In 2004 the city of Frankfurt am Main was already working to “environmental guidelines” for sustainable city development.

The guidelines describe sustainable development as a task for all administrative and policy areas and one that requires all social and economic players to assume responsibility. The objectives were set following comprehensive surveys.

The city is seen as an integrated environmental management system, which is a suitable vehicle for the implementation of environmental law and the coherent and cost-effective adoption of environmental policy measures for:

- Countryside, flora and fauna
- Water management
- Land management
- Waste management
- Climate protection and energy policy
- Traffic management

The guidelines provide a foundation for the city’s decision-makers. They encourage municipal employees to practise environmental protection by cutting down on the use of resources. They also create transparency for the general public.

In addition to the environmental guidelines, Frankfurt has adopted several systems and other guidelines for high-quality environmental management.

**Construction and modernisation**

Frankfurt’s “Guidelines for cost-efficient construction” for municipal buildings and companies (2005) stipulate that new buildings are to be built according to passive house standards and that refurbishment work must include passive house components. The efficiency criteria for installations and appliances are high and the use of PVC and tropical timber is banned.

**Environmentally friendly procurement**

Binding procurement resolutions:

- **1989**: Ban on building components made from tropical timber, unless they are FSC-certified
- **1990**: Ban on PVC building materials
- **1990**: Use of recycled paper in the municipal offices
• 2005: Procurement of natural gas-powered vehicles
• 2005: Ban on products made with child labour
• 2005: “Guidelines for cost-efficient construction”
• September 2007: Passive house standard for city-owned and municipal buildings; climate protection measures for future building projects

Those resolutions ensure a high environmental standard for Frankfurt’s municipal authorities, which did not previously have a certified environmental management system.

There are various initiatives to encourage Frankfurt-based companies - especially those in which the city has a stake - to introduce environmental management systems (EMAS, ISO 14000, ECOPROFIT).

**Mainova AG**
Mainova AG (electricity, natural gas, heating and water supplier, roughly 75% city-owned) adopted environmental guidelines in 2002.
[Link](#)

**FES GmbH**
FES Frankfurter Entsorgungs- und Service GmbH (waste disposal, city cleaning, transport safety; 51% city-owned) passed the waste disposal company surveillance audit in June 2011. The audit largely follows ISO 14001. FES was presented with the ECOPROFIT award in 2011. In 2010 it was the first municipal company to publish a sustainability report in line with the GRI standard (Global Reporting Initiative).
[Link](#)

**FRAPORT AG**
FRAPORT AG (Frankfurt Airport operator; 20% city-owned through Stadtwerke Frankfurt GmbH) has been undergoing regular audits by state-approved and regulated environmental auditors at Frankfurt Airport since 1999. Since 2002 the audits have also complied with ISO 14001. Fraport is EMAS-validated with DE-125-00032.

There is a comprehensive energy and carbon footprint and an environmental programme.
[Link](#)

**Parks Department/municipal forest**
Frankfurt's municipal forest has been certified according to the PEFC (Programme for Endorsement of Forest Certification Schemes) standard. The PEFC standards govern compliance with sustainable and natural forest management practices (appropriate restocking of stable mixed stands, appropriate proportions of dead wood, environmentally conscious forest management). The production function of the woodland areas, their biological diversity and their social function in terms of leisure and job creation must all be preserved.
ECOPROFIT Frankfurt am Main

The city authorities support and promote the ECOPROFIT procedure developed in Graz. To date, 32 companies in Frankfurt have received the ECOPROFIT award. These include a number of municipal companies. The company operating the “Commerzbank Arena” won the ECOPROFIT award in 2007 and again in 2011.

Link

Rhine-Main Environment Forum

Frankfurt is a member of the Rhine-Main Environment Forum (founded in 2001). The Forum developed out of the “50 eco-audits for Frankfurt am Main” initiative that was created in 1997 as part of the “Local Agenda 21”. Local companies could join this initiative if they had introduced an environmental management system and were working towards certification.

The Forum promotes networking, environmental protection and sustainable development in Frankfurt and the region. Project and business ideas as well as scientific knowledge on environmental issues are exchanged in working groups. The Forum supports cooperation between companies, higher education establishments, professional associations, public bodies and other institutions. It has 137 member companies.

Link

LEEN Frankfurt

The “Local Energy Efficiency Network” involves 10 fairly large companies (housing construction, service provision, industry) from Frankfurt and the region, which all have high levels of absolute energy consumption. Their common target is a 7% reduction in their energy consumption by 2012.

2.

Procurement in Frankfurt is dealt with de centrally, albeit with a central steering unit. The diverse binding resolutions for environmentally friendly procurement and the products in question are described above. In practice, they are implemented with very few exceptions.

The “Guidelines for cost-efficient construction” prescribe mandatory environmental labels (e.g. FSC, “Blue Angel”) for numerous products (e.g. wood-based composites, painting and adhesive materials, wood-fired heating systems). Wood-fired heating systems must be below the “Blue Angel” limits by a factor of 2. PVC and tropical timber may not be used (with the possible exception of FSC-certified tropical timber).

Further resolutions cover:

School catering

The requirements for lunches provided in municipal childcare centres are:

- 10% share of organic food (labels according to EU Ecolabel Regulation)
- Fruit and vegetables mainly seasonal and local
- Salad and raw fruit and vegetables
- Overall low proportion of convenience foods

Organic foods are to be included on the menu. The proportion of organic foods is based on the total food cost.
### Energy

The city of Frankfurt converted fully to “green energy” in 2008 for city-owned property and in 2010 for trams and underground trains. This includes:

- 50% from regenerative sources (certified with the “Green electricity label”)
- 50% from local combined heat and power generation

### Question 2
(max. 800 words)

Details of targets achieved or not to date (within the last 5-10 years). Provide a review of how both situations occurred and lessons learned. Make reference to:

1. Developing an overall policy for environmental management of municipal activities;
2. Increasing the share of the total consumption of eco-labelled, organic and energy-efficient products.

1.

Frankfurt’s city authorities have been acutely aware of sustainability criteria for a long time. Very high standards have been maintained.

The aims and measures in Frankfurt’s environmental policy have won awards at many national competitions. Frankfurt am Main came second in the “German Climate Protection Capital 2010” competition and third in the “German Capital of Biodiversity 2011” competition.

As a result of the resolutions for municipal buildings and for the residential buildings managed by the municipal housing association (ABG), Frankfurt is the city with the most certified passive houses (this will not become mandatory across Europe until 2020) and can be described as the “passive house capital”.

In the areas of planning and building, the procurement of appliances and materials, green energy sourcing and the use of organic foods, Frankfurt’s environmental policy makes very high standards a reality.

In 2010 the city published an [environmental report](#), which presented the objectives and measures in Frankfurt’s environmental policy and outlined the current status and trends. It was deliberately designed to be accessible to ordinary people and includes a wealth of useful information.

### Environment lessons and education for sustainable development

Several projects set up by the association “Umweltlernen in Frankfurt e.V.” (on behalf of the city; school-based energy conservation projects, “GreenBelt education area” project) have been recognised for the third time as official projects in the UN Decade of Education for Sustainable Development. For further information, see “Eco-innovation and sustainable employment”.

### GreenBelt and HABITAT

Frankfurt’s GreenBelt was singled out by the United Nations as a positive example of sustainable city development at the UN conference HABITAT II 1996 in Istanbul.

[Link](#)
Membership of Climate Alliance

In 1990 Frankfurt am Main was a founding member of the Climate Alliance of European Cities with Indigenous Rainforest Peoples.

2.

Organic and regional products

In many areas, particularly with regard to private households and companies, the city authorities have set out to win people over to environmentally friendly and organic products, the city engages in intensive PR work and networks with multipliers and organisations.

More information on buying organic food is available on:

http://www.frankfurt.de/sixcms/detail.php?id=3840&_ffmpar[_id_eltern]=3068

With support from the Environment Department, the Rhine-Main Environment Forum has been publishing the “Agenda” city map for the past seven years – with a new theme each year (e.g. electromobility and the 20th anniversary of Frankfurt’s GreenBelt) and a number of shopping tips. It is an up-to-date guide to environmentally friendly and climate-conscious suppliers of products and services in the city.

In order to support the marketing of organic products, the Forum joined producers, retailers and end-users such as companies and restaurants in creating the “Main-Bio” label.

The Environment Department produces brochures (e.g. on farm shops or protecting orchard meadows) which highlight the connection between buying local products and nature conservation.
In the Apple Appeal project, people can lease a meadow orchard for free. The city shows them how to tend it and the leaseholder keeps the harvest.

In many areas of Frankfurt there are now weekly markets selling regionally produced and organically grown produce. They are popular meeting places for the people of Frankfurt.

In primary schools, the message is also communicated to the very young. The Local Education Authority and the Environment Forum distribute organic lunchboxes to first-year pupils.

**Figure 2: Kerstin Garefrekes (Football player for Germany) and Mayor Jutta Ebeling**

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**Fairtrade Town**

In January 2011 Frankfurt was the first major German city to be awarded the international title of “Fairtrade Town” by TransFair e.V.

Fairtrade coffee is served at City Council and committee meetings. Fairtrade products are on sale in 130 retail outlets and 61 cafés, bakeries and restaurants. Representatives of the church, fairtrade shops and the sustainability movement in Frankfurt monitor compliance with the criteria.

[Link](#)

**Recycling of large electrical appliances**

E-waste recycling with a socio-political dimension is masterminded by Werkstatt Frankfurt e.V. Large electrical appliances are collected as bulky waste and, depending on an item's condition, it is repaired, dismantled to retrieve replacement parts and raw materials, or disposed of appropriately. Reconditioned appliances are sold at low prices in the second-hand shop. The Recycling Centre employs 300 people and has the support of the city of Frankfurt and the Federal Employment Agency.
Energy-saving products

The core task of Frankfurt's Energy Agency is to provide information on energy-saving products and technology. Policy and professional strategies are developed, advice and support given and wide-ranging PR work carried out. Many programmes provide advice and support for households, associations, companies and churches on saving energy and buying energy-saving products.

In 2010, for example, as part of the “Frankfurt saves electricity” programme, city households received a €50 bonus if they exchanged their old refrigerator for an energy saving A++ model. Around 1,000 old refrigerators were exchanged.

Building

The “Guidelines for cost-efficient construction” are also to be adopted by the city of Mainz and set an example for private property developers.

Question 3 (max. 800 words)

Plans to meet or revise key targets for the future and the proposed approach to achieve these.

By 2012 Frankfurt's municipal forest will also be FSC-certified. The FSC criteria - as those of the PEFC – relate to maintaining forest resources and ensuring the health and vitality of the forest. In addition, 5% of forest land is set aside as reference areas for the promotion of process protection. With very few exceptions, chemical treatments have been entirely eliminated.

Sustainable city development

In 2004 Frankfurt's city authorities committed to a programme of environmental protection with its “environment guidelines”. As stated above, it has entered into new forms of cooperation with the general public and business.

In order to further develop Frankfurt's environmental policy and to broaden its scope, at the start of the application process for the European Green Capital Award, in 2010 the municipal government set itself the goal of becoming a sustainable “Green City”.

In line with the “environmental guidelines”, the thinking is that “sustainable development is a task for all administrative and policy areas and one that requires all social and economic players to assume responsibility”.

Frankfurt will begin by focusing on four key topic areas:

- Economy and consumption
- Planning and building in the tightly packed urban space
- Climate and open spaces
- Sustainable mobility culture

The city has recognised strengths in these areas but major changes are also expected.
Initially, four departments will be involved in the sustainability debate: Planning, Building, Housing and Land Ownership; Transport; Economy, Sport, Safety and the Fire Service; and Environment, Health and Human Resources. Interdisciplinary working groups are developing lighthouse projects with specific ways of promoting sustainable development.

**First examples:**

The “School Year of Sustainability” should establish successful environmental education projects (e.g. the “Energy” and “Recycling” workshops and the “GreenBelt education area” programme). The aim is to teach primary school children the meaning of sustainable development and what individuals can do. Frankfurt’s primary schools, the Local Education Authority, the State Education Department for Frankfurt am Main and the Environment Department are cooperating with Frankfurt businesses such as Mainova AG and FES in this initiative. The pilot phase is to start in the 2011/12 school year. From 2013 the plan is for the “School Year of Sustainability” to be introduced in all primary schools in Frankfurt and a wide network of partners, such as companies, institutions and education associations, will be invited to cooperate.

For further details, see “Eco-innovation and sustainable employment”

**Endowment professorship for Energy Efficiency and Renewable Energies:** Mainova AG, the primary municipal energy supplier, provides support for research and teaching on “energy efficiency and renewable energies”. An endowment professorship has been set up at Frankfurt University of Applied Sciences. The first 36 students will be admitted to the new Bachelor programme in the winter semester 2011/12. It will teach the basics of electrotechnology and the economical use of energy. Apart from the distribution and storage of energy and energy law, it will also address the question of how to guarantee a continual supply of electricity despite the constantly changing availability of wind and sun. The course will lead to a Bachelor of Engineering.

**Frankfurt’s Citizens Fund for Climate Protection** is designed to create new forms of financing to support Frankfurt-based climate protection projects involving companies, citizens, initiatives, cooperatives and societies. At the same time, investment opportunities will enable citizens and companies to contribute to ecologically worthwhile projects whose transparency will also provide assurance that the money is going towards climate protection.

The fund has been developed in cooperation with:

• Department of Economy, Sport, Safety and the Fire Service
• Wirtschaftsförderung Frankfurt GmbH
• **Frankfurt School of Finance & Management gGmbH**
• **ConCap Connective Capital** (investment and consulting firm with a focus on microloans)
• Mainova AG

Fund resources are to be disbursed as project-related loans or subsidies to promote energy efficiency and greater use of renewable energies in small and medium-sized enterprises (SMEs) and in public facilities. The fund is to be financed from city resources, existing promotional programmes and contributions from local people and companies.

Preparations are being made for the fund to be established in 2012.
The 1970s Heinrich-Lübke estate is to serve as the model for the modernisation of large social housing estates. Since December 2010, ABG, in cooperation with the University of Vienna and the Fraunhofer Gesellschaft, has been redesigning and modernising it to increase energy efficiency. Particular emphasis is being placed on sustainability from social, structural and ecological perspectives. The inhabitants are very closely involved in the planning process. 

[Sustainability forum](Link)

Frankfurt’s first “sustainability forum” has been established – with 16 experts from business, professional associations, institutions and academia. They will set out their aims and priorities as well as the urgent tasks for sustainable city development and will provide assistance on the four key topic areas in the sustainability debate.

[Sustainability forum](Link)