



Future. Responsibility. Citizen Value.

A summary of AWM's sustainability report

2012 – Facts and Figures



ECONOMICS

18 years

— of stable low waste fees

**703 garbage
collectors and
truck drivers**

— 146 waste collection teams,
54,800 waste bins emptied per day

88 %

— of Munich's citizens are satisfied
with AWM



ECOLOGY

236 kg

— of waste per inhabitant collected and
processed; a total of 324,390 Mg per year

Nearly 35,000

— two-person households supplied with
electric power from waste (2011)

82,851 t

— CO₂ savings – as a result of business
activities



SOCIAL RESPONSIBILITY

23 nationalities

— are represented among AWM's employees

41 %

— of management personnel in higher
positions are women

14 collaborations

— with social projects and social
service providers

**20 foreign expert
delegations**

— are hosted for information and
knowledge exchanges

Greetings from Management



Axel Markwardt – First Managing Director



Helmut Schmidt – Second Managing Director

Dear readers,

This brochure summarizes our economic, ecological and social engagement and shows how we as a municipal waste management corporation contribute to Munich's livability. This includes the responsible management of Munich's solid waste with an increasing recycling rate and stable waste fees for all residents, a citizen friendly, convenient separate collection system and the reduction of greenhouse gas emissions. Furthermore, we offer job security and a comprehensive healthcare plan for employees.

In the coming years, we plan to be the first megacity in Germany to reach a recycling rate of 65% and to continue a high service standard of general interest.

Best regards,

Axel Markwardt
First Managing Director

Helmut Schmidt
Second Managing Director

Sustainability at AWM

Pioneer in Eco-efficiency

The waste management corporation of Munich (Abfallwirtschaftsbetrieb München, AWM) ensures the proper collection and management of household and commercial waste in and around Munich with a focus on citizens and the environment. Our core business of waste management has developed into a resource-efficient, closed-circle economy during recent years.

With its eco-efficient waste management concept, AWM is a pioneer in this development. For many years, we have integrated every aspect of sustainability into our planning and business decisions. By using innovative technology and sophisticated waste processing, we have achieved a positive carbon footprint already today.

Proper Handling of Recyclable Material

Besides the collection and management of residual waste, we also deal with the proper handling of recyclable material such as paper, biowaste, electronic scrap and synthetic materials, as well as industrial waste and hazardous waste.

We have built an efficient infrastructure in order to do so: in addition to our headquarters at



Georg-Brauchle-Ring and four work yards, we also operate our own repair shop. We process waste in our modern 'waste to energy' plant and close cycles of materials with our dry fermentation plant and earthworks in Freimann. We collect residual waste, paper and biowaste using a three-bin system directly from residential homes. For licensed packaging, there are approximately 1,000 recycling points available around the city.

Additionally, AWM has a total of twelve recycling centers able for collecting over 30 types of recyclables.

Numerous Measures to Avoid Waste

AWM has implemented numerous measures to avoid waste such as the re-use regulations at major events in Munich and different online services such as second-hand and repair guides. These top off our range of services.

Closed substance cycle management and resource efficiencies will be increasingly important in the future. For this reason, we will continue with our waste prevention programmes and recycling activities.

Economy

Low Waste Fees through Sound Management

As a municipal enterprise, AWM is managed in order to cover its costs by waste fees and returns any surplus to its customers. The efficient implementation of AWM's waste management concept has not only led to less residual waste in Munich but has also ensured stable fees for waste management for over 18 years. The waste fees are thus constantly far below the changes in the 'cost of living' index and lie on the lower range when compared with other large cities.

Citizen-value Services for all of our Customers

AWM is increasingly evolving into a comprehensive service provider. For example, our full services for emptying bins represent huge satisfaction levels for residents. Information is available at any time on our website, which also includes an online calendar for waste collection. AWM runs an Info Center for questions, complaints and suggestions.

We carefully tailor our services to the needs of private household, property management companies and industrial clients as well as the continued development of these services.

Regular customer surveys show that AWM is seen as a professional and trustworthy partner.

KEY ECONOMIC FIGURES

(in €)

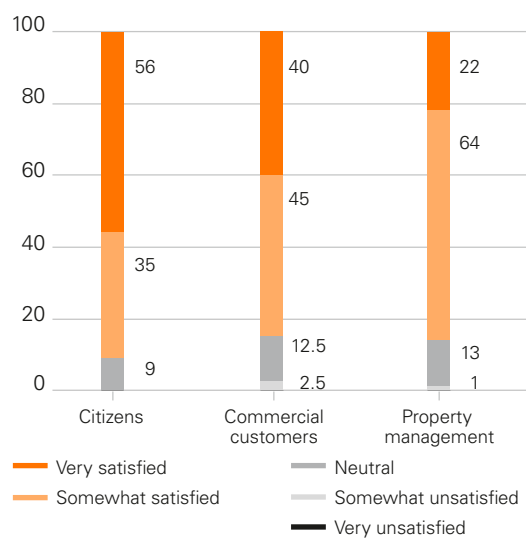
	2012	2011	2010
Sales revenue	182,447,749	185,263,000	189,280,141
Other operating income	9,752,011	7,692,291	13,245,967
Operating costs	119,863,092	125,374,411	145,312,838
Personnel expenses	71,242,382	65,755,978	60,619,846
Total expenses	191,105,474	191,130,390	205,932,683
Accumulated profit	26,882,002	19,473,470	18,268,239

AWM key economic figures in €

► In 2013 we were able to reduce waste fees for the fifth time in a row.

AWM'S CUSTOMER SATISFACTION RATINGS

(As percentages)



MANAGEMENT APPROACH

Mission Statement

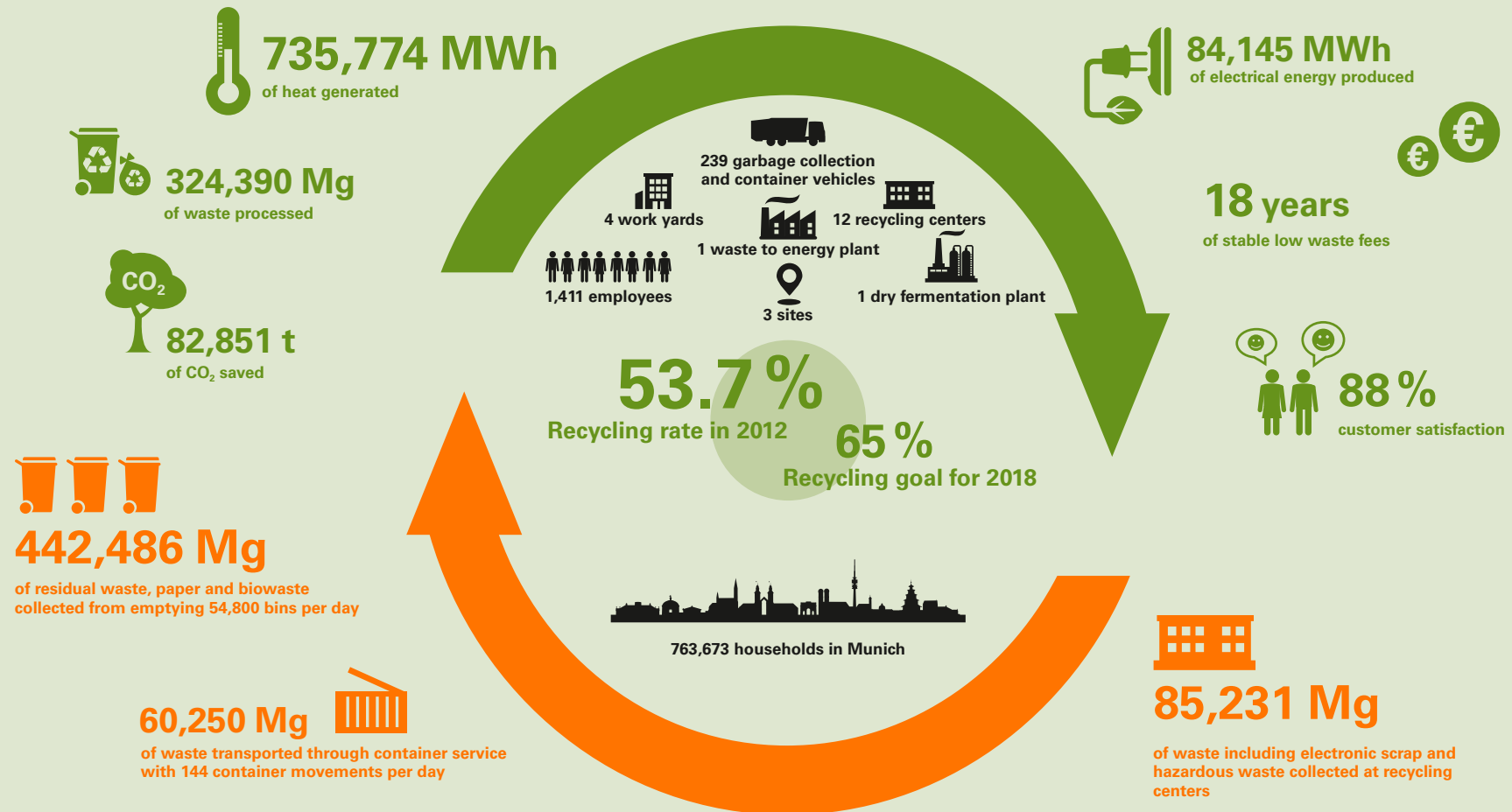
- Secure waste management, economic efficiency and high environmental standards with low fees are our contribution to the citizen value.

Guiding Principles

- In Munich AWM alone is responsible for the management of waste from the compulsory connection to the service and strives to provide high ecological and social standards while keeping costs as low and as stable as possible.
- In the market environment, its quality and scope of services – offered at a price level in line with the market – are decisive for AWM's competitiveness.

Munich's Waste – Our Responsibility

Facts and figures on AWM's way to a closed-circle economy (2012)



Ecology

Climate Protection

- Power and district heat for Munich: energy from waste
- Savings in CO₂ exceed emissions of CO₂ by a factor of six
- Munich should be the first megacity in Germany to reach a recycling rate of 65%

Resource efficiency and continued improvements to the collection, processing and management of municipal waste determine the company's main focus.

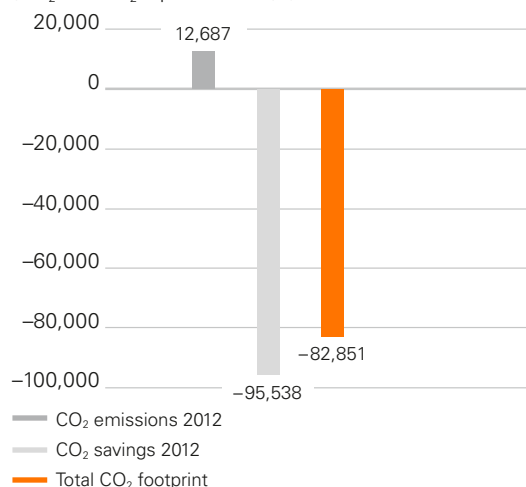
Using a 'waste to energy' plant, the operation of a high-tech dry fermentation plant and a modern vehicle fleet, we are able to make a valuable contribution to the reduction of CO₂ emissions.

Modern Infrastructure

The quality of recycling depends on a good quality of waste separation. AWM has therefore built up a network of twelve recycling centers in addition to waste bins and recycling points. The existing recycling centers are currently being modernized and being partially replaced by bulk recycling centers, which allow for higher processing rates.

AWM'S CARBON FOOTPRINT

(CO₂ and CO₂ equivalent in t/a)



AWM achieves a net reduction of 82,851 tonnes of CO₂-emissions through the use of waste to substitute fossil fuels and the production of electricity from biogas in the dry fermentation plant.

AWM is taking on a sustainability-focused construction approach and is committing itself and its providers to Munich's criteria catalog for eco-

VEHICLE FLEET CONSUMPTION

	2012	2011
Diesel (l)	2,265,451	2,299,945
Gasoline (l)	36,457	36,224
Natural gas (kg)	26,475	24,306
Operating supplies (l)	113,671	133,020

Although AWM expanded its vehicle fleet in 2012, fuel consumption fell thanks to new, fuel-efficient vehicles.

logical construction. For example, we completed an innovative carport roof in November 2011 with an area of 3,200 square meters for solar photovoltaic panels. Since its start of operation it saved 157 t of CO₂.

Vehicle Fleet

We continually invest in our fleet to maintain high standards for the vehicles and the environment. As a result, AWM was able to reduce diesel consumption. Already half of the vehicles comply with the Euro 5 emission standard or have the EEV seal of approval. AWM prefers the procurement of low emission vehicles.

► AWM's goal is to minimize its negative effects on the environment as much as possible.

► **320 kilograms of coal or 260 cubic meters of natural gas can be saved by incineration of one megagram of waste.**

Collection and Processing of Waste

Thanks to the well-planned material stream management, AWM reached a recycling rate of 59% for municipal waste in 2012. This is the rate for waste that is recycled or converted into energy. The rate includes all waste used for energy production, for recycling, and for preparation of re-use.

Closing cycles of materials

Processing waste as ecologically as possible is central to AWM. Because not every type of waste – like residual waste – can be recycled, it is used to produce electrical and thermal energy. The resulting reduction in the consumption of fossil fuels leads to a reduction in CO₂ emissions.

The combined heating and power plant 'Heizkraftwerk Nord', which is operated by 'Stadtwerke München' (Munich's municipal energy supplier), provides heat for 150,000 households.

This power plant processes 96 metric tons of waste per hour, allowing it to reach a thermal output of 172 megawatts. With the use of flue gas cleaning technology, the plant's emissions are far below all emission limits according to German Federal Emission Protection Regulation no. 17.

In the dry fermentation plant, biowaste is processed into biogas and compost by using an innovative technology. An advantage of this facility is the extremely low consumption of energy, as heat resulting from fermentation process is re-used. The biogas resulting from the fermentation produces electricity, which is fed into the public grid. In 2012, this amounted to 2,392,262 kilowatts of power. That energy could run 10,900 washing machines for a whole year. The compost that is produced is turned into high-value earth products that are sold by AWM. Thus the natural cycle of material is closed.

MANAGEMENT APPROACH

Mission Statement

- With our expertise in waste management, we make a significant contribution to improve climate protection and resource efficiency.

Guiding Principles

- AWM sets ecological standards in waste management and contributes to Munich's efforts of climate protection and resource efficiency.
- AWM encourages its consumers to both reduce and separate their waste.
- AWM focuses on reducing energy consumption, reducing the emission of pollutants, conserving resources as well as sustainable procurement practices.

Social Responsibility

AWM is characterized by its comprehensive measures for the satisfaction and health of its employees. At the same time, we are conscious of our social responsibility. This is why we employ voluntary waste consultants trained at AWM for waste prevention.

Employees

For its 1,411 employees, AWM is a reliable employer. We offer many health courses and an annual Health Day. In addition, there are measures for facilitating work and many advanced training courses for skill development. Our employees have easy access to information and they are encouraged to contribute their ideas. Equality and fairness are of upmost important to us.

Transparency

AWM makes all of the details concerning the collection and processing of waste as transparent as possible. The materials that AWM does not process itself are sent on to certified service providers selected via public tendering.

The 'International Labor Organization Guidelines' are the basis for purchases and procurement (to eliminate child labor, for example). Employees are trained and informed in order to prevent corruption.

MANAGEMENT APPROACH

Mission Statement

- We offer a safe and attractive workplace.
- We ensure that ecological, economic and social topics are of equal footing with our business. Our actions are characterized by total integrity.

Guiding Principles

- AWM sets social standards in relation to its employees and offers a safe and attractive workplace. The work atmosphere is based on appreciation and respect. Leadership is systematic and focused on results. Work protection and health promotion are important goals at AWM.
- AWM contributes to both social and public life as well as to social integration.

In addition, AWM lobbies within Germany and Europe alike for the continuity of municipal services of general interest.



► **Dedication to job satisfaction and the health of our employees.**

Social Responsibility

AWM fosters waste prevention. We have many services for re-using; exchanging, donating and selling used items.

To raise Munich citizens' awareness of waste prevention and separation, AWM arranges customer events such as the 'Public Open Day' and the 'Day of Services of general interest'. We also take our international responsibilities seriously: AWM regularly hosts foreign delegations to inform foreign representatives about sustainable waste management and to share our AWM operating experience.

Vision, Goals and Strategy

► **AWM orientates its business strategy on the principles of sustainability since 2008.**

For years, sustainability has been a core component of our business strategy, our mission, our vision and our goals. Our vision is: 'As a municipal enterprise we guarantee sustainable resource management for all of Munich's municipal waste.' This specifies a framework for the development of comprehensive goals and measures.

In order to monitor the improvements in the sustainability of our services, AWM uses a system of goals based on key figures. This illustrates the cause-effect relationships between the owner and the customer on the one hand and employees on the other. For each of these we have defined key figures that provide transparency on the success of our operations and room for improvement.

In 2012, we improved this strategy and developed management approaches in the areas of economics, ecology and social responsibility. Each of these include a mission statement, guiding principles and goals. Key performance indicators were defined to measure the sustainability of AWM's actions in the future.



AWM'S GOALS

- Reaching a recycling rate of 65 %
- Highest quality standards
- Stable waste fees
- 100 % completion of our service promises
- To remain an attractive employer
- Environmental and climate protection

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