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Position paper

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Sustainable procurement of food and meals by the City of Vienna

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# **Position paper on sustainable procurement of food and meals by the City of Vienna**

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## **Introduction**

The City of Vienna and its departments and units which employ more than 60,000 people purchase considerable amounts of food for meals for children, young people and adults. The majority is used for kindergartens, schools, hospitals and care facilities, as well as residential facilities for retirees.

This position paper intends to describe and explain the basic principles and values for the sustainable public procurement of food, meals and beverages by the City of Vienna.

Every day approx. 100,000 people are provided with warm meals in public facilities of the City of Vienna. The required food is purchased according to “ÖkoKauf” criteria in order to guarantee high quality and healthy meals. This holds true for kindergartens and after-school centres of Municipal Department MA 10 as well as for schools with full-day care of Municipal Department MA 56, for hospitals and nursing homes of the Vienna Hospital Association (KAV), the General Hospital (AKH) of the City of Vienna, the HERA sanatorium, the day centres for the elderly of Fonds Soziales Wien (Vienna Social Fund) as well as retirement homes of the Retirement Homes Fund of the City of Vienna (KWP). Additionally the PUMA Environmental Management Programme in the Vienna City Administration (without KAV) promotes compliance with high standards of environmental protection at events by the departments of the City of Vienna.

With the “ÖkoKauf Wien” programme, the City of Vienna has been implementing high standards for sustainable procurement since 1998 and commits itself to providing a high quality and sustainable food supply by purchasing food produced in a manner which is as environmentally and climate friendly as possible. One of its most significant achievements is that a stipulated minimum rate of 30% (by value) of all procured food is made up of organic products.

Public procurement in its entirety is subject to the procurement law of the European Union and its Austrian implementation in the Federal Procurement Act 2006. Furthermore, there are many other European and national rules of law which need to be considered when purchasing food and providing catering services. These provisions range from consumer protection to food labelling and quality assurance of food and food preparation to waste management.

The City of Vienna’s goal is to promote sustainable production and use of food through its procurement policy. This requires behaviour which has the least possible negative effects on

human beings, animals, plants and the environment and which takes care of the needs of future generations. Expediency, economy and economic efficiency shall not be conflicting and shall be taken into consideration in particular regarding the entire value added chain.

## **Basic principles for sustainable procurement of food**

Production, processing, transport, storage, preparation and waste management of food significantly contribute to damaging the environment. Bearing this in mind, the following important requirements have thus been created for the procurement of food and meals:

### **1. Food from organic agricultural production**

Today's industrialised agricultural production of food damages the environment worldwide via soil erosion, high water consumption, eutrophication, loss of species, biocides and greenhouse gases. Certain eating habits, especially a very high consumption of meat, intensify the damage.

All scientific studies show that organic farming is a less damaging means of food production in terms of impacts on soil, biodiversity and the climate.

A very important pillar of organic farming is the prohibition of mineral nitrogen fertilisers, synthetic chemical pesticides and genetically modified organisms. Organic livestock farming requires livestock grazing numbers to be determined according to the feeding area in order to exclude intensive livestock farming. In organic livestock farming, animal protection criteria (e.g. open air and grazing areas, family groups) are incorporated far better than in conventional livestock farming. The City of Vienna intends to also be an ethical role model in relation to animal protection by procuring products from organic livestock farming (also see item 7).

Organic food production (agriculture, processing, inspections and imports) is standardised by European-wide regulations (Council Regulation EC 834/2007) and by international association agreements. State-authorized, regulated inspections guarantee compliance with the regulations which protect consumers of organic food from fraud to a large extent. The majority of organic farmers in Austria are members of organic farming associations and thus subject to adhering to stricter requirements than those imposed by EU regulations under private law (e.g. copper limits in wine and fruit growing).

Another advantage of organic food from the consumers' point of view is its higher nutritional quality. A meta-study<sup>1</sup> of 343 scientifically recognised studies shows that eating organically produced and processed grains, vegetables and fruits has health enhancing effects. Compared to conventionally produced food it contains significantly (between 18 and 69 %) more antioxidants,

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<sup>1</sup> Baranski et al., 2014

phenolic acid and polyphenols. Organic products contain significantly less heavy metals like cadmium (on average -48%) and have lower nitrogen concentrations (sum total: N: -10%, Nitrate: -30 %, Nitrite: -87 %) and are thus less harmful to health. In organic products pesticide residues are rarely detectable compared to conventionally produced food. Recently 2 meta-studies<sup>2</sup> on the benefits of organic milk and organic meat were published showing that they have a higher content of unsaturated fatty acids, especially due to the feed used and the free-range keeping of livestock.

A scientific study on the economic benefits of organic farming in Austria evaluated the potential savings of annual secondary costs for repairing the damage done to the environment by conventional farming at approx. EUR 1.3 billion<sup>3</sup>. Secondary costs for society and the tax payers, respectively (e.g. for drinking water treatment) are caused by humus depletion, soil compaction and erosion, heavier flooding due to the decreased water holding capacity of soil, greenhouse gas emissions, loss of biodiversity, pesticide and nitrogen emissions in water and air as well as pesticide residues in food.

## 2. Region of origin

In the most recent discussions on sustainability in our diet, the regional origin of food has been emphasised as being particularly beneficial, mainly in relation to climate protection due to reduced CO<sub>2</sub> emissions (i.e. less greenhouse gas emissions) through shorter transport routes. Thus, for example, tomatoes from Italy trigger 66 % more CO<sub>2</sub> equivalent emissions than tomatoes produced in Austria.<sup>4</sup> This applies to food produced by conventional and organic farming. Furthermore, the additional ecological and health benefits of organic products need to also be taken into account (see above).

There is no clear definition of the region of origin. Important benefits of regional food are freshness and the potential reduction of climate-damaging emissions through short transport distances. Another benefit is the preservation of rural structures and livelihoods and thus the cultural landscape of the respective region, which is a good reason for purchasing regional and organic food. For pragmatic reasons, "regional" is defined as "up to approx. 150 km of distance from the consumer's venue" corresponding to the *ÖkoEvent guidelines* and the *Green Meetings & Green Events* ecolabel guideline. Therefore transport routes can go from Vienna to surrounding federal provinces, as well as nearby neighbouring countries.

The increasing degree of food processing, higher specialisation of individual companies as well as the concentration of certain processing companies (dairies, etc.) result in increasing intermediate transports and longer transport routes. Making general statements on the climate and

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<sup>2</sup> Srednicka-Tober, D. et al., 2015

<sup>3</sup> Schader et al., 2013

<sup>4</sup> Daxbeck et al., 2011

environmental relevance of regional products is difficult. Transportation of smaller amounts of commodities in small lorries is not very efficient, for example. Due to its shorter transport routes, regional food still has the potential to avoid energy consumption and thus greenhouse gas emissions. Efficient marketing structures and an increased demand can have a supportive effect, however, seasonality and efficient transport routes need to be taken into account.

Food transportation by airplane does the most damage to the climate and shall thus be avoided.

**NB:** Storing potatoes, apples, etc. over winter can be very energy intensive. Therefore the criteria “regional” and “seasonal” (see below) need to be evaluated.

### **Side topic: Palm oil**

In recent years the oil of the oil palm has become the most used as well as most problematic food additive. The oil palm grows in tropical regions. Monocultures for palm oil production increasingly eliminate primary rainforests and peat forests in Southeast Asia and increasingly also in Africa and Central America. This means the destruction of habitats of uncountable species, among them orangutans, tigers and rhinos. The conversion of forests into production areas of e.g. oil palm plantations results in the release of big amounts of greenhouse gases. It is not uncommon that cultivating oil palm plantations comes along with land theft and displacement of farmers and indigenous people.

Recently, it has become necessary to explicitly state the presence of palm oil on the ingredient lists of food, to indicate “vegetable fats” is not enough anymore. Alternatives to palm oil are oils from the local region, e.g. rapeseed oil, which additionally has a nutritionally beneficial composition of fatty acids. Due to the aforementioned reasons, palm oil should be avoided whenever possible.

### **3. Seasonality and freshness**

Taking seasonality of the region into consideration has several benefits – the ideal freshness of the products, less use of energy for growing outside (growing fruits and vegetables in heated glasshouses outside the season needs significantly more energy and produces much more CO<sub>2</sub>, the same applies to storage after harvesting), short transport routes and significantly lower costs. Vegetables and fruits purchased according to season also guarantees a fully mature taste (e.g. strawberries).

Canteen kitchens could potentially help the environment, too by providing seasonal summer and winter food, e.g. in terms of side dishes and salads. While in the summer and autumn months all vegetables grow in Austria, the selection is more limited during the winter months. However, even

in winter you can have fresh and healthy vegetables from Austria: potatoes, carrots, celery and beetroot, as well as lamb's lettuce, leek, savoy, sprouts and cabbage bring a lot of variation to the menu and provide us with precious vitamins and minerals<sup>5</sup>.

Observing seasonality is also interesting for canteens when purchasing food, since due to greater quantities of the respective seasonal vegetable or fruit, they can be bought for better prices. Therefore the price difference between organic and conventionally produced food is lower for food which is in season, making it easy to have organic meals in the respective season.

A prerequisite for an increased use of seasonal food in canteens is following certain requirements, in combination with an adjustment of the menu and recipes, as well as the respective training of the kitchen staff. This has been and still is being implemented in current projects (UMBESA, "Natürlich gut Teller" [naturally good plate]).

#### **4. Non-GMO products**

The use of genetic engineering in farming involves some risks. On the one hand the effects of genetically modified organisms (GMO) on human health have not been clarified yet, neither has the release of GMO on the environment on a long-term basis. There is a risk that genetically modified plants will multiply in an uncontrolled way, develop types of resistance, interbreed with wild plants or other crop plants and replace other plant types.

Quality labels such as "Ohne Gentechnik hergestellt" (produced without genetic engineering) and "Bio" (organic) guarantee that the use of genetic engineering is prohibited. The legal requirements regarding production, labelling and inspections of non-GMO produced food are defined in the guideline on the definition of the "Non-GMO production of food" and its labelling in the Austrian food codex. Legal requirements on organic farming are laid down in the EU Council Regulation (EC) 834/2007. For non-GMO and organic food this means:

- no genetically modified seeds
- no genetically modified feed
- no genetically modified animal breeds
- no use of GMOs in processing such as e.g. genetically modified rennet in cheese production and genetically produced food additives (e.g. vitamins).

In general, organic products shall be given preference, since there are no exceptions to the prohibition of genetically modified feeds.

#### **5. Minimisation of waste**

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<sup>5</sup> Daxbeck et al., 2013 a

At the top of waste hierarchy there is waste prevention. It is the best way to minimise negative effects on the environment and resource consumption. Avoiding waste is easiest done by shopping in a conscious manner (e.g. reusable rather than disposable products) and starts even before procurement with needs assessment and by having an overview on how to supply the needs.

One should avoid wasting food for both ethical reasons and environmental protection. As described above, the production, processing and transport of food are connected with the consumption of raw materials, energy, area and water and expose the environment to air pollutants, fertilisers and biocides. Every person in the added value chain can and should contribute to wasting as little food as possible.

A reduction in the amount of purchased food also results in less resource consumption by processing, as well as financial savings which in turn can be used for more organic and fair trade products.

The type of transport packaging also plays a role. A lot of material and energy is needed for the production of disposable pallets or plastic containers. Transport packaging which is used several times are more environmental friendly even though they need to be cleaned.

## **6. Reduction of animal products**

About a fifth of all anthropogenic greenhouse gas emissions come from nutrition, the majority from livestock farming and the production of foodstuff of animal origin. The destruction of rainforests and savannahs for agricultural areas which are used for grazing or growing feed contributes significantly to the greenhouse effect.

Substantial shares of feed for intensive livestock farming, which is mostly produced with genetically modified organisms, are imported from developing countries. While people in the southern regions of the globe starve, about half of the world's grain harvest and a big share of the soy harvest is fed to farm animals. 10 kg of grain or soy beans are needed to produce 1 kg of meat.

A significant share of globally scarce drinking water is used for agricultural livestock. The manure produced by intensive livestock farming pollutes the ground water with nitrates, antibiotics and their metabolites.

Currently too much meat is landing on Austria's plates, which brings about an increase in modern diseases. Nutrition organisations recommend 2 to 3 portions of meat and sausage per week. Reality shows that on average as much as 9 portions of meat and sausage are eaten per week. According to a nutritional report, the protein intake of adults at 1.1 g per kg means it is above the recommended 0.8 g per kg body weight per day.

A sustainable, environmentally friendly and health conscious diet means reducing the consumption of food of animal origin such as sausage, ham, meat, eggs and cheese. Pulses of all variations are precious protein providers and a good alternative to food of animal origin.

A reduction of animal-based food in favour of vegetable-based food also has social implications, since a bigger share of food can directly be used for food for people instead of feed for animals. This will avoid big losses and more people could be fed worldwide.

## **7. Animal rights (ethical handling of animals)**

For financial reasons, millions of pigs, hens and turkeys are kept in facilities which in no way fulfil their needs nor do they give them enough space to live in. The animals cannot live out their innate behaviour and have hardly any possibility to occupy themselves. The results are behavioural disorders (e.g. feather plucking or biting each other) to which intensive animal livestock farming reacts with painful interventions instead of better livestock farming conditions. Piglets, for example, have their curly tail and their teeth cut off, the horns of horned animals such as cattle and goats are removed, although they need them all their lives for their metabolism, their social behaviour and well-being.

Additionally male piglets are castrated – until today in many cases still without anaesthesia. Fattened chicken and turkey hens grow so fast that their skeleton cannot keep up: The joints of their legs are often misshapen, the animals can hardly walk in a normal way. Such problems are especially caused by extreme breeding for special properties (a lot of breast meat, a lot of milk in cows).

For non-organic food of animal origin the following needs to be considered:

- a mandatory labelling of the type of livestock farming only exists with poultry eggs and shell eggs.
- Austria has partly stricter animal protection rights than other EU countries (e.g. prohibition of cage-rearing of laying hens, lower stock density for fattened chickens).
- processed products (e.g. liquid eggs) may contain elements of animal origin coming from non-EU countries and thus may not even meet EU minimum standards regarding livestock farming.

Standards of organic livestock farming are much stricter than legal provisions and guarantee a higher degree of animal rights.

## **8. High social standards in production and trade**

Farm workers belong to the worst paid occupational groups worldwide. At the same time they are exposed to many health risks such as the use of biocides. About 5.6 % of all people employed in Austria work in agriculture, according to a labour force survey the average amount of working

hours in agriculture are 55.9 hours per week. Agriculture is also ranked third regarding frequency of accidents behind construction and manufacturing industries. People working in the farming industry also often have health problems.

Harvesters work under particularly bad working conditions: Wages usually do not meet collective agreements and extra hours, night or Sunday work is sometimes not paid at all.

According to UNDOK, the point of contact for trade unionist support for undocumented workers, migration and employment laws force people into pseudo self-employment. Employers very often make use of this situation and conduct wage and social dumping.

At the moment there are only concepts regarding an international standardisation of minimum wages, protection of employees and social security in farming. Austria has not yet ratified the ILO agreements on occupational safety in the farming industry and on the protection of workers against air pollutants, noise and vibration. There are also no better conditions regulated in organic farming. One advantage workers of organic farms have is that they are not exposed to pesticides. Fair trade shall be given priority in imported products, since they guarantee higher social standards.

## **9. Low degree of processing**

The fresher und more unprocessed the food is, the better its nutrient density and its value for health. Food of vegetable origin with a low degree of processing and a high fibre content should be given priority. Industrial processing of food results in loss of vitamins and nutrients either intended like in white flour or unintended when producing vegetable cans or frozen vegetables.

A high degree of processing usually results in adding many food additives which do not always need to be indicated. Ready-made or semi-finished products often contain undesired ingredients such as palm oil or require a lot of energy in their production since they mostly have a high energy density (high sugar, fat or trans fatty acid content).

Nutrition organisations recommend a high share of fresh food and preparation methods, which are gentle on nutrients, such as short cooking and heating times. This is needed in order to conserve the nutrient density of food. The kitchen of the Vienna Hospital Association (KAV) and the Retirements Home Fund of the City of Vienna (Kuratorium Wiener Pensionisten Wohnhäuser) make a valuable contribution in this regard.

## **Annex:**

### **Definition of the term “food”**

For the purposes of Regulation (EC) No. 178/2002 “food” (or “foodstuff”) means any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans. This includes water and beverages and any substances intentionally incorporated into the food during its manufacture, preparation or treatment.

Food does thus not include: Feed, live animals, unless they are prepared for placing on the market for human consumption, plants prior to harvesting as well as many non-food substances like medicinal products, cosmetics, tobacco and tobacco products, narcotic and psychotropic substances and residues and contaminants. Neither food law nor modern nutritionists make a difference between the term “food” and “foodstuff”.

### **Sustainability – objectives and measures**

- Achieve food security
- Promote sustainable and resilient farming methods which contribute to conserving the ecosystem and to gradually improving the quality of surface and soil
- Preserve the genetic variety of seeds, crop plants as well as animals and their related species in the wild
- Correct trade barriers and distortions on the global agricultural markets, abolish all types of agricultural export subsidies and all export measures with the same effect
- Reduce food loss within the production and supply chain to a minimum
- Improve resource efficiency in consumption and production (sustainable farming and efficient use of natural resources)

- Strive for separation of economic growth and use of resources
- Ensure sustainable patterns of consumption and production
- Minimise food waste
- Guarantee environmentally friendly use of chemicals, stop their release into the air, water and soil in order to limit their negative effects on human health and the environment to a minimum
- Minimise waste during an entire lifecycle and significantly reduce the amount of waste by prevention, minimisation, recycling and reutilisation
- Encourage companies – particularly large-size and transnational enterprises – to introduce sustainable processes and to include information on sustainability in their reports
- Ensure that people have access to relevant information as well as raising their awareness on sustainable development and on living their lives in harmony with nature
- Make diet an important focus in schools

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### Organic farming

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### Fairness and social issues

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#### Degree of processing

- DGE
- Vollwert-Ernährung, Konzeption einer zeitgemäßen und nachhaltigen Ernährung Koerber, Männle, Leitzmann

#### Non-GMO

- <http://www.gentechnikfrei.at/>

#### Less animal-based food

- Vollwert-Ernährung, Konzeption einer zeitgemäßen und nachhaltigen Ernährung Koerber, Männle, Leitzmann
- Ernährungsbericht 2012 (Austrian Nutrition Report 2012)