Sustainable Use of Pesticides Directive 128/2009 and other legislation concerning water quality is also relevant. Appropriate action on invasive species should also be in process in line

with EC Regulation 1143/2014 on invasive non-native species. Measures taken to protect native biodiversity and ecosystem services from these species, as well as to minimise and mitigate the human health or economic impacts that they can have should be discussed.

Please outline activities which educate people about the values of nature and raise public awareness of your city's biodiversity including reference to the Natura 2000 network of sites. Also, tell us about opportunities provided for citizens to make decisions about and engage with natural spaces. Research into local issues including climate change impacts may be another contributing factor to the conservation and enhancement of biodiversity.

The assessment of applications will take into account the context of the city and the pressures it faces, the current status of biodiversity and the achievements of past protection and conservation work, the monitoring of wildlife and its management, as well as what use is made of monitoring information. Applicant cities should provide evidence of commitment to agreed plans and funding from a range of sources to back the city's aspirations for its nature and biodiversity. It is important that good maps are given to show locations of sites, their context and connectivity.

2.6 AIR QUALITY

The selected indicators are described in the European Union Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe.

The target and limit values are set to protect human health. Member States should take action in order to comply with the limit values, and where possible, to attain the target values.

- The limit value for the annual mean of NO₂ is 40 µg/m³;
- The limit value for PM₁₀ (daily mean) is 50 µg/m³ and should not be exceeded more than 35 times during a year;
- The limit value for the annual mean of PM₁₀ is 40 µg/m³;
- The target value for PM_{2.5} is 25 µg/m³;
- The limit value for hourly NO₂ is 200 µg/m³ and should not be exceeded more than 18 times during a year.

For presented air quality data specify the type of measurement station (e.g. traffic, urban background, regional background).

For the annual concentrations of NO₂, PM_{2.5} and PM₁₀ provide a quantitative assessment of the contribution from local sources and from long-range transport for these pollutants as a percentage. For example, for annual mean of NO₂ at traffic measurement stations about 75% originates from local sources and 25% from long-range transport. The contribution from long-range transport should ideally be determined to represent the administrative boundaries of the city. The purpose of this assessment is to estimate how much of observed concentrations can be managed by the city.

Provide information on air quality plans and measures implemented over the last five to ten years to improve the urban air quality and to increase awareness of air pollution.

- Comment on which measures have been most effective and how this has been assessed;
- Explain how the implemented measures have influenced the present situation;
- Refer to stakeholder involvement, communication with the population.

Describe the short and long term objectives for air quality and the proposed approach for their achievement. Emphasise to what extent plans are consolidated by commitments, budget allocations, monitoring and other evaluation methods.

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2.7 NOISE

The quality of the acoustic environment is an important element of the urban environment and a challenging issue that city administrations have to manage. It impacts on the quality of life of the population of a city. Ambient sound levels that are beyond comfort levels are referred to as environmental noise pollution. This can be caused by many different sources, such as traffic, construction works and industry as well as some recreational activities. Excess levels of noise can cause damage to hearing, annoyance, increased stress levels and blood pressure, and unnatural sleeping patterns.

According to the World Health Organisation (WHO) research, it is estimated that a significant part of Europeans are regularly exposed to noise levels exceeding 55dB(A) at night. In addition, the European Environmental Agency (EEA) report *'Managing exposure to noise in Europe'* underlines that at least 100 million Europeans are exposed to levels of traffic noise above legal guidelines, thus yielding a range of health problems. Based on the EEA 2014 report, traffic noise annoys almost 20 million Europeans and disturbs the sleep of an estimated eight million. Environmental noise is also linked to approximately 43,000 hospital admissions, 900,000 cases of hypertension and more than 10,000 premature deaths per year.

Road traffic is the main source of noise in Europe, the report says, followed by railways, airports and industry. Larger cities are noisier. Cities housing more than 250,000 people generally have a larger share of the population exposed to levels above the legal guidelines.

The report also says that noise considerations should be incorporated into planning and building new infrastructure and that, moreover, quiet areas should be protected. Finally, the document also states that wildlife may also be seriously affected by noise, according to a mounting body of evidence.

The Environmental Noise Directive (2002/49/EC) is one of the main instruments to identify noise pollution levels and to trigger the necessary action both at Member State and at EU level. It relates to the assessment and management of environmental noise. Its principle aim is to 'define a common approach' intended to avoid, prevent or reduce, on a prioritised basis, the harmful effects, including annoyance, due to the exposure to environmental noise. The Directive refers to noise that people are exposed to continuously and not to noise created by persons themselves, their neighbours, their workplaces or while in transit. Its aim is to provide a basis for developing EU measures to reduce noise emitted by major sources, in particular road and rail vehicles and infrastructures, aircraft, outdoor and industrial equipment and mobile machinery. The underlying principles of the Directive include:

- Monitoring environmental noise pollution through the development of 'strategic noise maps' for major roads, railways, airports and agglomerations, using harmonised noise indicators L_{den} and L_n ;

- Informing and consulting the public about noise exposure, its effects, and the measures considered to address, manage and reduce noise;
- Addressing local noise issues by developing action plans to reduce noise where necessary and maintain, and improve, environmental acoustic quality in areas where it is good;
- Developing a long-term EU strategy; this includes providing objectives to reduce the number of people affected by noise in the longer term, and providing a framework for developing existing community policy on noise reduction from sources.

EU regulations on noise management have been based on internal market objectives such as setting harmonised noise limits for motor vehicles, household appliances and other noise-generating products. These laws have encouraged the development of innovations that can help limit noise pollution, such as low noise tyres and more silent road surfaces, as well as noise barriers and soundproofing.

The city must provide clear information on the municipal policies regarding the reduction of noise and the improvement of the acoustic environment as well as the management of areas with good acoustic quality in the municipal territory in its application. Details must be given on urban noise data, on noise abatement actions both already adopted and envisaged for the future, and on urban soundscape management considering the protection of existing zones with good acoustic quality and the definition, delimitation and preservation of quiet or sound improved areas.

The application must detail the municipal strategies for the management of the acoustical environment, the involvement of stakeholders and of the local population and report on informational, educational and awareness raising campaigns performed and planned regarding sound and noise issues. Information on the costs undertaken and on the budgets for future measures shall be provided.

Regarding the present situation, noise data should be provided, at least on the share of population exposed to total noise values of L_{den} (day-evening-night indicator) above 55 dB(A) and above 65 dB(A) and to total noise values of L_n (night indicator) above 45 dB(A) and 55 dB(A). In addition, figures for noise exposure to individual noise sources (e.g. road, rail, air, industry, and leisure/entertainment) can also be provided for a better picture of the present situation. Technical advice on the calculation of noise exposure data can be found in the position paper 'Good Practice Guide for Strategic Noise Mapping and the Production of Associated Data on Noise Exposure' - European Commission Working Group Assessment of Exposure to Noise (WG-AEN), Version 2, 13 January 2006.

Where available, information/data for the previous (5-10) years should be included to show trends. Information on existing or planned quiet areas, or sound improved areas, should also be included. Recommendations and advice concerning quiet areas shall be found in the '*Good practice guide on quiet areas*' - EEA Technical Report No 4/2014.

The description of the measures implemented over the last five to ten years to improve the urban sound quality and to increase awareness to noise should highlight whether these measures are part of an overall and long-term noise action plan. The applicant should:

- Report on noise maps, acoustic zoning and on action plans;
- Comment on which measures have been most effective;
- Explain how the implemented measures have influenced the presentsituation;
- Refer to stakeholder involvement, specifically in the adoption of the plans, communication with the population, and plans to preserve areas where the acoustic environment is good.

The short and long term objectives for the quality of the acoustic environment and the proposed approach for their achievement must be described in detail together with assigned budgets. The applicant should:

- Emphasise to what extent plans are adopted, consolidated by commitments, budget allocations, and monitoring and performance evaluation schemes;
- Indicate the target foreseen reduction in the share of population exposed to noise values of L_{den} above 55 dB(A) and above 65 dB(A) and in the share of population exposed to noise values of L_n above 45 dB(A) and 55 dB(A), mention other targets;
- Refer to stakeholder involvement, consultations, and actions to manage and preserve urban and open country quiet areas, and actions concerning sound improved areas (holistic/qualitative approaches to the acoustic environment, e. g. by soundscape design approaches.

2.8 WASTE

The Waste Framework Directive (2008/98/EC) (WFD) sets out the regulatory structure for the better management of wastes ensuring the environment and human health are protected. The Directive includes key definitions such as waste, recycling, recovery etc. In responding to the questions on this indicator applicants are required to use the appropriate definitions as set out in the Directive when describing their waste system.

The Directive describes basic waste management principles such as the waste management hierarchy, polluter pays principle and extended producer responsibility including targets to be met by 2020. Specifically these are:

- The preparing for reuse and the recycling of waste materials such as paper, metal, plastic and glass from households waste streams and other similar sources to a minimum of overall 50% by weight;
- The preparing for reuse, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the list of waste shall be increased to a minimum of 70% by weight.

The Directive requires that Member States adopt waste management plans and waste prevention programmes and there is an opportunity for an applicant city to describe the waste management plans and prevention programmes in place.

However waste management is also considered in a wider context having regard to objectives for sustainability, resource efficiency and the circular economy. At the end of 2015 the European Commission adopted an ambitious Circular Economy Package, which includes revised legislative proposals on waste to stimulate Europe's transition towards a circular economy. The package consists of an EU Action Plan for the Circular Economy that establishes a concrete and ambitious programme of action, with measures covering the whole cycle: from production and consumption to waste management and the market for secondary raw materials. The proposed actions will contribute to 'closing the loop' of product lifecycles through greater recycling and reuse, and bring benefits for both the environment and the economy.

The revised legislative proposals on waste set clear targets for reduction of waste and establish an ambitious and credible long-term path for waste management and recycling. Key elements of the revised waste proposal include:

- A common EU target for recycling 65% of municipal waste by 2030;
- A common EU target for recycling 75% of packaging waste by 2030;
- A binding landfill target to reduce landfill to maximum of 10% of municipal waste by 2030.

At present the 7th Environmental Action Plan which is in place includes specific objectives for waste management to be met by 2020 (reduction of food wastage, decrease of waste generation, high quality reuse and recycling rates, no energy recovery from recyclable waste, elimination of landfilling of recoverable waste).

Therefore information provided should include references to how waste management is considered and managed in the wider context of the circular economy and the 7th EAP (particularly in responding to Section 8C).

8A. Present Position

In response to this section the applicant should aim to provide comprehensive details on the current waste management practices in the city tackling each of the bulleted items. It is recommended that data tables and charts are used to complement your response.

Cities are encouraged to use waste data in the form of tables of charts to support the responses. Any data submitted should be clear and complement the qualitative response.

8B. Past Performance

In response to this section the applicant should focus on describing how the programme of waste management, its implementation and development of infrastructure (collection and treatment) has progressed in the city over the past five to ten years. Each bulleted item is to be addressed and it is recommended that data tables and charts are used to complement your response.

8C. Future Plans

In response to this section the applicant should focus on describing the future plans, objectives and target the city is aiming to achieve whilst emphasising the commitment to and continual assessment of the delivery programme.

In responding the applicant should make reference to the circular economy and the steps the city intends to take in the move away from linear economic models. In the context of the waste sector, this refers to keeping resources within the system through activities such as reuse, repair, refurbishment and recycling. Each bulleted item is to be addressed and it is recommended that data tables and charts are used to complement your response.

General Notes

- Answer all parts of the indicator questions;
- Waste data provided should primarily relate to 'household and municipal waste', i.e. household and commercial waste, collected on behalf of or by the municipalities, unless otherwise specified in the application form. Household waste is defined as all waste generated by a household

including residual, recyclable materials (e.g. paper, plastics, glass etc.) bulky and green waste. The definition of municipal waste⁶ is *'waste generated by households, and also includes similar waste from sources such as shops, offices and public institutions'*. Be specific if using a different definition of municipal waste;

- You may also include information relating to the management of 'construction and demolition' and other industrial waste to demonstrate overall approach to waste management. If these other streams are referred to, clear descriptions are to be provided;
- Reference to 'measures' must include compliance with the EU Waste Framework Directive in terms of the preparation and implementation of 'waste management plans' on either a municipal or regional basis. The extent of segregated waste collections into separate waste streams, where they exist, will be assessed in addition to the percentage municipal waste recycling rate and future targets;
- Data on waste prevention and management for different waste streams should be provided and compared to the existing EU legally binding targets but also in the context of the waste objectives of the 7th EAP;
- Where specific packaging waste data is not available for the city or only available at a national level then measures to promote the prevention, reuse and recycling of packaging waste should be outlined;
- When providing details of separately collected wastes, include the types of waste collected and types of collection systems (e.g. drop off points, civic amenity, kerbside, other initiatives);
- The meaning of the 'polluter pays' principle is as described in Article 14 of the WFD;
- When describing measures for treatment of residual wastes, information should be provided on any energy recovery measures such as landfill gas utilisation, thermal treatment such as Waste to Energy facilities and where applicable, the relative efficiency of the recovery measures (e.g. combined heat & power).

Helpful References:

Glossary of key waste management terms in keeping with European Commission definitions

http://ec.europa.eu/eurostat/statistics-explained/index.php/Category:Environment_glossary

Waste Framework Directive (2008/98/EC)

<http://ec.europa.eu/environment/waste/framework/>

Waste Prevention

<http://ec.europa.eu/environment/waste/prevention/index.htm>

Circular Economy

http://ec.europa.eu/environment/circular-economy/index_en.htm

Waste Management Planning

<http://ec.europa.eu/environment/waste/plans/index.htm>

⁶ http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Municipal_waste

2.9 WATER

The Blueprint to Safeguard Europe's Water Resources is the EU policy response to challenges to our water resources. It outlines actions that concentrate on better implementation of current water legislation, integration of water policy objectives into other policies, and filling the gaps, in particular as regards water quantity and efficiency. The objective is to ensure that a sufficient quantity of good quality water is available for people's needs, the economy and the environment throughout the EU.

The Blueprint focuses on the development of key tools and measures for the implementation of current EU water legislation such as the Water Framework Directive (WFD). In this context relevant indicators include:

- The status of water bodies identified under the WFD and which are relevant at city level;
- For households, units should be litres/capita/day;
- For industry, agriculture, small business and tourism, water demand values should be reported for each sector both as total amount of used water (in cubic meter/year) and as share of total water consumption in the city (%);
- For the industry sector, please include water demand for cooling in energyproduction;
- If your city is a tourist destination, detail the variation in water demand during the tourist season;
- Provide trends of water demand per sector during the last 5-10 years.
- Explain what sector-specific technical measures have been put in place to improve water efficiency (e.g. water saving devices, network rehabilitation, water recycling/reuse), what incentives have been chosen (e.g. pricing, taxes, subsidies, metering, product eco-labelling, building rating), and what institutional and regulatory changes accompanied the implementation of measures (e.g. were they mandatory or voluntary) to reach the current situation;
- Give details of technical, nature-based, economic and institutional measures planned to improve water management (from both demand and supply side) for each sector, including possible use of alternative water sources;
- Give details of measures aimed at preventing/reducing impacts of floods and droughts and at improving the status of water bodies within the city, e.g. restrictions implemented.

Applicants should provide relevant information in the context of current EU Water legislation (mainly the Water Framework Directive WFD⁷ and so-called 'sister directives', such as the Urban Waste Water Treatment Directive (UWWTD⁸) and requirements that result from the legislation.

- Population equivalent (PE), collecting systems, primary and secondary treatments are defined in the UWWTD;

⁷ Directive 2000/60/EC

⁸ Directive 91/271/EEC

- For the purposes of the application form, the following minimum treatment efficiencies define a tertiary treatment: organic pollution removal of at least 70-90% for BOD₅ and 75% for COD, and at least one of the following:
 - a) nitrogen removal of at least 70-80%,
 - b) phosphorus removal of at least 80%,
 - c) further treatment necessary to fulfil other Council Directives, e.g. microbiological removal, according to needs. It is the nature of the area of discharge, if considered as 'sensitive', that will determine the needs and requirements to comply with;
- The population not connected to waste water collecting systems might be served by individual and appropriate systems. Examples: on-site systems (e.g. septic tanks, constructed wetlands), which achieve different treatment levels. Another option is that the waste water is stored in water-tight cesspools and transported to an urban waste water treatment plant (UWWTP) by truck. In case of on-site systems, estimate the treatment level achieved (i.e. primary, secondary, tertiary treatment level). In the case of transport to UWWTPs, please provide information on the treatment performance of the plants;
- UWWTPs: If data on incoming and discharged loads is not measured, please say why;
- Provide a short explanation in the case of missing information for specific indicators (1-7) in 9A;
- Describe innovative actions and emphasise initiatives that go beyond the legal requirements.

2.10 GREEN GROWTH AND ECO-INNOVATION

Applicants should discuss plans, programmes and policies in the context of promoting green growth and eco-innovation in the city. The focus should highlight innovative approaches of how technological and non-technological eco-innovations are supported or directly implemented by the applicant city. Applicants should also consider policies aiming to create jobs in green sectors.

Jobs in 'green sectors', such as renewable energy, energy efficiency, waste recycling, green chemistry, organic farming and green construction, should be included when discussing issues associated with sustainable employment.

Include data and information on how 'green growth and sustainable eco-innovation has developed over time. For example, show how the share of the city budget dedicated to support environmental R&D developed during the last five to ten years (also as a percentage of total budget), how the number of jobs in green sectors changed over time and how the city is implementing the public procurement of innovation.

Provide information about the timelines of future plans (section 10C). Discuss whether the city takes active steps in promoting the application and diffusion of eco-innovation by the different city departments and also by industries within the city boundary.

Include information on budgets for future plans and strategies, note if these are secured or prospective.

2.11 ENERGY PERFORMANCE

Sustainable energy performance plays a central part in the EU's 2020 and 2030 climate and energy framework and the long-term perspective for 2050. The 2020 package is a set of binding legislation that sets three key targets: reducing carbon emissions by 20%, increasing the share of renewable energies by 20% and increasing energy efficiency by 20%. Legally binding targets have been set for each Member State.

The 2030 climate and energy framework, adopted by EU leaders in October 2014, builds on the 2020 climate and energy package and sets three key targets for the year 2030: at least 40% cuts in greenhouse gas emissions (from 1990), at least 27% share for renewable energy and at least 27% improvement in energy efficiency. It is also aligned to the EU long term perspective (80-95% reduction of greenhouse gases by 2050) set out in the Roadmap for moving to a competitive low carbon economy in 2050, the Energy Roadmap 2050 and the Transport White Paper.

Furthermore, the Renewable Energy Directive (2009/28/EC), the Energy Performance of Buildings Directive (2010/31/EU), the Ecodesign Directive (2009/125/EC), the Energy Labelling Directive (2010/30/EU) and the Energy Efficiency Directive (2012/27/EU) are relevant to this indicator.

- Current development or Action Plan refers to city plans or strategies, formulated and adopted over the last five to ten years which are now being implemented, such as Sustainable Energy Action Plans through the Covenant of Mayors;
- The energy mix refers to the share of different energy sources which help meet the energy demand of the city. The dynamics and details of the energy mix over time and future plans for such highlight the intentions of the city in terms of its renewable energy transition. If possible, demonstrate an understanding of the economic, ecological, technical or other (aesthetic, social, infrastructural, cultural) implications of different energy strategies;
- Flexible, efficient and well-coordinated compatible and integrated district heating and electricity systems can be key components in a city's energy mix;
- Increasing energy efficiency is a key strategy for achieving a carbon neutral energy system, but it is equally important to lower energy demand through campaigns and incentives for citizens, organisations, companies and public institutions;
- Refer to the built environment of the city in current Development or Action Plans and the current status of energy performance including buildings, industry, tertiary and transport sectors;
- For 2050 the European Commission has long-term goals for 80-95% reduction of greenhouse gases which require large and systematic investments in energy efficiency, energy substitution and new renewable energy;
- For future and in particular long-term future energy plans, you may also include systems visions about transport, industry and food systems. In addition to the building stock those systems represent three important energy sectors, in particular for the use of renewable energy, with potentially conflicting and/or supplementing uses in the overall future energy system.

2.12 GOVERNANCE

The various dimensions of urban life, environmental, economic, social and cultural, are interwoven and successful urban management requires an integrated approach. Measures for environmental protection and improvement should be combined with those for physical urban renewal, education, economic development and social inclusion. Strong partnerships between citizens, civil society, the local economy and the various levels of government are a pre-requisite for effective action.

This approach is especially important given the seriousness of the challenges that European cities currently face, from demographic change to job creation, social progress, and the impacts of climate change. Effective local responses to these challenges are critical for achieving the smart, sustainable, inclusive society envisaged in the Europe 2020 Strategy.

For guidance on integrated environmental management, see the Reference Framework for European Sustainable Cities www.rfsc.eu (Governance chapter), and the 2007 Integrated Environmental Management, Guidance in relation to the Thematic Strategy on the Urban Environment report.

A number of practical tools exist to strengthen protection of the urban environment in promoting more integration. One of them is an Integrated Environmental Management System (IEMS); a strong voluntary commitment by the city to act on its environmental problems. A well-developed IEMS helps avoid conflicts by considering competing demands from various policy areas and initiatives (economic well-being, competitiveness, health, environment, spatial planning), and by setting long-term goals.

EU guidance on IEMS in urban areas provides best practice examples and experiences.

Use this final indicator to describe your integrated approach, ambition and leadership in environmental policy, detailing ambition and vision. Highlight the organisational and management structure of your administration. This section may be brief, but should make clear how the environmental quality of the city is safeguarded, and show the priority of environment in relation to other policy areas i.e. how is sustainability and environmental principles integrated into non-environmental policy areas.