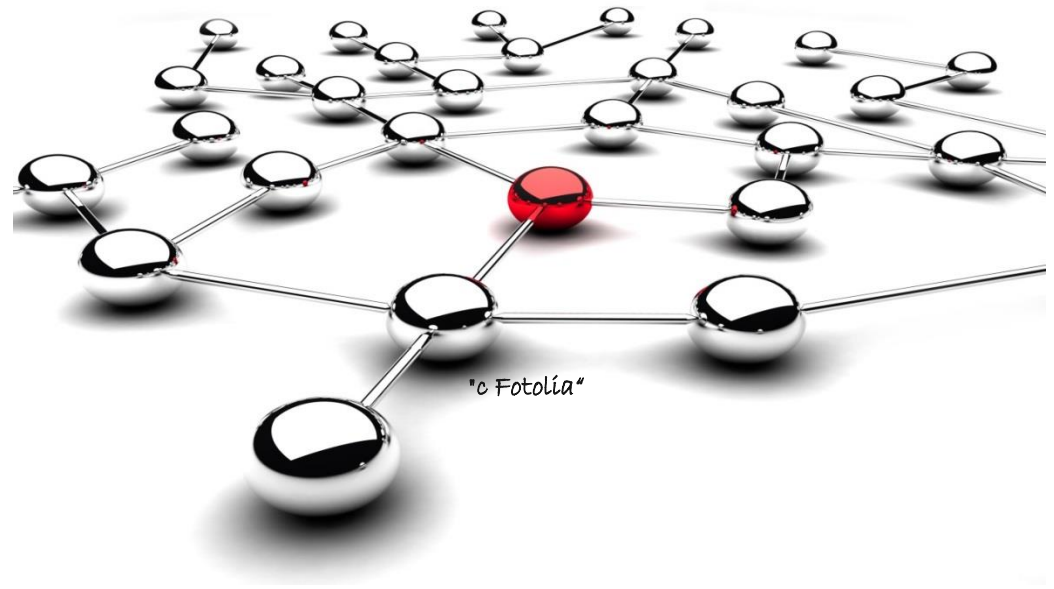




Contents

- I. Private and public consumption in Austria
- II. Green Public Procurement in Vienna“
- III. Current Focal Areas



"c Fotolia"

Human needs and consumption

Manfredo Max Neef

- Subsistence
- Protection
- Leisure
- Meaning

- Affection
- Understanding
- Participation
- Identity
- Freedom – Self Determination



Housing

Construction

Food

Human

Leisure

Living

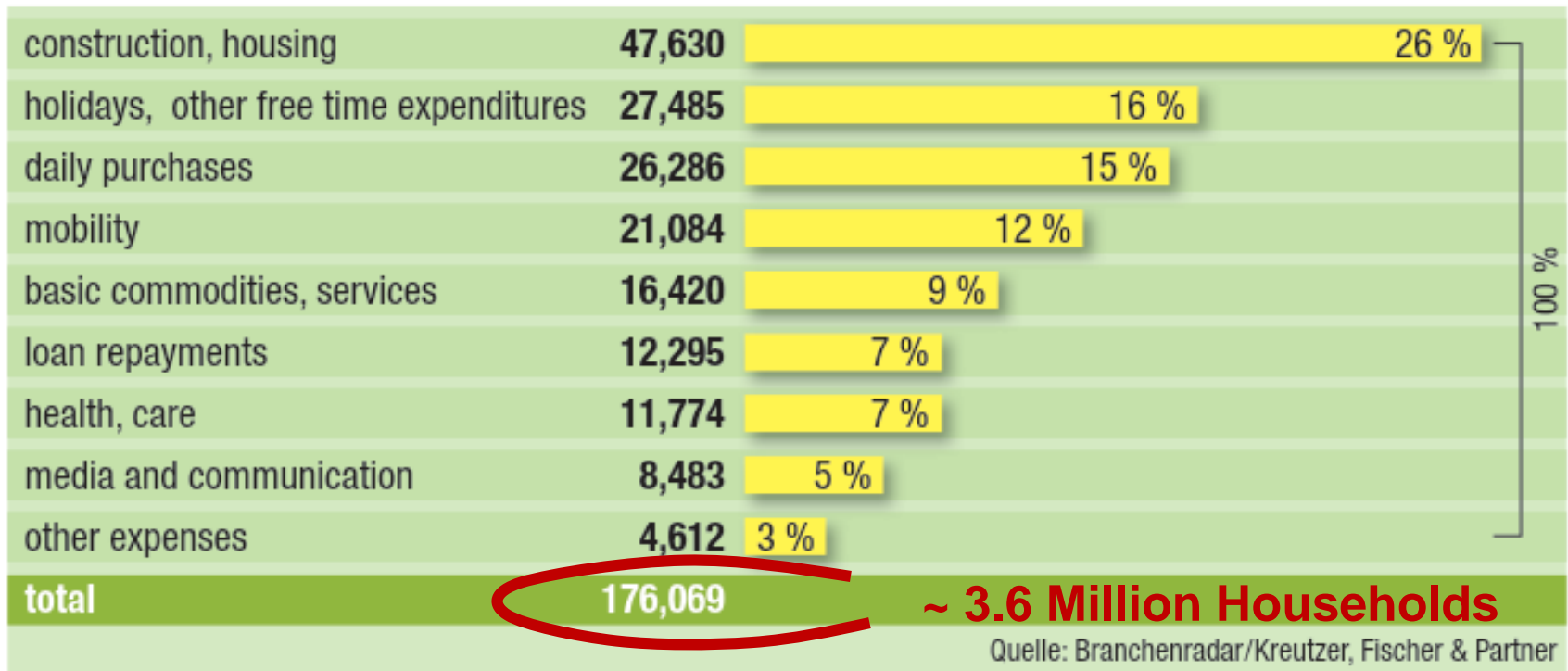
Work

Work

Expenditures of private households

HOUSEHOLD FINAL CONSUMPTION EXPENDITURE IN AUSTRIA 2014

(in Million Euro, distribution by sector)

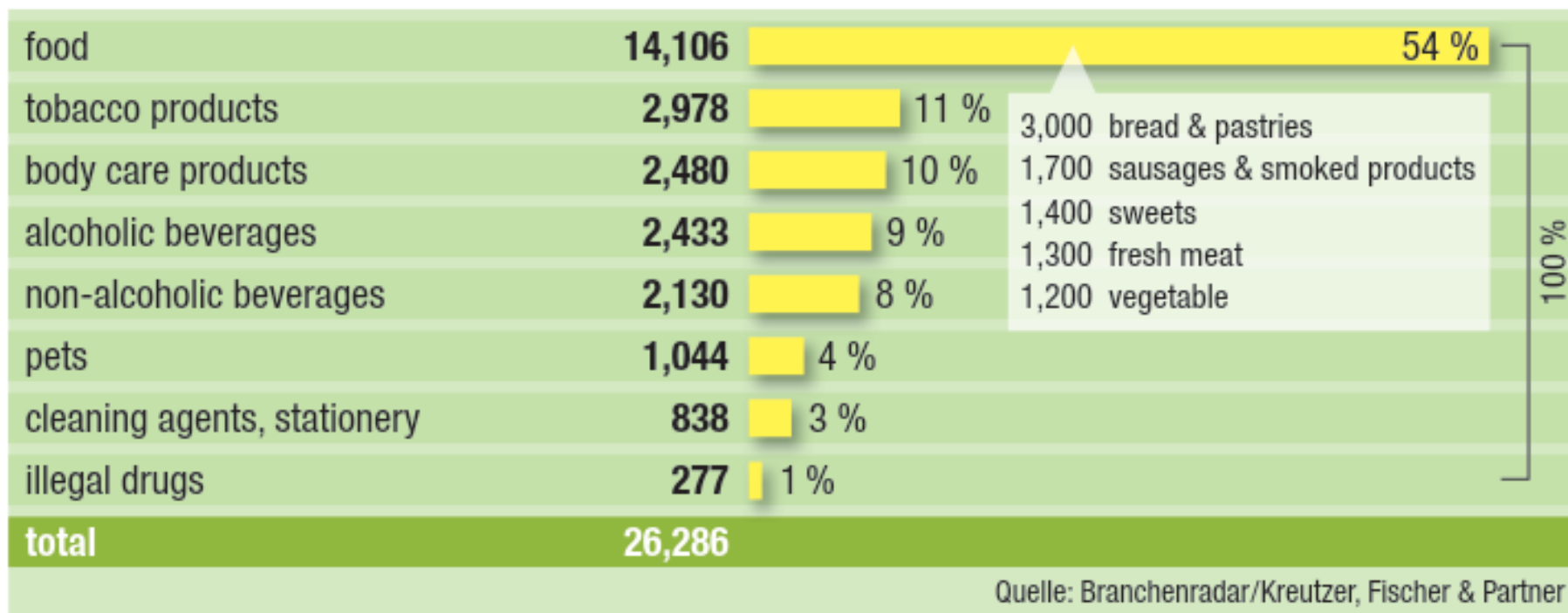


Austria: 40 Billion € / year

Vienna: ~ 4 Billion € / year

Daily Purchases

HOUSEHOLD CONSUMPTION EXPENDITURE FOR DAILY PURCHASES (in Million Euro)



- Population ~ 1.9 Million (800,000 households)
- Federal state, capital city and municipality



Vienna - Overview

- Largest employer in Austria
- 60,000 employees

Public buildings

- 22 Hospitals & Geriatric centers
Vienna Hospital Association
 - 2000 Residential buildings with 220,000 flats
Wiener Wohnen (Housing Organisation)
 - 360 Schools
 - 400 Kindergartens
 - 147 Office buildings
- } Building & Facility
Management Department

“ EcoBuy Vienna“ - Milestones

- Self-committment as model city for environmental protection
- 1998 - EcoBuy started in line with the Climate-Programme
- 2004 - Criteria were made mandatory by decree
 - All work results were published

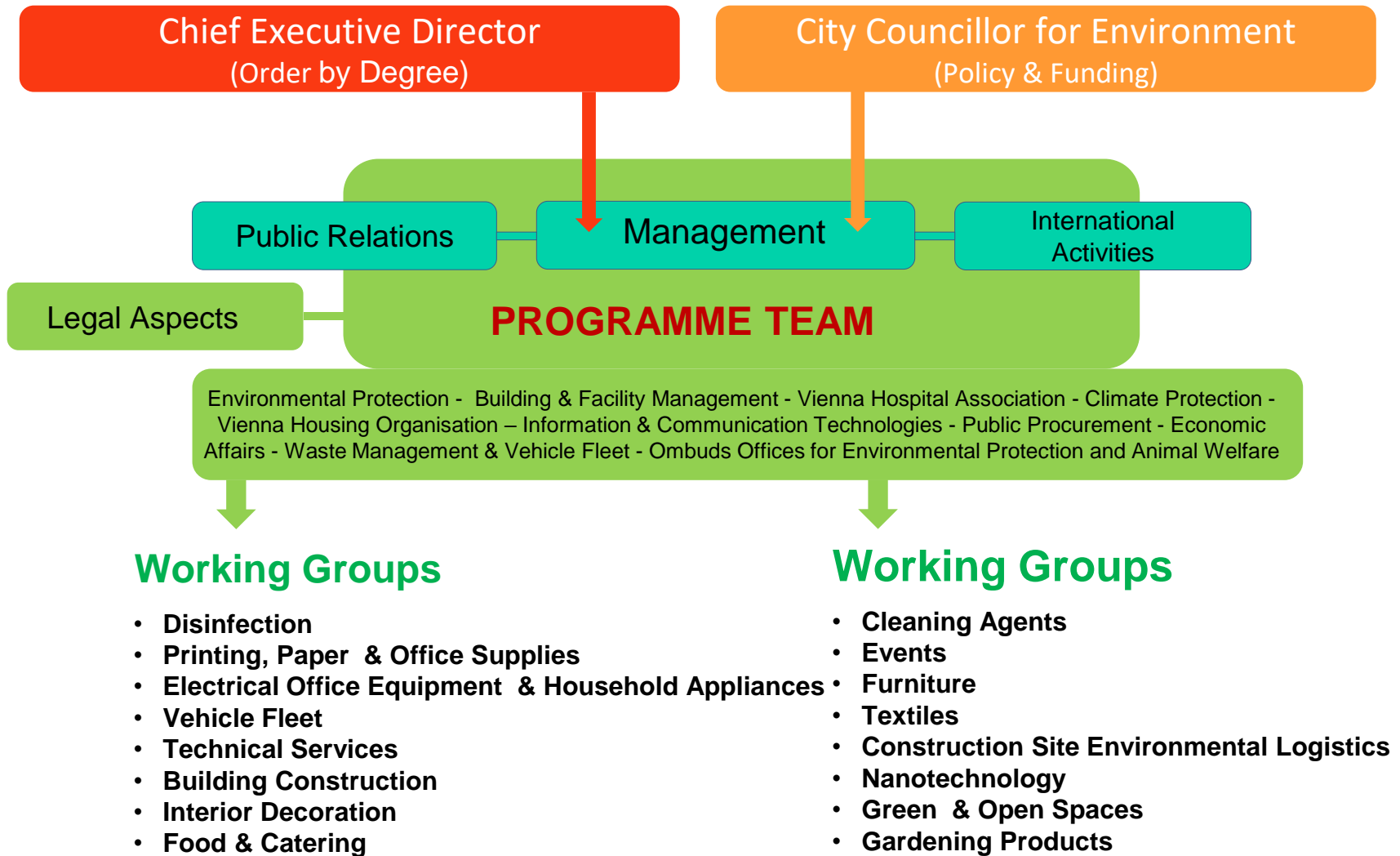
<https://www.wien.gv.at/english/environment/protection/oekokauf/>



- 2011 - UN Habitat Best Practice Award and European Sector Award (EPSA)
- 2015 – Smart Public Procurement Lab
- 2018 – 20th anniversary ?

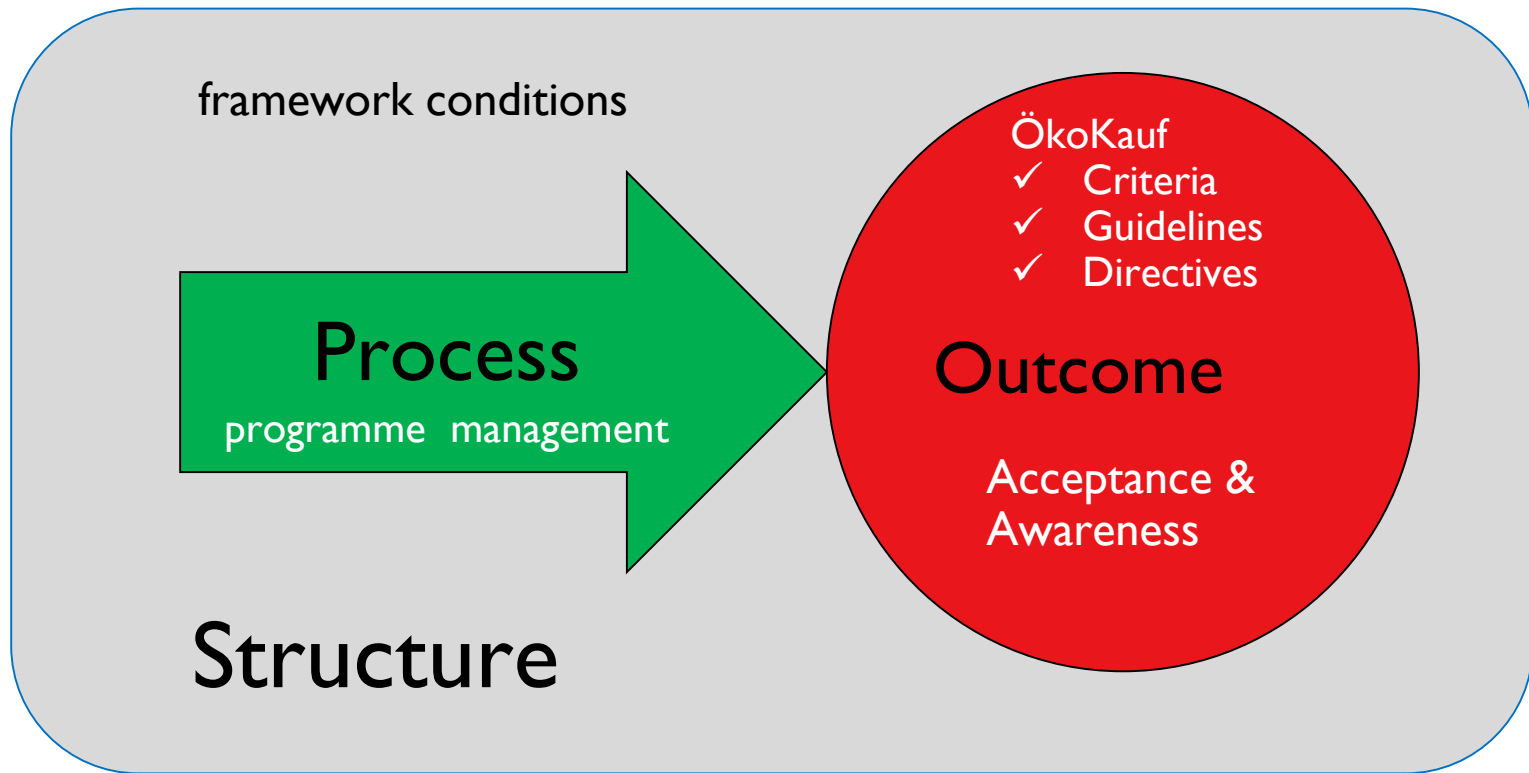


“ EcoBuy-Vienna“ – at a glance





Impact Analysis – Assessment levels



Impact Analysis 2013 - Indicators



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Ecological Impacts

- Saving of resources and energy
- Prevention of pollution
- Contribution to climate protection

Social Impacts

- Improvement of living and working conditions
- Promotion of environmentally responsible behavior
- Strengthening green public procurement



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Economical Implications

- Cost savings
- Positive influence of the supplier market
- Promotion of environmentally friendly business



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Impact Analysis – classification of results

- ✓ Electrical Office Equipment and Household Appliance
- ✓ Printing, Paper und Office Supplies
- ✓ Disinfection
- ✓ Cleaning Agents
- ✓ Furnitur
- ✓ Textiles
- ✓ Vehicle Fleet

place of work



construction

- ✓ Interior Decoration
- ✓ Building Construction
- ✓ Facility Management – Water-saving sanitary facilities
- ✓ Green and open spaces
- ✓ Construction Site Environmental Logistics

ecological

living space

- ✓ Food and Beverage
- ✓ Events and Event Management
- ✓ Prevention and Disposal Services
- ✓ Nanotechnology
- ✓ Avoiding of PVC

Impact Analysis 2013 – Main Results

- ✓ Cost savings about **1.5 million € per year**
- ✓ Reduction of **15,000 t of CO₂ per year.**
- ✓ Up to **40 % less cleaning products** are recently used with an equally good result.
- ✓ **Saving of 4 t of harmful solvents** per year.
- ✓ Reduction of air pollutants and **macroeconomic benefit of about 300,000,- €**

Download service:

www.wien.at/english/environment/protection/oekokauf/criteria-catalogues.html

Current and future focal points

- Consideration of SDG's especially Goal 12
- Greater emphasis of social criteria
- Smart Public Procurement as an umbrella brand
- 2018 – 2nd Smart Public Procurement Lab
- Position papers
 - Food & Catering and Events
 - Sustainable Buildings



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TagCloud

Smart Public Procurement Lab 2014



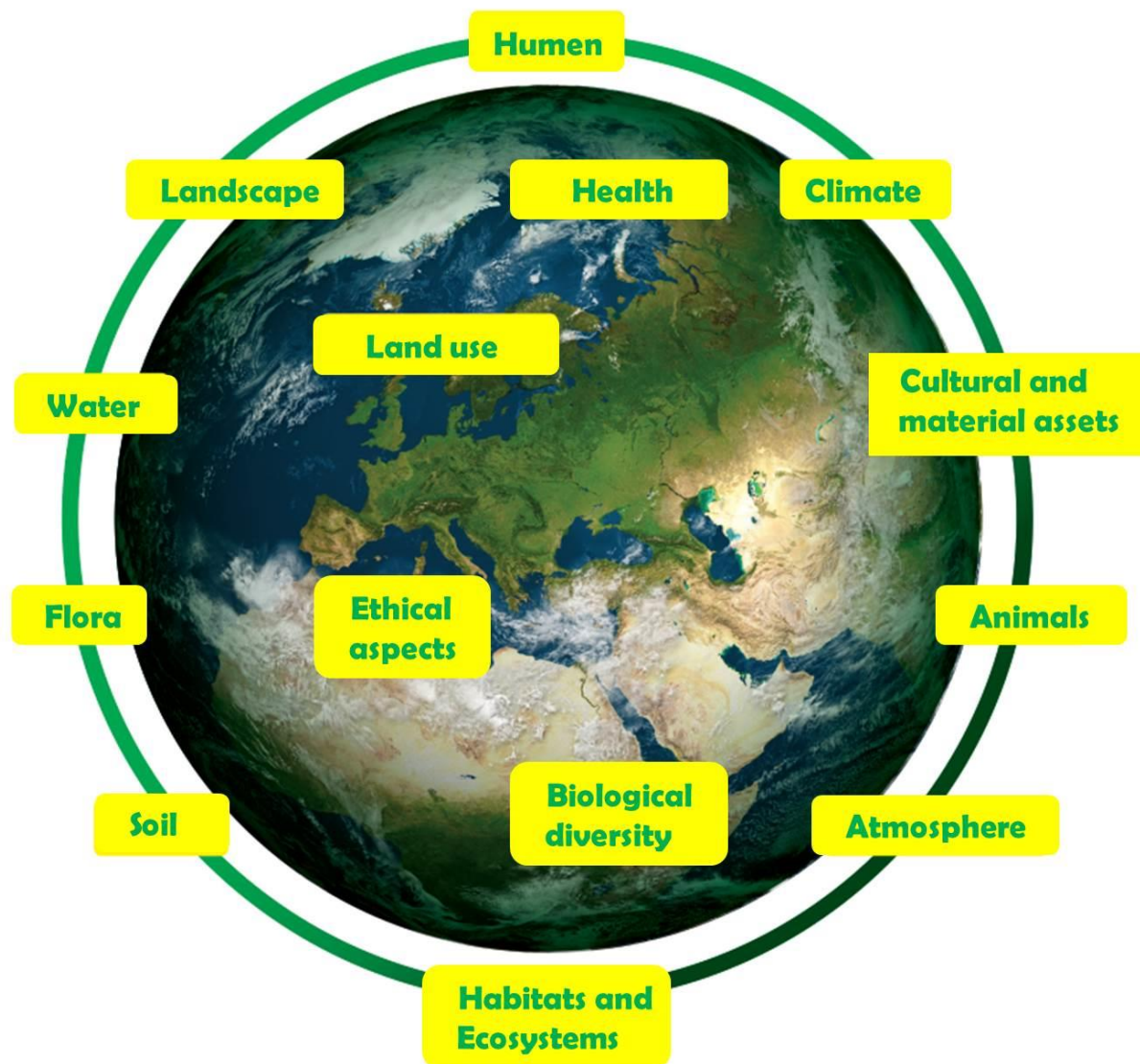
Green Public Procurement

Make

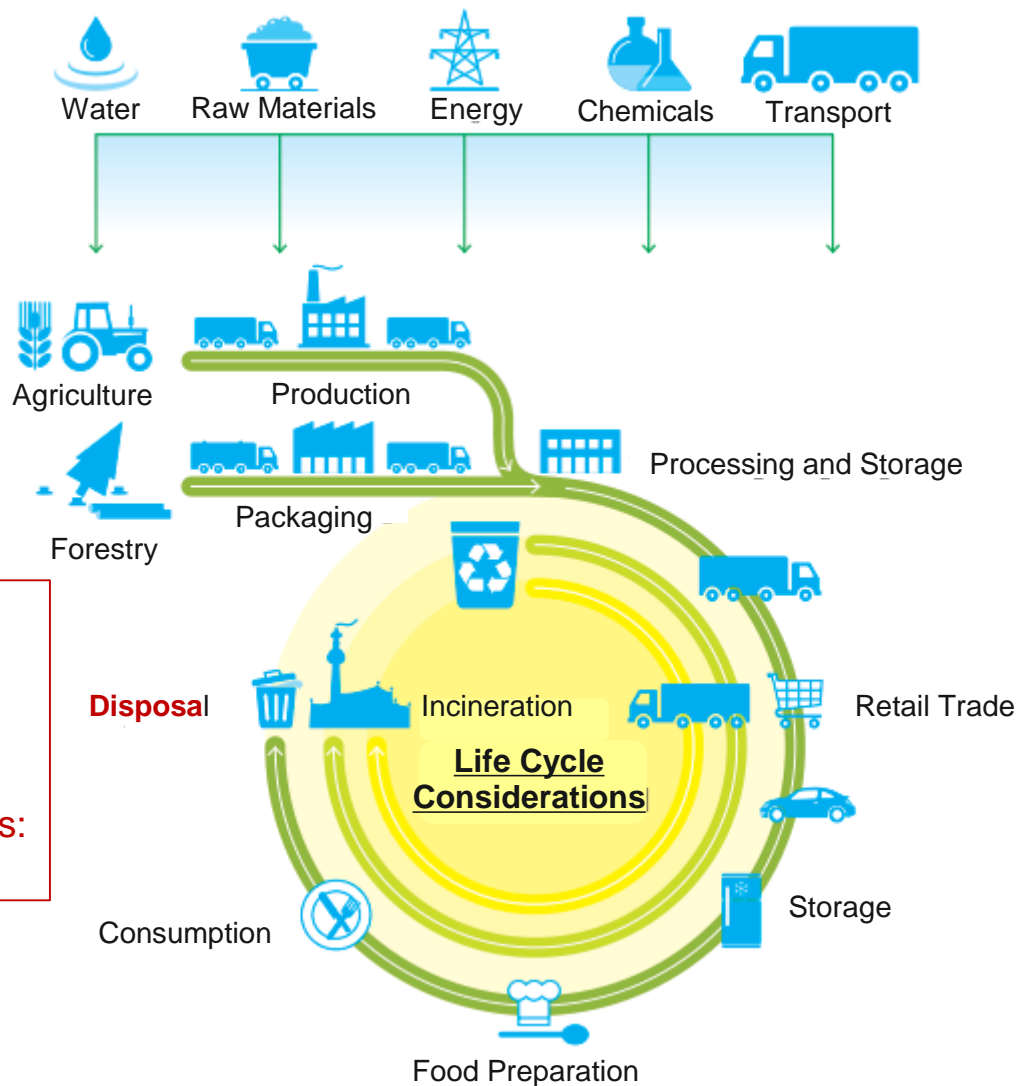
~~WATCH~~ THINGS

HAPPEN!

Objects of Protection



Life cycle considerations on food



1.3 million tonnes /year
 Food waste worldwide
 (Austria 157,000 t ,
 70,000 t in Vienna,
 40 kg / capita and year)
 expressed in money terms:
 400,- € / household

Procurement of Food & Catering

Case Study – position paper

1. Food coming from organic farms
2. Region of origin
3. Seasonality and freshness
4. Non-GMO products
5. Minimisation of waste
6. Reduction of animal products
7. Animal rights (ethical handling of animals)
8. High social standards in production and trade
9. Low degree of processing

Case Study

Charter on Sustainability Vienna North Hospital

31 sustainability criteria has been taken into account



Criteria for green buildings

AG - HOCHBAU

- Ökologische Kriterien im Schulbau (März 2009)
- Dämmstoffen aus nachwachsenden Rohstoffen (Oktober 2014)
- Dämmstoffe aus mineralischen Rohstoffen (Dezember 2011)
- Dämmstoffen aus geschäumten Kunststoffen (März 2011)
- Bitumenanstrichen und bituminösen Spachtelmassen (März 2011)
- Beschichtungen und Abbeizmitteln für Holz und Metall in Außenanwendungen (Mai 2013)
- Leitfaden Fenstersanierung (Dezember 2009)
- Außenputze (Dezember 2011)
- Fassadenfarben (Mai 2013)

AG - INNENAUSBAU

- Putze und Spachtelmassen (Mai 2013)
- Ausbauplatten (Dezember 2010)
- Innenwandfarben (Mai 2013)
- Elastische Dichtmassen (Mai 2013)
- Hohlböden (August 2014)
- Verlegewerkstoffe (November 2013)
- Bodenbeläge aus Holz und Holzwerkstoffen (August 2014)
- Laminatbodenbeläge (August 2014)
- Textile Bodenbeläge (August 2014)
- Elastische Bodenbeläge (August 2014)
- Sockelleisten (August 2014)
- Oberflächenbehandlungen mineralischer Bodenbeläge (Mai 2013)
- Beschichtungen für Estrich und Beton (Mai 2013)
- Brandschutzbeschichtungen (Mai 2013)
- Belagsbeschichtungen (Mai 2013)
- Beschichtungen für Holz und Metall sowie von Abbeizmitteln (Mai 2013)
- Informationsblätter für gesunden und ökologischen Innenausbau

Positionspapier zur Vermeidung von chlororganischen Verbindungen, insbesondere PVC)
Richtlinie

AG - BAUSTELLEN-UMWELTLOGISTIK

Entwurf: Richtlinie umweltorientierte Bauabwicklung (2014)

AG - GRÜN- UND FREIRÄUME

Richtlinie für Bodenbeläge im Freiraum – Planung (August 2011)

Fassadenbegrünung – Leitfaden (September 2013)



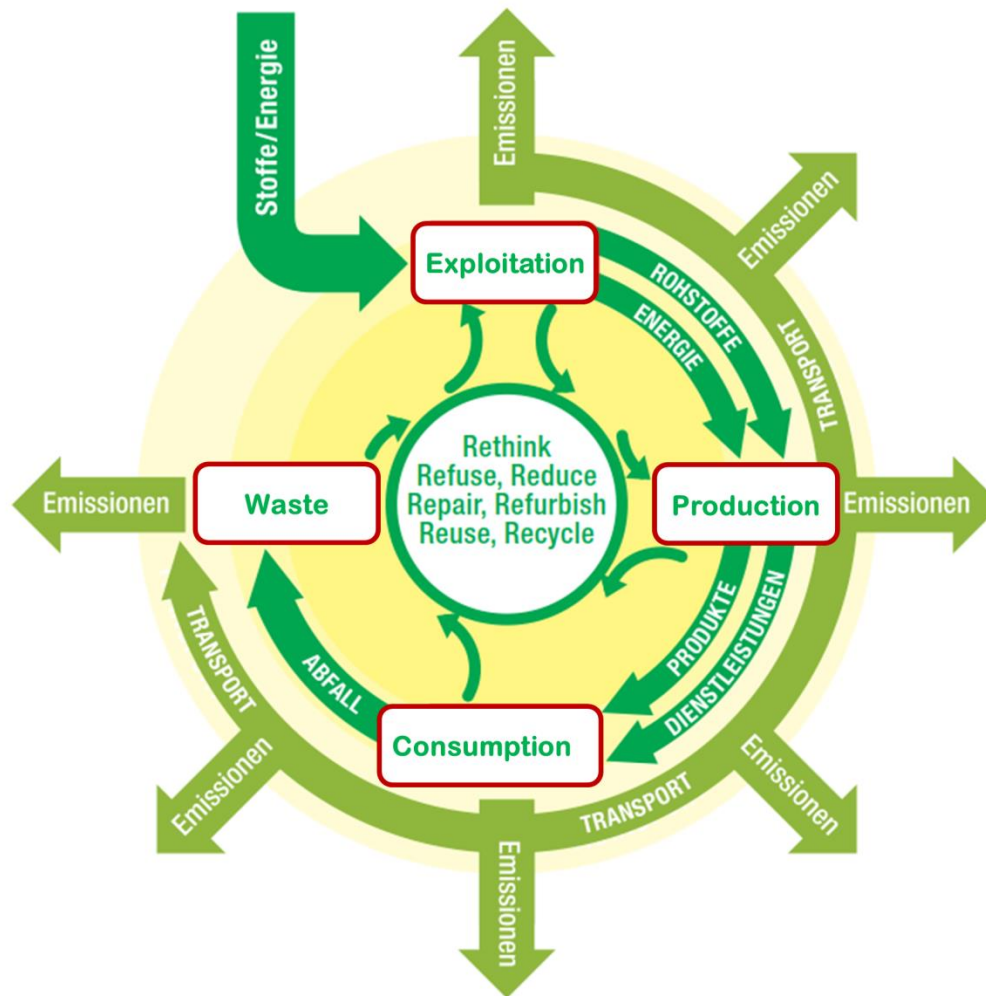
AG - HAUSTECHNIK

- Richtlinie für Haustechnik-Planungen
- Heizkörpern (April 2011)
- Heizkessel (Oktober 2014)
- Urinale (Oktober 2013)
- Aufzüge (Juni 2013)
- Wassersparende Spülkästen (Oktober 2013)
- Warmwasser-Fußbodenheizungen (April 2011)
- Heizungswasserpumpen und Kaltwasserpumpen (April 2011)
- Ergänzung der Leistungsbeschreibung durch die Stadt Wien
- Elektrische Boiler zur dezentralen Trinkwassererwärmung (Oktober 2014)
- Boiler und Speicher für Trinkwarmwasser, Frischwassermodule (Oktober 2014)
- Sanitärarmaturen und Durchflussbegrenzer bei Waschtisch- und Duschanlagen (Oktober 2014)
- Split- und Multisplitklimaanlagen mit einer maximalen Kälteleistung von 20 kW (Oktober 2013)
- Kältemaschinen und Kälteanlagen mit einer Kälteleistung von mehr als 12 kW (Oktober 2013)
- Ökologische Kriterien für die Beschaffung von Energiesparlampen (Oktober 2014)
- Leuchtmittel, elektronische Vorschaltgeräte und Beleuchtungskörper (Jänner 2015)

AG - TIEFBAU

- Die Beschaffung von Qualitätskompost im Bauwesen (Mai 2005)
- Stabilisierte Verfüllmaterialien (November 2003)

Life Cycle Considerations



„EcoBuy Vienna“ - Goals

- Greening public procurement
- Boosting the availability and the trade of green products
- Long term savings (energy, water, money,..)
- Implement criteria as (inter)national standards
- Mainstreaming GPP
- Synergies with other programmes
- Role model for citizens



“ EcoBuy-Vienna“ - Intended Effects

- Savings on resources (energy, water,..)
- Extension of product life-cycles
- Contributing to climate protection
- Reduction of emissions (air, water, soil, noise)
- Waste prevention
- Prevention of substances harmful to environment
- Promoting environmentally conscious behaviour

GPP - Consideration of green aspects

We have several options to buy green products and services:

- Immediate product decision
- Choice of tendering and award procedure
- Considerations of green aspects in the performance description
- Determination of technical specifications
- Terms of contract and implementation rules
- Determination of specific award criteria
- Life cycle considerations

Key Aspects

- Multi-stakeholder approach
- Cross departmental network of competences
- Apart from 2 full-time positions no extra staff
- Programme team, 17 working groups, 2 advisory boards (legal compliance, PR)
- About 150 employees participate
- Quality management for all results

Making Vienna an ecological place of work

		Ecological Impacts		Social Impacts	Economic Impacts
		Efficient use of resources Reduction of environmental impact	Reduction of GWP in CO ₂ -equivalents		
Working Environmentally in Vienna	Electrical Office Equipment and Household Appliances	<ul style="list-style-type: none"> Electricity Savings: 630 MWh p.a. Water Savings: 1,500 m³ p.a. Avoidance of potentially harmful surface coatings 	126 t CO ₂ p.a.	<ul style="list-style-type: none"> Higher comfort due to greater efficiency of electrical devices Facilitation of environmental conscious behaviour of users 	<ul style="list-style-type: none"> Reduction of costs for electricity and water: 113,000 € p.a.
	Printing, Paper and Office Supplies	<ul style="list-style-type: none"> 300 t office paper p.a. by means of double-sided printing Procurement criteria for with product pollutant limits Use of recycling products 	1,060 t CO ₂ p.a.	<ul style="list-style-type: none"> Sustainable use wood resources Promotion of economical paper use 	<ul style="list-style-type: none"> Effect on suppliers (certification is required)
	Disinfection	<ul style="list-style-type: none"> Complete exclusion of persistent, environmentally toxic substances 	-	<ul style="list-style-type: none"> Improved quality of working environments and reduced illnesses amongst employees WIDES database as publicity tool Awareness campaigns, e.g. to caution against using disinfectants at home 	<ul style="list-style-type: none"> No increase in costs even with higher product quality Influence on the market by means of the publicly available WIDES-database
	Cleaning Agents	<ul style="list-style-type: none"> - 37 % needed cleaning agents Reduction of environmental pollutants Cleaning without the use of chemicals 	-	<ul style="list-style-type: none"> Improved quality of working environments and reduced illnesses amongst employees Participation in the „ÖkoRein“ database 	<ul style="list-style-type: none"> Cost reduction for centralised purchasing: 28,250 € p.a.
	Textiles	<ul style="list-style-type: none"> Reduction of chemicals in textiles 	-	<ul style="list-style-type: none"> Improved quality of working environments and reduced illnesses amongst employees Criteria for socially fair procurement 	<ul style="list-style-type: none"> Effect on the suppliers (taking responsibility for the entire supply chain)
	Vehicle Fleet	<ul style="list-style-type: none"> Reduction of air pollutants: 9 t NO_x p.a. 76 t CO p.a. 25 t NHHC p.a. 0.6 t particulate matter p.a. 	-	<ul style="list-style-type: none"> Reduction of air pollutants: externalities equivalent to 113,000 € p.a. Improved of air quality 	<ul style="list-style-type: none"> Pioneer in Green Public Procurement
Total			1,186 t CO₂ p.a.		141,250 € p.a.

Energy Savings

Improved quality of working

less cleaning agents

Reduction of air pollutants

Ecological construction in Vienna

		Ecological Impacts		Social Impacts	Economic Impacts
		Efficient use of resources Reduction of environmental impact	Reduction of GWP in CO ₂ -equivalents		
Building Environmentally in Vienna	Interior Fitting	<ul style="list-style-type: none"> Reduction of solvents: 4,100 kg p.a. Reduction of other pollutants from chemicals in construction products 	37 t CO ₂ p.a.	<p><i>Employee protection</i></p> <ul style="list-style-type: none"> Provides for healthy and comfortable room conditions Awareness raising through information leaflets and the calculation tool Ö.B.U.S. Listing of „ÖkoKauf Wien“ compliant products in the database of baubook.oea Preparation and harmonization of environmental building standards 	<ul style="list-style-type: none"> Significant contribution to employee protection Effect on manufactures and suppliers
	Building Constructions	<ul style="list-style-type: none"> Ecological approach in construction works Reduction of pollutants 			
	Facility Management – efficient electric lighting	<ul style="list-style-type: none"> Electricity Savings: 7,200 MWh p.a. 	1,400 t CO ₂ p.a.	<p><i>Reduction of energy costs</i></p> <ul style="list-style-type: none"> Raising of awareness and facilitation of environmental conscious behaviour of users pioneer in resource-efficient building services and facility management Guideline for façade greening designs in order to improve the urban microclimate 	<ul style="list-style-type: none"> Reduction of electricity costs: 1,250,000 € p.a. Reduction of electricity costs: 31,000 € p.a. Reduction of water costs: 47,000 € p.a.
	Facility Management – water-saving sanitary facilities	<ul style="list-style-type: none"> Electricity Savings: 650 MWh p.a. Water Savings: 88,000 m³ p.a. 	88 t CO ₂ p.a.		
	Green and Open Spaces	<ul style="list-style-type: none"> Proposes ecological criteria for the choice of paving material 	-		
	Construction Site Environmental Logistics and Public Works	<ul style="list-style-type: none"> Efficient use of resources Use of quality compost Prevention and recovery of waste Reduction von construction site transports, e.g. at the site of Aspern Urban Lakeside: 204 t CO₂ 	315 t CO ₂ p.a.	<ul style="list-style-type: none"> Reduction of air pollutants: externalities equivalent to 179,000 € Reduction of construction site traffic, as well as noise and particulate emissions Application of quality compost as a natural fertilizer 	<ul style="list-style-type: none"> Cost of construction site logistics and environmental management are offset by improved resource balance Use of locally available resources
Total			1,840 t CO₂ p.a.		1,328,000 € p.a.

Ecologically living in Vienna

		Ecological Impacts		Social Impacts	Economic Impacts
		Efficient use of resources Reduction of environmental impact	Reduction of GWP in CO ₂ -equivalents		
Living Ecologically in Vienna	Food and Beverage	<ul style="list-style-type: none"> Procurement of organic food which is less energy-intensive and preserve natural resources Reduction of "alien" substances in the ecosystem 	11,700 t CO ₂ p.a.	<ul style="list-style-type: none"> Increased quality of food in the facilities of the City of Vienna Numerous awareness campaigns („natürlich gut Teller“, criteria for the sustainable purchase of eggs or fish, genetically modified food, etc.) Role model in the implementation of these procurement criteria 	<ul style="list-style-type: none"> Promotion of organic, regional and seasonal food Support of regional organic farmers
	Events	<ul style="list-style-type: none"> Support of more resource efficient and environmental friendly organisation of events Savings through reusable cups: 100 kg CO₂ per event (1,000 cups) 	2 t CO ₂ p.a. (reusable cups)	<ul style="list-style-type: none"> Cleanliness of event site Acting as a role model for the guests of the event 	<ul style="list-style-type: none"> Cost savings through reusable cups and dishes Influence on the market through the listing of environmentally conscious suppliers
	Prevention / Disposal Services	<ul style="list-style-type: none"> Waste from kitchens are collected for the Viennese biogas plant (equivalent of 2,100 MWhth district heat or 788 MWhel electricity) 	-	<ul style="list-style-type: none"> Highly efficient waste management system is an example both nationally and internationally 	-
	Nanotechnology	<ul style="list-style-type: none"> Impacts in different product groups 	-	<ul style="list-style-type: none"> Contact point for inquiries about the latest nano-products Impacts in different product groups Raising awareness and providing information about opportunities and risks with regard to the various applications of nanotechnologies 	<ul style="list-style-type: none"> Media campaign with strong influence on the suppliers
	PVC	<ul style="list-style-type: none"> Promotion of recyclable substitute products for PVC plastic Reduction of environmental impact (in connection with the production process and disposal of PVC) 	-	<ul style="list-style-type: none"> Improved quality of working environment (indoor air quality) Elimination of health hazards (with regards to PVC in baby products, toys and if used in neonatology) Elimination of risks in case of fire 	-
Total			11,702 t CO₂ p.a.		

Procurement of organic food

Electric office equipment & household appliances

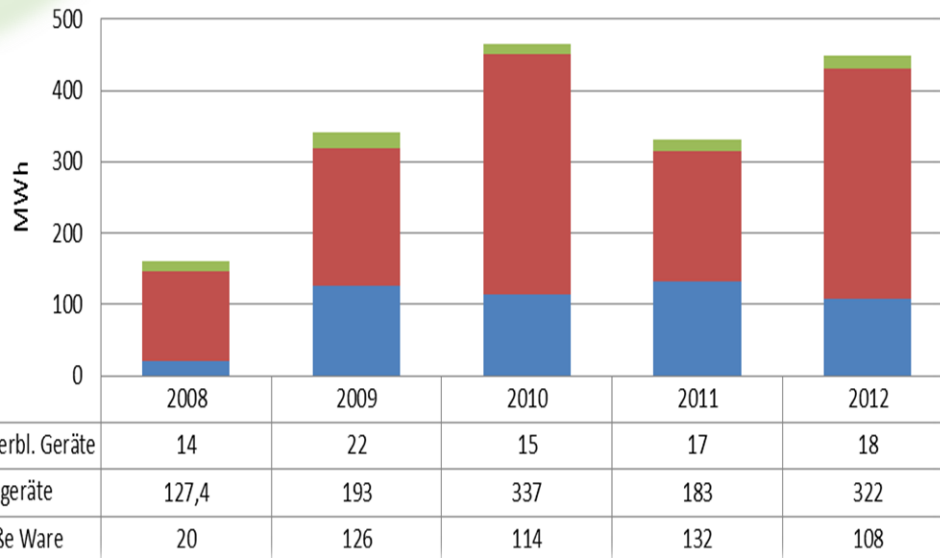
Electricity savings: 630 MWh p.a.

Ecological Impacts

Electrical Office Equipment
and Household Appliances

Efficient use of resources Reduction of environmental impact	Reduction of CO ₂ -equivalents
<ul style="list-style-type: none"> Electricity Savings: <u>630 MWh p.a.</u> Water Savings: 1,500 m³ p.a. Avoidance of potentially harmful surface coatings 	126 t CO ₂ p.a.
<ul style="list-style-type: none"> 300 t office paper p.a. by means of... 	

Stromeinsparung pro Jahr

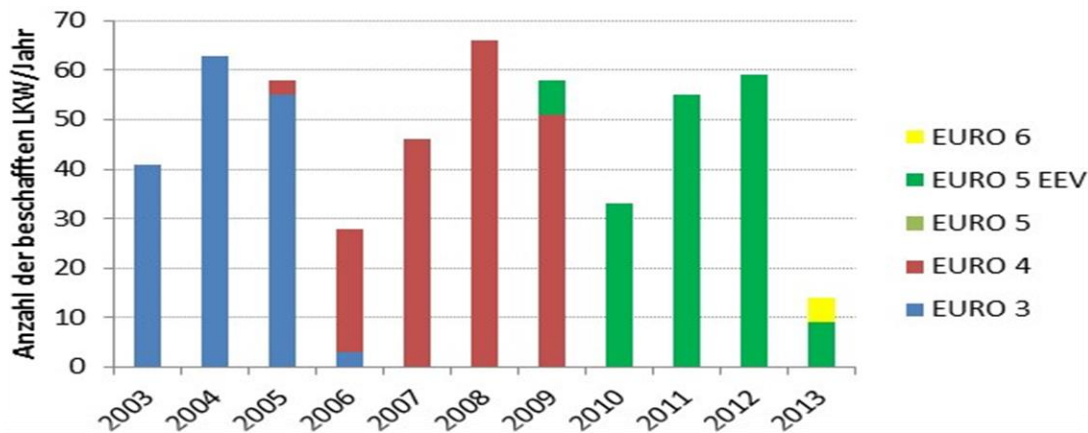


Vehicle fleet

Reduction of air pollutants

Vehicle Fleet	<ul style="list-style-type: none"> Reduction of air pollutants: 9 t NO_x p.a. 76 t CO p.a. 25 t NHHC p.a. 0.6 t particulate matter p.a. 	<ul style="list-style-type: none"> Criteria for socially fair procurement Reduction of air pollutants: externalities equivalent to <u>113,000 €</u> p.a. Improved of air quality
		1,186 t CO ₂ p.a.

LKW-Beschaffungen 2003-2013 nach EURO-Klasse



Monetäre Bewertung der Umweltkosten in Anlehnung an EU-RL 2009/33/EG

		€/kg	BETRAG
CO ₂	€/kg	0,03	0
NO _x	€/g	0,0044	40.260
PM	€/g	0,087	47.954
CO	x	X	X
HC	€/g	0,001	24.694
Geschätzte Einsparung an externen Kosten 2010-2013		GESAMT	112.908

Food

Food and Beverage	Ecological Impacts		Social Impacts	Economic
	Efficient use of resources Reduction of environmental impact	Reduction of GWP in CO ₂ -equivalents		
	<ul style="list-style-type: none"> Procurement of organic food which is <u>less energy-intensive</u> and preserve natural resources Reduction of "alien" substances in the ecosystem 	<p>11,700 t CO₂ p.a.</p>	<ul style="list-style-type: none"> Increased quality of food in the facilities of the City of Vienna Numerous awareness campaigns (<u>„natürlich gut Teller“</u>, criteria for the sustainable purchase of eggs or fish, genetically modified food, etc.) Role model in the implementation of these procurement criteria 	<ul style="list-style-type: none"> Promotion of organic, regional and seasonal food Support of regional organic farmers
	<ul style="list-style-type: none"> Support of more resource efficient and environmentally friendly organisation of 		<ul style="list-style-type: none"> Cleanliness of event site Acting as a role model for the 	<ul style="list-style-type: none"> Cost

Procurement of organic food

