

Updated Environmental Statement 2011

Vöhringen Works



Validation certificate

Environmental verifier's declaration on verification and validation activities

The undersigned Thomas Schneider with EMAS environmental verifier registration number DE-V-0178 accredited or licensed for the scope NACE 24.44 to have verified whether the site Vöhringen as indicated in the updated environmental statement of the organisation Wieland-Werke AG with the registration number DE-104-00108 meets all requirements of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).

By signing this declaration, I declare that

- the verification and validation has been carried out in full compliance with the requirements of Regulation (EC) No 1221/2009,
- the outcome of the verification and validation confirms that there is no evidence of non-compliance with applicable legal requirements relating to the environment,
- the data and information of the updated environmental statement of the site reflect a reliable, credible and correct image of all the sites activities within the scope mentioned in the environmental statement.

Vöhringen, 16 April 2011

Thomas Schneider
Environmental Verifier
Reg. No. DE-V-0178



Environmental policy

Wieland-Werke AG is conscious of its responsibility to nature and to society. Our environmental policy aims to contribute towards protecting our environment and sustaining its quality for the life of the community in general.

The following principles embody our objectives:

1. Responsibility for environmental protection

Environmental protection is a managerial task and as such is on a level with the other corporate objectives. Responsibility for our environmental activities is shared by all our employees and the executive. Environmental interests are considered in all the decisions taken in the Company.

2. Continual improvement

We undertake to continually improve environmental protection within the Company. This includes the economical use of resources and endeavours to improve the energy efficiency of our processes. We regard statutory provisions and official orders as minimum requirements. Wherever it makes sense from an ecological and economic point of view, our activities go even further.

3. Employee motivation

We promote our employees' environmental awareness, knowledge and initiatives through information and training measures. Our managerial staff set a leading example here, motivating the entire workforce to behave in an eco-friendly and responsible manner.

4. Product-related environmental protection

From the development stage on, we ensure that our products are manufactured, packed and transported in as ecologically sound a manner as possible. They also ought to be recyclable. Thanks to the physical and technical properties of our products, their use frequently leads to an improvement in the energy efficiency of machines, equipment and processes. In addition, our products are practically infinitely recyclable.

5. Environmental protection in the production process

Our aim is to make use of the best technology available when planning production processes and setting up and operating our facilities. We exploit every opportunity for avoiding pollutant and noise emissions, saving energy and raw materials, and avoiding, reducing or reusing waste.

6. Reducing environmental impact

We identify and review the environmental impact and performance of our products, manufacturing processes and activities on a regular basis. We take preventive action so as to minimise environmental hazards and protect land, air and water. Our organisational and technical precautionary measures ensure that any discharge of substances is prevented or kept to a minimum in the event of a disruption in operations.

7. Inclusion of service providers and suppliers

We call for environmental standards from our contractors and suppliers that are consistent with our environmental policy and we check their observance. We oblige service providers working on our Company premises to comply with our environmental standards.

8. Precautions and self-checking

We verify the implementation of our environmental policy through regular environmental audits. These serve to identify and document weak points and progress in our environmental management.

9. Informing the general public

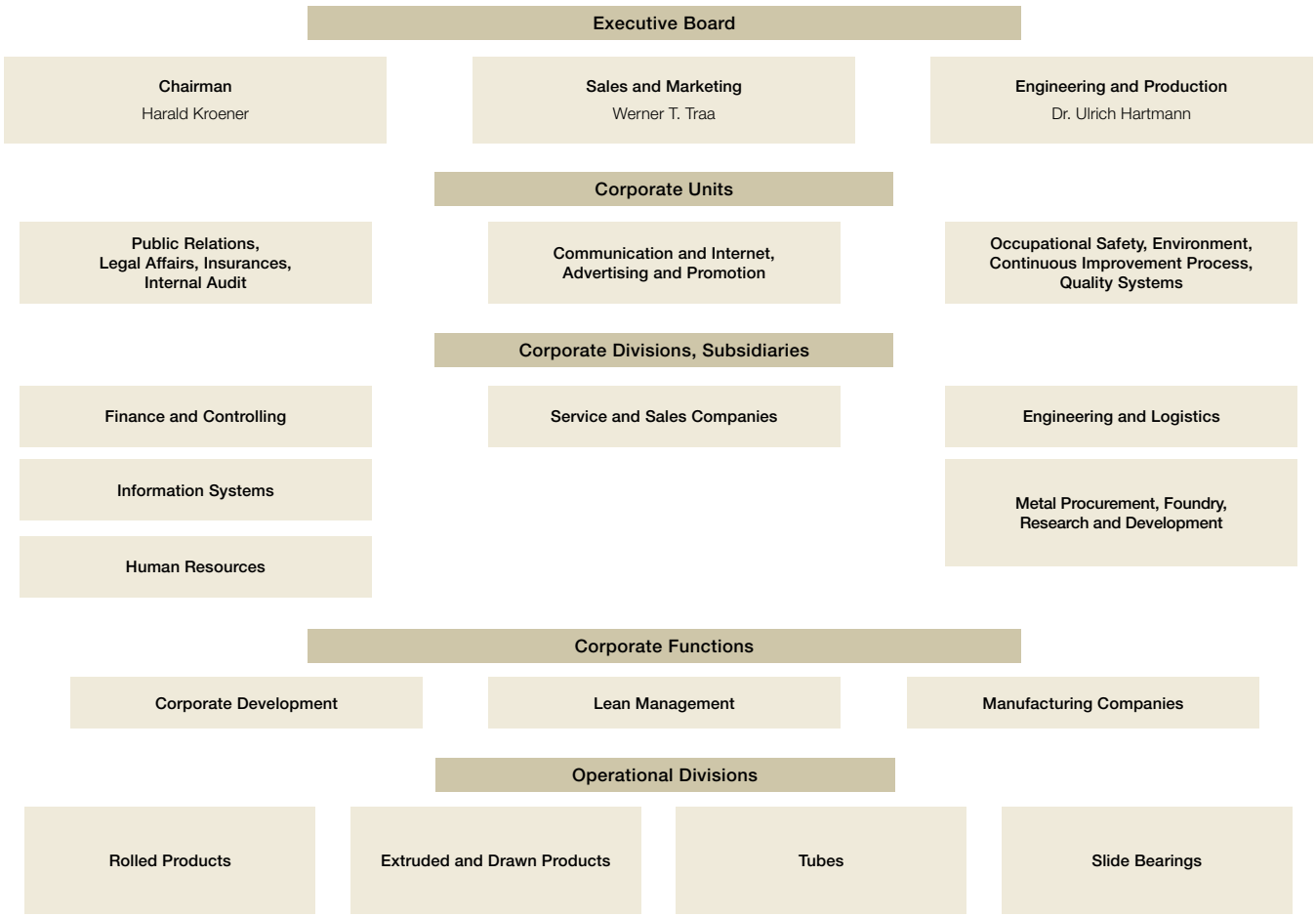
We conduct an open dialogue on our environmental policy and possible environmental impact with our customers, suppliers, public authorities, trade and professional organisations, and the general public, making information available as appropriate. Preventive measures and response procedures in relation to environmental damage and accidents are coordinated with the public authorities.

Wieland-Werke AG

Two handwritten signatures in black ink, one appearing to be "Karl R. ..." and the other "U. Hartmann".

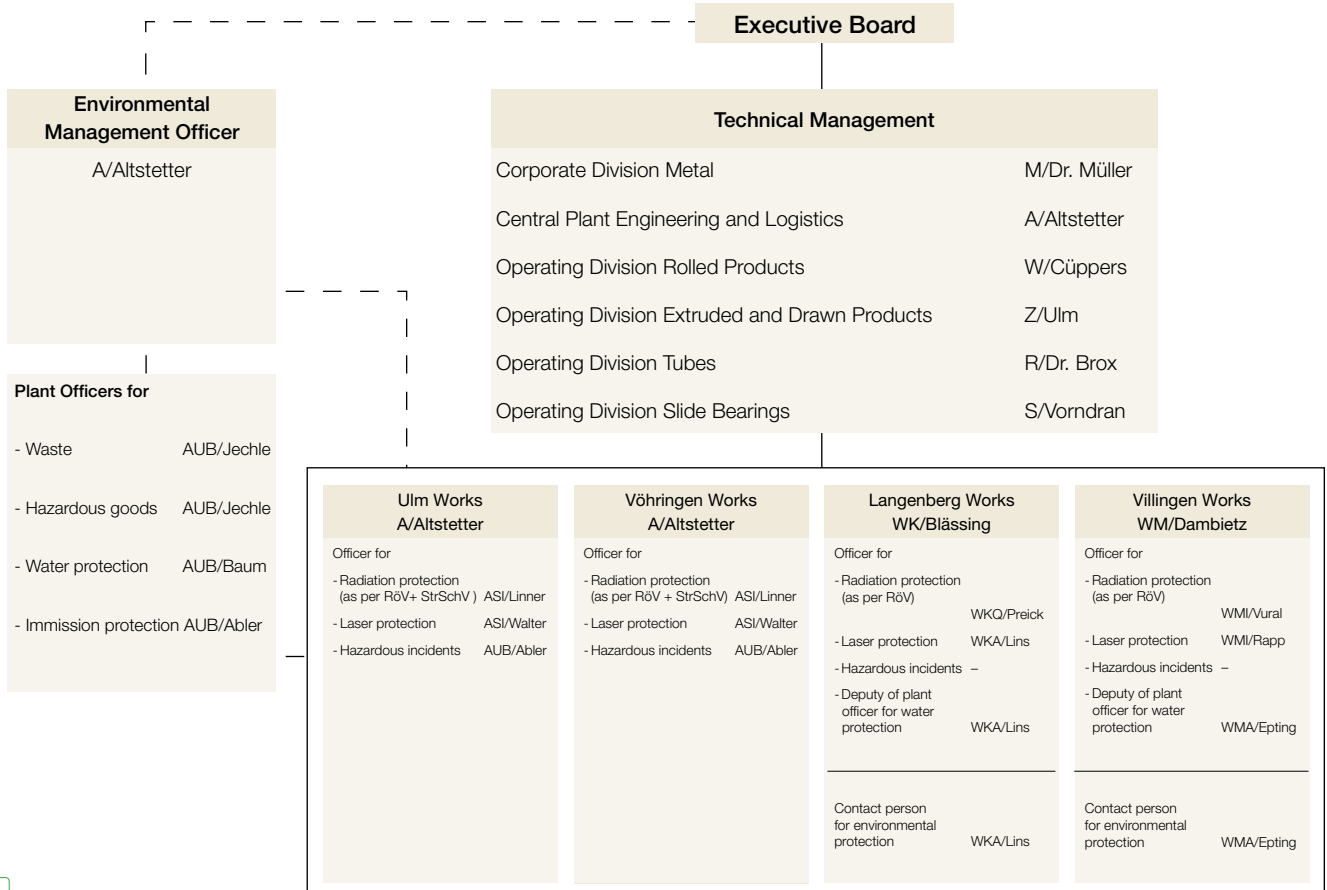
April 2010

Organisational Structure of Wieland-Werke AG



January 2011

Environmental Protection at Wieland-Werke AG

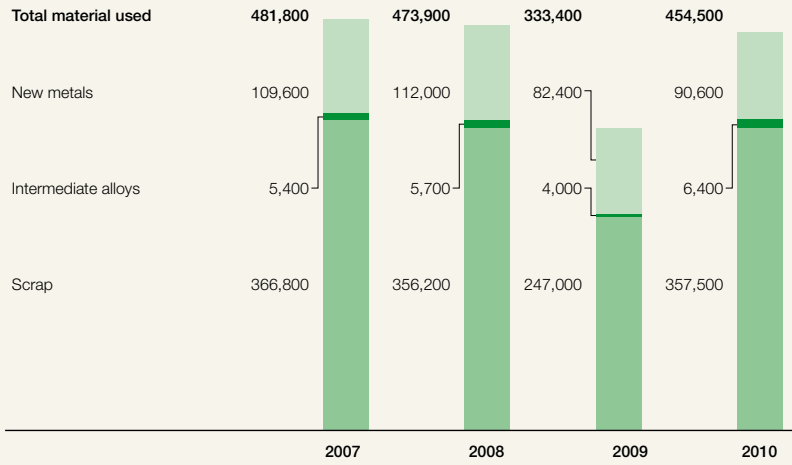


Input

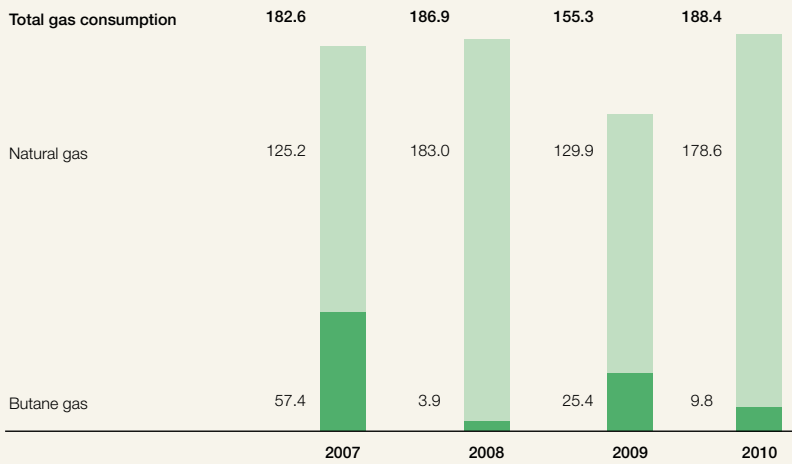


Input

Raw material input (t)



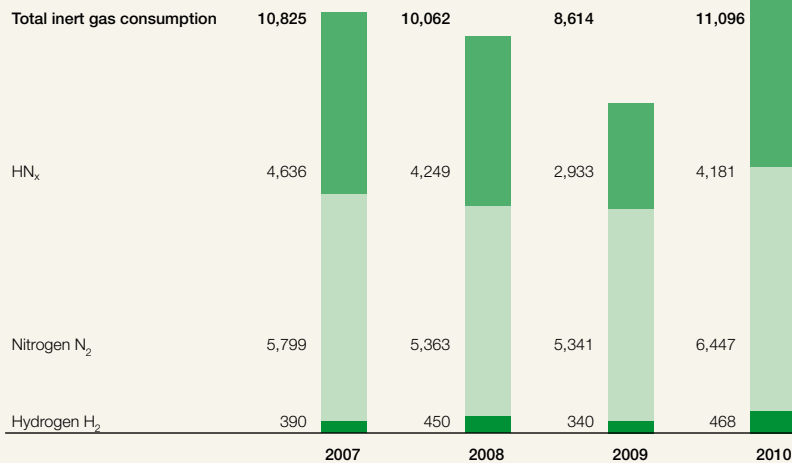
Gas consumption (million kWh)



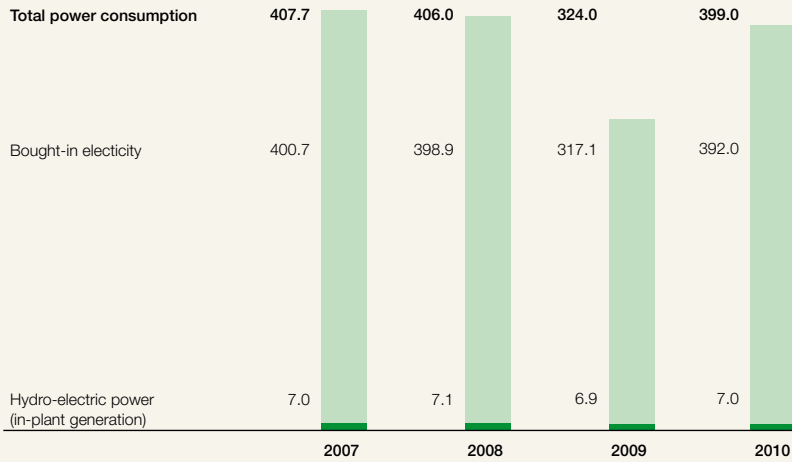
Natural gas and butane gas are alternative sources of energy whose use depends on the current price levels at a given time.

In 2010, the volume of gas used for heating decreased from over 40 % to 35 % due to the increase in process heat consumption.

Inert gas consumption (thousand m³)



Electric power consumption (million kWh)



Specific electric power consumption related to the production output (finished products) dropped by about 10 % due to higher capacity utilization in 2010.

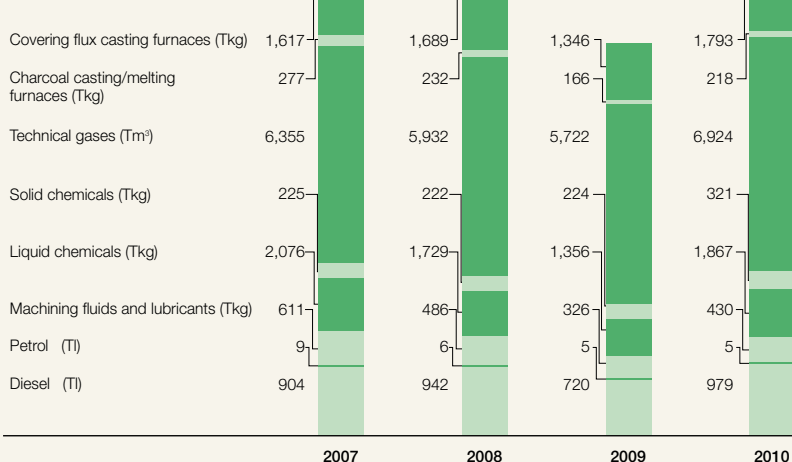
Water consumption (million m³)



Specific water consumption related to the production output (finished products) was reduced by about 15 %.

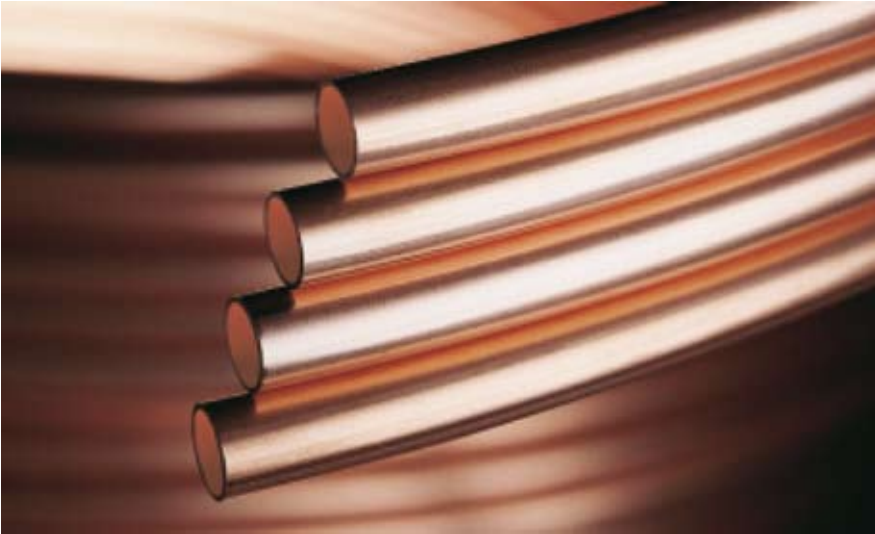
* These values were slightly adjusted due to changes in the volumes of drinking water from the town of Vöhringen.

Operating supplies

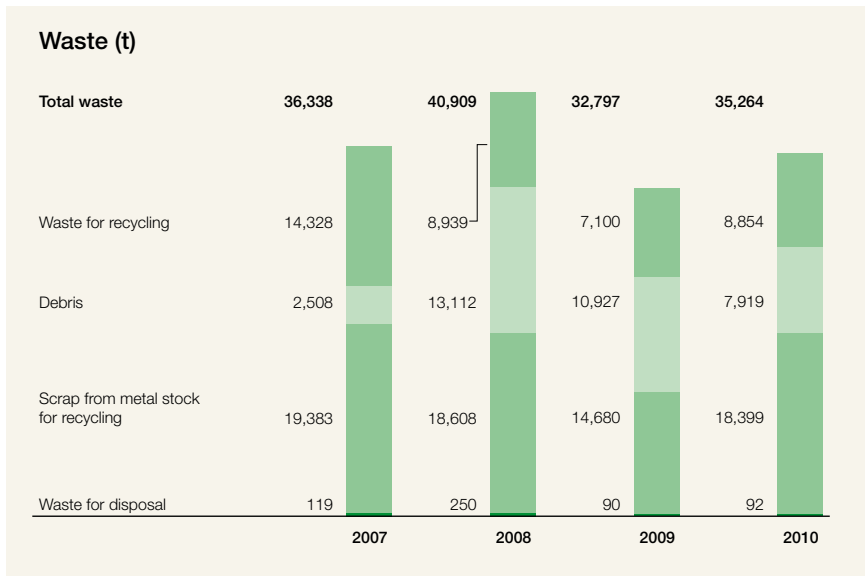
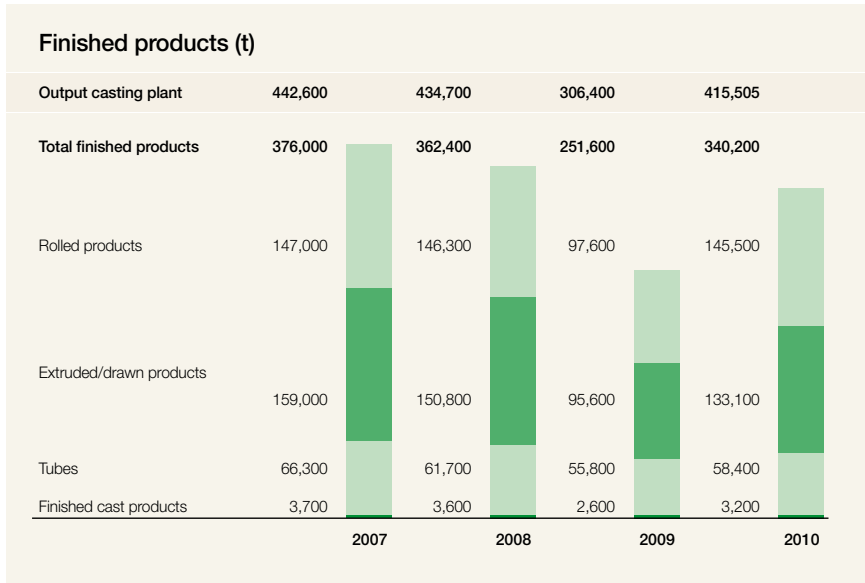


Most operating supplies were up in proportion to the higher production output. A disproportionate increase was recorded only in pickling chemicals consumption. This was due to a changed product mix in the Rolled Products Division with an increased share in surfaces requiring pickling with mixed acids.

Output



Output



The waste generated during production increased by about 17 % as the production output rose by 35 %. This means specific waste volumes (related to production output) were significantly reduced.

Hazardous waste made up 8,223 t of the total 35,264 t of waste in 2010.

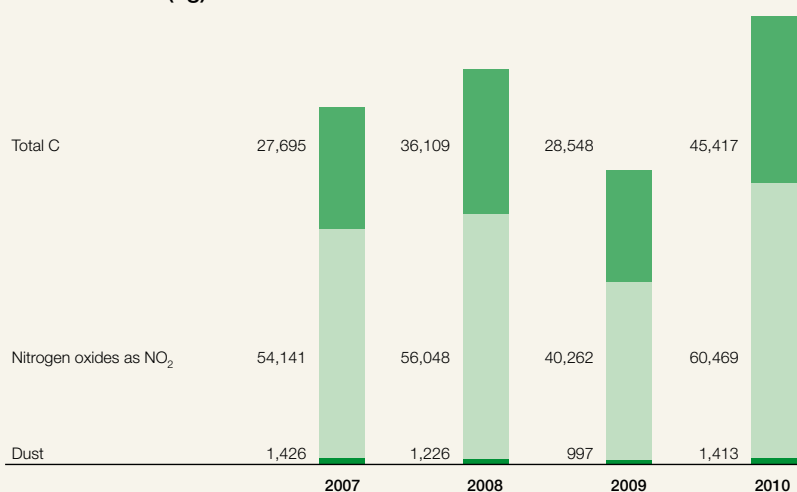
The largest fractions were:

- zinc oxide filter dust
- oil emulsions and washing liquids
- neutralization sludge from wastewater treatment
- contaminated construction waste



* These values vary from the last Environmental Statement due to necessary subsequent correction.

Air emissions (kg)



The emission loads are based on the 3-yearly emission measurements under the terms of BImSchG calculated on the basis of the actual operating hours of each source of emission.

In 2010 emissions were measured at most of the facilities.

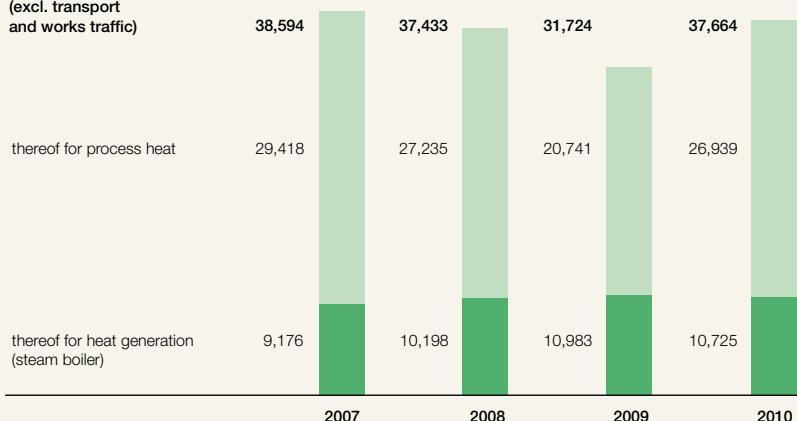
Despite the stipulation that emissions should always be measured at maximum plant utilisation levels, these are in fact "snapshot" measurements.

As a result, fluctuations in the emission measurements lead to considerable discrepancies in load calculations.

CO₂-emissions (t/a)

(directly from fossil fuel combustion)

Total t CO₂
(excl. transport
and works traffic)



We participate in CO₂ emissions trading with our heat generating facilities (steam boilers 1, 2, 7 and 8).

The certified allowance allocated for the first trading period 2008–2012 is 11,666 t CO₂ per year.

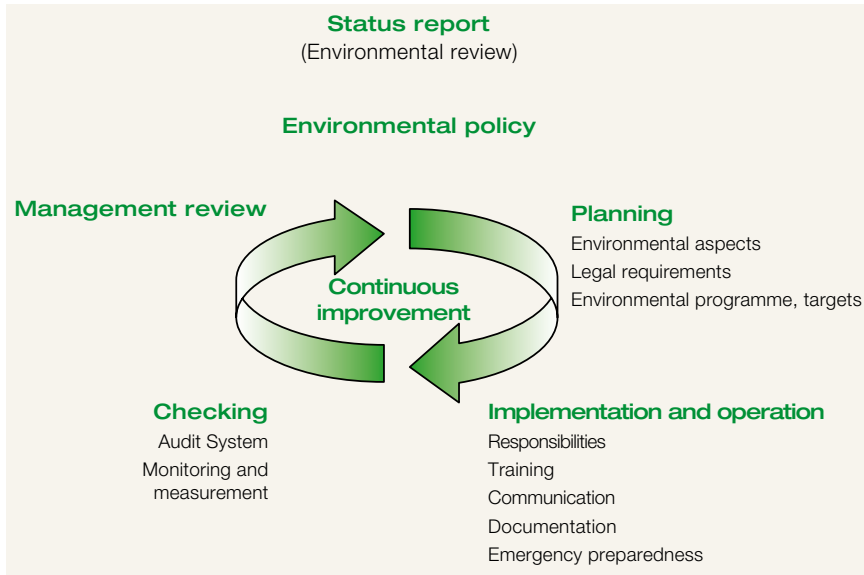
Core indicators	2009		2010	
		related to output of finished products		related to output of finished products
Energy efficiency:				
Total energy consumption	479,300 MWh	1.905 MWh/t	587,600 MWh	1.727 MWh/t
thereof renewable energies	109,932 MWh	0.437 MWh/t	138,030 MWh	0.406 MWh/t
Material efficiency:				
Raw material input, casting shop	333,400 t	1.325 t/t	454,500 t	1.336 t/t
Water:				
Total water consumption	8,121,000 m ³	32,277 m ³ /t	9,236,000 m ³	27,149 m ³ /t
Waste:				
Total waste generation	32,797 t	0.130 t/t	35,264 t	0.104 t/t
thereof hazardous wastes	4,068 t	0.016 t/t	8,223 t	0.024 t/t
Biodiversity:				
Use of land	432,754 m ²	1.72 m ² /t	432,754 m ²	1.27 m ² /t
Emissions:				
CO ₂ emissions (electricity and gas) ¹⁾	163,935 t	0.652 t/t	170,210 t	0.500 t/t
Dust and NO ₂ emissions ²⁾	41,259 kg	0.164 kg/t	61,882 kg	0.182 kg/t

The reduction in the core indicators energy efficiency, water and waste is chiefly attributable to the increase in plant utilization during the fiscal year 2009/2010.

1) Other greenhouse gases are not relevant at the location.

2) Other emissions, such as SO₂, are insignificant at the location.

The Environmental Management System



Fulfilment of the elements set out in the control cycle on the left is required for successful certification in accordance with DIN EN ISO 14001:2005 and validation according to EU Regulation No. 1221/2009 “EMAS III”.

The responsibilities, processes and procedures called for in the implementation of these elements are regulated by process descriptions and working instructions. These are integrated into the Wieland-Werke AG QM Manual. The processes which are relevant and essential to environmental management are determined by systematic “Identification and Assessment of Environmental Aspects” as set out in the Environmental Statement 2009. Employee involvement is based on close co-operation with the Works Council and on the Employee Suggestion Scheme which now includes an Environmental suggestions category. In addition, in line with our “LEAN Management policy”, many employees are committed to the group-wide continuous improvement process which also encompasses environmental protection issues.

Legal conformity

A large number of environmentally relevant laws and ordinances and various sets of rules apply to the Vöhringen location and the facilities in it which are subject to licensing. Compliance with the related requirements is monitored and reviewed at regular intervals.

All “also valid” rules and requirements follow from the environmental legislation and approvals. Supervision of compliance with them has been assigned to authorised officers. The outcome of our internal monitoring was that we found no evidence of any non-compliance with the relevant environmental regulations.

Changes at the location

At the moment, the most important environmentally relevant project is the construction of the new billet caster K3. All the stipulations under environmental legislation were already implemented at the planning stage.

The most important German laws are:

- the Federal Immission Control Act (BImSchG)
- the Water Act (WHG)
- the Closed Substance Cycle and Waste Management Act (KrW-/AbfG)
- the Federal Soil Protection Act (BBodSchG)

Environmental Programme 2010 – Environmental Performance

Objective/Programme	Individual Targets	Individual Actions	Organizational Unit Responsible	Status	Cost (in €)
Process Optimization					
Cut primary energy consumption and CO ₂ emissions through increasing plant heat utilization in the new press shop (building 64)	Extrusion press P21: improve heat utilization in billet heating: save 24 % energy over old presses	Replace obsolescent billet heating furnaces by two gas furnaces and one HTS furnace	Extruded and Drawn Products Division	End of 2010: Run-up phase largely completed, verification of energy savings possible at the end of 2011	1,000,000 (environmental content)
Reduce air emissions: new dedusting concept for the K3 billet caster	Reduce direct and diffuse dust emissions from the casting shop	Construction of a new, enclosed casting shop and an additional dedusting facility	Plant Planning Department – Metal	End of 2010 Construction and installation completed	7,900,000 (total cost of EA9 dedusting facility)
Save energy: push up the waste heat percentage of the casting shop's energy consumption	Raise waste heat utilization in the casting shop by up to 5,000 MWh through setting up a central NT network	Set up a central closed-circuit recooling system for the new billet caster feeding into the air-intake system	Energy Management Department and Plant Planning Department – Metal	End of 2010: construction and installation completed; verification of energy savings possible at the end of 2011	approx. 1,000,000 (environmental content)
	Improve waste heat utilization in the casting shop by raising the furnace coil cooling temperature from 40 °C to > 70 °C	Carry out an experiment on the O74 melting furnace	Energy Management Department	End of 2010: test postponed to 2011	20,000
Save energy: Implement an energy-saving project in the Vöhringen works	Reduce energy costs by 10 % together with marked cut in consumption	Implement measures as per priorities list	Energy Management Department	Completion scheduled for end of 2012	approx. 500,000
Protect water: reduce water and waste water volumes in the new press shop (building 64)	Extrusion press P21: Cut waste water by approx. 1,000 m ³ /year and cooling water consumption by approx. 100,000 m ³ /year	Replace 3 obsolescent presses by new P21 press with closed-circuit recooling systems	Extruded and Drawn Products Division	End of 2010: Run-up phase largely completed, verification of energy savings possible at the end of 2011	2,000,000 (environmental content)
Protect water: avoid risk when draining tanks	Create a secure chemicals drainage area	Build a tank drainage site for pickles and brines at building 17	Energy/Waste Management Department	End of 2010 Construction and installation completed	30,000
Protect water: Reduce water pollution in tube drawing shop	Improvements in water protection through closed circuit cooling water system at extrusion press P15	Re-cool cooling-water pond with external heat exchanger	Energy Management and Tube Drawing Departments	End of 2010 Project completed	200,000
Continuous Improvement Process					
Reduce noise immissions at the Vöhringen works	Targeted identification of noise sources using modern measuring technology	Film critical areas with special camera	Maintenance Department	End of 2010 Measurements completed, results are available	10,000
Reduce waste volumes at the Vöhringen works	Push up recycling quota by increasing metal recirculation in the casting plant	Construct and start up a slag-sorting facility for slag from the casting process	Plant Planning Department – Metal	End of 2010: construction and installation completed; start-up still outstanding	1,175,000
Optimize Wieland-Werke AG's Environmental Management System	Heighten benefits through revised presentation	Reduce number of working instructions and present "also valid" documents more clearly as such	Environmental Protection Department	End of 2010: postponed until after completion of EIMS	–
Organizational Measures					
Improve plant and materials management at Wieland-Werke AG	Build up shared database for materials and plant for the four Wieland-Werke AG works	Set up an Environmental Information Management System (EIMS) based on a procured software solution	Environmental Protection Department	End of 2010: software installed, data transfer complete; expansion across works in the course of 2011	50,000
	Centralized processing of all individual requirements under approval notices for all plant subject to approvals	Introduce software for monitoring approval deadlines as part of the Environmental Information Management System	Environmental Protection Department	2011	20,000

Environmental Programme 2011

Objective/Programme	Individual Targets	Individual Actions	Organizational Unit Responsible	Target Date Implementation	Cost (in €)
Process Optimization					
Cut primary energy consumption and CO ₂ emissions through increasing plant heat utilization	* Extrusion press P21: improve heat utilization in billet heating: save 24 % energy over old presses	Replace obsolescent billet heating furnaces by two gas furnaces and one HTS furnace	Extruded and Drawn Products Division	Verification of energy savings possible at the end of 2011	1,000,000 (environmental content)
	Dismantle plant steam network and replace with a hot water network with improved waste heat feed	Set up new central steam/hot water transformer station in building 17	Energy Management Department	March 2011	500,000
Save energy: push up the waste heat percentage of the casting shop's energy consumption	* Raise waste heat utilization in the casting shop by up to 5,000 MWh through setting up a central NT network in the area of billet casting shop K3	Set up a central closed-circuit recooling system for the new billet caster feeding into the air-intake system	Energy Management Department and Plant Planning Department – Metal	Verification of energy savings possible at the end of 2011	ca. 1,000,000 (environmental content)
	Heat new office building (building 86) with waste heat	Extract waste heat from continuous furnace DO48	Energy Management Department	November 2011	100,000
	* Improve waste heat utilization in the casting shop by raising the furnace coil cooling temperature from 40 °C to > 70 °C	Carry out an experiment on the O74 melting furnace	Energy Management Department	September 2011	20,000
Increase efficiency: implement an energy-saving project in the Vöhringen works	Reduce specific energy consumption per tonne produced by 2 %	Implement measures as per priorities list	Energy Management Department	December 2011	approx. 500,000
Protect water: reduce water and waste water volumes in the new press shop (building 64)	* Extrusion press P21: Cut waste water by approx. 1,000 m ³ /year and cooling water consumption by approx. 100,000 m ³ /year	Replace three obsolescent presses by new P21 press with closed-circuit recooling systems	Extruded and Drawn Products Division	Verification of volume reduction possible at the end of 2011	2,000,000 (environmental content)
Resource efficiency: copper recovery from waste	Copper recovery from used pickles and copper-bearing scrap/recyclables	Cooperation project with BIFA and the Knittel company	Energy/Waste Management Departments	Feasibility study in 2011, pilot plant in 2012	400,000 (complete project)
Continuous Improvement Process					
Reduce waste volumes at the Vöhringen works	* Push up recycling quota by increasing metal recirculation in the casting plant	Construct and start up a slag-sorting facility for slag from the casting process	Plant Planning Department – Metal	May 2011	1,175,000
Optimize Wieland-Werke AG's Environmental Management System	Heighten benefits through revised presentation	Reduce number of working instructions and present "also valid" documents more clearly as such	Environmental Protection Department	December 2011	–
Reduce CO ₂ emissions	Determine Wieland-Werke AG's corporate carbon footprint (CCF)	Project with external consulting agency	Trade Association Work Department	September 2011	13,000
Organizational Measures					
Improve plant and materials management at Wieland-Werke AG	* Build up shared database for materials and plant for the four Wieland-Werke AG works	Set up an Environmental Information Management System (EIMS) based on a procured software solution	Environmental Protection Department	Expansion across works by September 2011	50,000
	* Centralized processing of all individual requirements under approval notices for all plant subject to approvals	Introduce software for monitoring approval deadlines as part of the Environmental Information Management System	Environmental Protection Department	2011	20,000

* Individual target carried over from the Environmental Programme 2010.

Wieland-Werke AG

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0541-01272/05.11 AG PDF (3/WWA)