COUNTRY PRACTICE
IN ENERGY STATISTICS

Topic/Statistics: Energy Consumption in the Service sector

Institution/Organization: Statistics Austria

Country: Austria

Date: 14 March 2012

CONTENTS

Abstract

In recent years the importance of the service sector has increased steadily. This sector is adding a significant contribution to the value of the total economy and covers a large proportion of the workforce. The sector of public and private services in Austria accounts a proportion of around 12% of the final energy consumption in 2008. In addition the transport-related consumption of this sector should be noted.

As part of the energy balances there is data available for the overall service sector at energy sources level but there is only little detailed information available on energy consumption of this sector at sectoral level (NACE divisions).

The first survey of energy consumption in the service sector was carried out for the reference year 2003. Here, the annual energy consumption was collected and the main aim of this survey was to improve the data basis for the energy balance (physical and monetary) and to meet the higher requirements of this accounting system. In recent years, however, there is an increased interest in capturing and presenting the energy consumption in this very heterogeneous sector in detail.

In the framework of the EU Directive on energy efficiency and energy services from 17 May 2006 the availability of detailed data of this sector's also becomes more important to formulate instruments that support energy efficiency, to perform specific energy programs and to measure the success of energy saving programs.

Against this backdrop, the central objective of the survey for the year 2008 is winning substantial information on energy consumption and its structure within the service sector.

This statistics comprises consumption and the associated expenditure of establishments (2003)/enterprises (2008) in the service sector, broken down by predefined fuels. It is a voluntary sample survey with a sample size of 2 500 establishments (2003), respectively a sample size of 12 000 enterprises (2008). The data source used to define the universe is the Business Register.

The results of the survey are incorporated in the calculation of the Austrian energy balances at the overall sectoral level and at a detailed sectoral level in the energy accounts. For 2008 the results are published also separately.

Key elements	
Name of the statistics	Energy consumption in the service sector
Background and purpose of the statistics	Survey the Energy consumption in the service sector
Population, sample and data sources	2003: Establishments in the ÖNACE 2003 economic section E (of which only division 41), G, H, I, J, K und O (of which only division 92 and 93) with more than two employees or 2008: Enterprises in the ÖNACE 2008 economic sections from G to S (divisions 45 to 96) with two and more employees
Main users	Statistics Austria: Energy balance, Energy Accounts
Important contribution or issue addressed	Energy balance, Energy Accounts
Other remarks	Residence principle

1. General information

1.1. Name of the statistics/topic

The statistics/topic could either be a specific energy statistics (e.g. electricity production) or a topic within energy statistics (e.g. energy balances). For more information, please see Section III of the Instructions.

Energy consumption in the service sector

1.2. History and purpose

State when the statistics were first published.

Due to the specific nature of this survey, which makes the results on their own not very meaningful, it is not published independently for 2003; it was first published for the reference year 2008.

Describe briefly the main purpose of producing the statistics and why it is relevant.

The survey on Energy consumption in the service sector aims to improve the data basis for the Energy Balances and Energy Accounts and thus meeting the increased requirements that apply to these bodies of statistics.
The statistics comprise energy consumption in physical and monetary units in the services sector broken down by energy sources, namely gasoline, diesel, LPG, gas oil (2003 only), fuel oil, natural gas, electricity, district heat, fuel wood (2003 only), wood pellets, wood chips, biogenic energy sources and others.

1.3. Reference period

State the time period the data are collected for.

Calendar year

1.4. Frequency

Specify how often the statistics are disseminated (e.g. annually, monthly, quarterly, etc.). If the statistics are not produced at regular intervals, state at what times they have been produced in the past and the main reasons behind the irregularities.

5 yearly

1.5. Dissemination

Describe how the statistics are published (e.g. printed publications, online publications, online databases, etc.). If applicable, include the web address to the main website of the statistics.

The results 2003 are not published separately but as integrated part of the Energy Balances and the Energy Accounts. The results 2008 are currently published on the Internet on the Statistics Austria website – Energy in the form of an online publication..

1.6. Regional level

State the lowest geographical level (e.g. administrative regions, municipalities, etc.) for which the statistics are made available to the public.

Nuts 2

1.7. Main users

Identify the key users of the data and the main applications. Include both internal and external users, and if possible try to distinguish between end users and others.

Statistics Austria, Directorate Spatial Statistics: Energy balance, Energy Accounts

1.8. Responsible authority

Write the name of the institution and department/office with the main responsibility for disseminating the statistics (e.g.: Statistics Norway, Department of Economics, Energy and the Environment).

Statistics Austria, Directorate Spatial Statistics, Energy & Environment

1.9. Legal basis and legally binding commitments

State the national legal basis for the data collection. Include a complete reference to the constitutional basis, and web address to an electronic version (e.g.: The Statistics Act of 16 June 1989 No. 54, §§2-2 and 2-3, http://www.ssb.no/english/about_ssb/statlaw/forskrift_en.html).

Federal Statistics Act 2000, as amended

If the data collection is not based on a legal basis, give a short description of other agreements or volunteer arrangements.

Five-year contracts with the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) and the Austrian Federal Ministry of Economics, Family and Youth (BMWFJ, formerly BMWA)

If applicable, give reference to national and international commitments that are legally binding (e.g. EU statistical legal acts).

Regulation (EC) No. 1099/2008 of the European Parliament and of the Council of 22 October 2008 on Energy Statistics.

1.10. Resource requirements

Specify how the production of the statistics is financed (e.g. over the ordinary budget, project based support, financial support from other institutions or organization). If applicable, state the contracting entity (e.g.: Ministry, EU Commission, OECD). A contracting entity is any entity which is ordering a survey or the compilation of a statistics, and paying for it

Normally the survey is financed by BMLFUW and BMWFJ, of which each covers 50% of the implementation costs; the survey 2008 has an exceptional character as for the extension of the sample it was in addition cofinanced by BMLFUW and E-Control (Austrian Energy Regulator).

Specify the resource requirements for producing the statistics (e.g. man-labour days, number of workers involved in the statistical production process of the statistics/topic in question).

~150 person days, 2 persons involved

1.11. International reporting

List any international organizations and names of reporting schemes that the statistics are reported to. If available, also include the website where the reported data are published (e.g. International Energy Agency, Monthly Oil Statistics, UNSD, etc.).

Not relevant

2. Statistical concepts, methodology, variables and classifications

2.1. Scope

Describe the scope of the statistics (e.g. the statistics cover supply and use of all energy products in Norway, classified according to International Standard Industrial Classification of All Economic Activities – ISIC).

The statistics comprise energy consumption in physical and monetary units in the services sector broken down by energy sources, namely gasoline, diesel, LPG, gas oil (2003 only), fuel oil, natural gas, electricity, district heat, fuel wood (2003 only), wood pellets, wood chips, biogenic energy sources and others.

2.2. Definitions of main concepts and variables

Describe the main concepts (e.g.: territory principle, resident principle, net calorific value, gross calorific value).

Resident principle

Describe the main variables (e.g. how are the different energy products defined in the statistics? How are production, intermediate consumption, final consumption, transformation, feed stock, the energy sector, etc. defined?).

Energy consumption is broken down by energy sources namely gasoline, diesel, LPG, gas oil (2003 only), fuel oil, natural gas, electricity, district heat, fuel wood (2003 only), wood pellets, wood chips, biogenic energy sources and others.

2.3. Measurement units

Describe in what unit the data is collected (e.g. physical unit (m3, metric tons), monetary unit (basic prices, market prices)). Describe in what unit the data is presented. Describe if the calorific values are collected (e.g. on a net vs. gross basis) and how they are used.

If applicable, describe the density of the energy product(s) and the estimated *thermal efficiency coefficients* of different energy products and consumer groups or by appliance. Thermal efficiency coefficient indicates the share of the energy products which is actually usable for end consumption. Descriptions of density and thermal efficiency coefficient could alternatively be put in an annex.

Litre:	Gasoline, Diesel, Fuel oil and Gas oil, LPG
kWh:	Electricity, Natural gas, District heating
kg:	LPG, Pellets
stere:	Wood chips, bark, others
m³:	Natural gas

Energy sources were converted into compatible units for the purposes of the analysis with the aid of the following factors:

Fuel	Unit	2003	2008
Gasoline	1000 l	750 kg	746 kg
Diesel	1000 l	834 kg	834 kg
LPG	1000 l	580 kg	580 kg
Gasoil	1000 l	844 kg	-
Fuel oil	1000 l	921 kg	921 kg
Fuelwood	1 stere	460 kg	523 kg
Biogenic energy sources	1 m³ bulk volume	372 kg	-
Natural gas	1 m³	11.11 kWh	11.11 kWh
Wood pellets	1 m³ bulk volume	-	652 kg
Wood chips	1 m³ bulk volume	-	350 kg

2.4. Classification scheme

Include references to relevant international and national standard classifications. If national, give a brief description of the standards. If available, include web addresses to the electronic version of the standards).

Classifications used are:
- OENACE 2003 or OENACE 2008 - classification of economic activities
- Sectoral classification of Joint IEA/ECE/EUROSTAT Questionnaires aggregated from NACE categories
- NUTS-classification for statistics on regional representation

2.5. Data sources

Give an overview of the different data sources used in the collection and compilation of the statistics/topic (e.g. household survey, enterprise/establishment survey, administrative data/registers, foreign trade statistics, production statistics and other primary/secondary data sources).

Examples of administrative sources/registers are: business register for enterprises and establishments, population register, land register, housing and building registers, tax registers, international trade registers, etc.

The data source used to define the universe is the Business Register

2.6. Population

Describe the entire group of units which is the focus of the statistics (the population).

Establishments (2003), enterprises (2008) in the service sector

Specify the following statistical units:
- Reporting unit
- Observational unit
- Analytical unit

Examples of different kind of statistical units include: enterprise, enterprise group, kind-of-activity unit (KAU), local unit, establishment, homogeneous unit of production.

In most cases the reporting unit, observational unit and analytical unit are identical, but there are examples where this is not the case. In electricity statistics, you may find that energy companies (the reporting unit) provide data about different consumers like the individual household or manufacturing company (the observational unit). The analytical unit may be a group of energy consumers, defined by the ISIC.

-         Reporting unit: Establishments in NACE rev. 1 division E (of which only division 41), G, H, I, J, K und O (of which only division 92 and 93) with more than two employees for the reference year 2003; enterprises in NACE rev. 2 (divisions 45 to 96) with two and more employees for the reference year 2008.
-         Observational unit: Establishments (2003)/ Enterprises (2008) in the service sector
-         Analytical unit: NACE division, IEA/EUROSAT/UNECE sectors

2.7. Sampling frame and sample characteristics

Describe the type of *sampling frame* used in the collection and compilation of the statistics (e.g. list, area or multiple frames). A sampling frame is the source material or device from which a sample is drawn. Note that the sampling frame might differ from the population.

Business Register

For each survey(s) used for the compilation of the statistics, specify the *sampling design* (e.g. random, stratified, etc.). Describe the routines employed for updating the sample. Include information about the sample size, and discuss to what extent the sample covers the population (e.g. energy consumption in the sample compared to total energy use by the population).

Note that chapter *2.7: Sample frame and sample characteristics* may overlap with chapter *3.4: Grossing up procedures.*

For the year 2003 it is a random sample of about 2 500 establishments in the ÖNACE 2003 economic section E (of which only division 41), G, H, I, J, K und O (of which only division 92 and 93) with more than two employees
For the year 2008 it is a random sample of 12 000 enterprises in the ÖNACE 2008 economic sections from G to S (divisions 45 to 96) with two and more employees. The random sampling procedure is carried out by taking into account the sectoral and regional structure of the enterprises within the population.

2.8. Collection method

For each survey used for the compilation of the statistics/topic, describe how the data are collected (e.g. face-to-face, telephone, self-administered, paper and internet-based questionnaires, or administrative data and registers).

By post and electronically, that is to say, the survey forms are sent by post but the respondents have the option of obtaining and returning the questionnaire electronically by e mail. Since 2008 a web-based questionnaire (eQuest) is available.
The questionnaires of all surveys are shown in the Annexes.
They are so straightforward and self-explanatory that no additional explanations were necessary but a covering letter explaining the purpose of the survey to the respondents was attached.

2.9. Survey participation/response rate

For each survey used for the compilation of the statistics/topic, specify the average response rate, or refer to response rates for specific surveys conducted.

Participation in this voluntary survey was 38.89 % or 982 of the 2 525 establishments contacted in 2003.
Participation in this voluntary survey was 29.28 % or 3 513 of the 12 000 enterprises contacted in 2008. In 2008 1 364 or 11.37.3% of the participating enterprises used the web questionnaire.

3. The statistical production process

3.1. Data capture and storage

Describe how the data is captured and stored (e.g. if the respondent replies using Internet-based questionnaire, the received data are electronically transferred to the production database. Paper questionnaire responses are keyed manually to the production database).

Manual data capture by the department and electronically submitted data

3.2. Data editing

Describe the regular routines employed for detecting and correcting errors. This may include:
- Manual routines for detecting and correcting errors
- Automatic error-detection (and correction)
- Micro- and macro editing procedures
- Data validation procedures
- Outlier identification
- Processes and sources used for quality controls

Plausibility checks of the stated quantities with reference to the stated values and annual average prices. In addition, respondents were contacted by telephone if data were implausible.

3.3. Imputation

Describe the principles for imputation and the assumptions that these principles are based on.
Note that this chapter may overlap with chapter *3.2: Data editing* and chapter *5.2: Accuracy*

Missing quantities or values are calculated with reference to the corresponding datum, using the average price
Addition to the following specified required criteria of contributors selected on the basis of the following specified hierarchical distance criteria:

Required criteria	Distance criteria (hierarchical)
One heating fuel	Heating system, m² heated surface, number of employees, NACE
Electricity	Number of employees

3.4. Grossing up procedures

Describe how the population is divided into strata and what statistical models the estimations in the strata are based on. Describe how sub-indices are combined into aggregate indices and how uncertainty is estimated.

Free projection by weighting the individual cases according to their share of the universe.

3.5. Analytical methods

Give a description of any analytical methods used to adjust the data (e.g.: seasonal adjustment and temperature adjustment). A more detailed description of the analytical method can also be included as an annex.

In case of updating fuels used for space heating an extrapolation with heating degree days is done.

4. Dissemination

4.1. Publications and additional documentation

Describe the form of dissemination of the statistics/topics in question (e.g. printed publications, website, etc.). Please provide relevant website link(s) if available.

The information is published in the context of Energy Balances (Laender and Austria) and Energy Accounts (Austria). In view of the specific nature of the survey for 2003 independent publication did not appear useful.

Give a complete reference to publicly available statistics databases where data from the statistics can be extracted. Include web addresses if available online.

The results 2008 are currently published on the Internet on the Statistics Austria website – Energy (report available in German only).

Indicate whether you charge users for access to the statistics at any level of aggregation.

Not relevant

4.2. Revisions

Describe the current revision policies. E.g.: Is historical data revised when new methodology, new definitions, new classifications etc. are taken into use? Is the data continuously revised, or is the data revised at certain points in times (e.g. every third year, annually, etc.)?

Not relevant

If applicable, describe any major conceptual or methodological revisions that have been carried out for this statistic/topic in the past.

Not relevant

4.3. Microdata

Describe how microdata are stored.

As excel files

Specify if microdata are available for scientific and/or public use. If so, describe under what conditions these are made available.

Not relevant

4.4. Confidentiality

Describe the legal authority that regulates confidentiality, and what restrictions are applied to the publication of the statistics.

Not relevant

Describe the criteria used to suppress sensitive data in statistical tables (cell suppression).

Not relevant

Describe how confidential data are handled.

Not relevant

Describe any confidentiality standards that go beyond what is legally required.

Not relevant

5. Quality

5.1. Relevance

State to which degree the statistical information meet the real needs of clients/users.

The main purpose of the survey is to improve the quality of Energy Balances and the Energy Accounts

5.2. Accuracy

State the closeness of computations or estimates to the exact or true values that the statistics were intended to measure.

Whereas the sampling error is within acceptable limits for the service sector as a whole, the uncertainty with respect to individual energy sources in some sectors is very high. This is due to the high variance in the energy source quantities consumed in combination with low numbers of cases. The only way to improve is a higher or full coverage combined with more intensive respondent follow up in order to improve the response rate. However, due to cost considerations this is currently not realistic. For sampling errors see table 8 and table 9 in the annexed document

Measurement and processing errors
Discuss the measurement and processing errors that are relevant for the statistics. Try as far as possible to give an estimation of the size and scope of the errors.

None known

Non-response errors
State the size of the unit non-response and the item non-response, distributed by important variables in the population (e.g. region, industry). Consider if the non-response errors are systematic, and if so, describe the methods used to correct it. Indicate whether the effects of correcting non-response errors on the results have been analysed, and, if so, describe them.

Unit Non Response : 61.11 % (2003) and 70.72 % (2008); Item Non Response is not relevant; firstly because missing individual data were calculated with the corresponding datum (quantity-value data pairs) with the respective average price and – secondly - missing required criteria were imputed.

Sampling errors
Discuss the size of the sampling errors. Compare the population and sample with regards to important properties (e.g. coefficient of variance).

No effects of the sample are observable.

Other sources of error
Discuss other sources of errors that might be relevant for the statistics. E.g.: Model assumption errors, coverage errors

Concentration of imputed cases with the average prices used is likely. Changes in the fuel consumption structure are underestimated potentially because of the extrapolation methodology (see Analytical methods)

5.3. Timeliness and punctuality

Specify the time between the end of the reference period and publication.
If the statistics are published both as preliminary and final figures, specify the time between publication of preliminary and final figures. You should also point out whether the publication date is set according to certain rules (e.g. advance release calendar, a specific day or prior to other publications).

The results are available for the final Energy Balances of the respective year under review.

Point out if there have been any major discrepancies between the planned publication date and the actual publication date in recent years. If so, state the length of this discrepancy and its cause.

Not relevant

5.4. Accessibility

Describe how easily accessible the statistics are. In particular, is there an advance release calendar to inform the users about when and where the data will be available and how to access them?

Are metadata and other user support services easily available? Are there particular groups that don't have access to the published statistics (e.g.: visually disadvantaged)?

Not relevant

5.5. Comparability

Discuss the comparability of the statistics over time, geographical areas and other domains.

Comparability over time
Discuss comparability over time and include information about whether there have been any breaks in the time series of the statistics and why. Also describe any major changes in the statistical methodology that may have had an impact on comparability over time.

The surveys for 2003 and 2008 are not fully comparable due to the change of the sampling criterion "number of employees" from more than 3 to more than 2 employees. Due to the fundamental revision

of the economic statistical classifications from OENACE 2003 to OENACE 2008 the direct comparability at the level of OENACE-divisions (NACE 2-digit) does no longer exist.

Comparability over region
Discuss comparability over geographical areas, and include information about whether the statistics are comparable to relevant statistics published by other countries and/or international organisations.

The comparability over region with other EU and IEA Member States in the frame of energy reporting is given.

Comparability over other domains
Discuss comparability over domains, and include information about whether the statistics are comparable between different industries, different types of households etc.

Not relevant

5.6. Coherence and consistency

Discuss the coherence/consistency between preliminary and final figures.

Not relevant

Discuss the coherence/consistency between monthly, quarterly or yearly statistics within the same subject area. Can the results of different frequencies for the same reference period be combined in a reliable manner?

Not relevant

Discuss the coherence/consistency with other related statistics (also those produced by other institutions/organisations on the same subject).

Coherence with comparable primary statistics used as data sources for Energy Balances (Material Input Statistics. Sample Survey on Energy Consumption in the Service Sector, Sample Survey on Energy Consumption of Households and Useful Energy Analysis) is fulfilled.

6. Future plans

Are there any current or emerging issues that will need to be addressed in the future? These could include gaps in collection, timeliness issues, data quality concerns, funding risks, confidentiality concerns, simplifications to reduce respondents' burden etc.?

For the future a survey frequency of 5 years is planned.

Annexes

Standard documentation
Meta information
(Definitions, comments, methods, quality)

On the Random Sample Surveys

Energy Consumption in the Service sector

This documentation is valid for the reference period:

2003 and 2008

Status: **January 2011**

STATISTICS AUSTRIA
The Information Manager

STATISTICS AUSTRIA
Bundesanstalt Statistik Österreich
A-1110 Vienna, Guglgasse 13
Phone: +43-1-71128-0
www.statistik.at

Directorate Spatial Statistics

**Organizational unit
Environment and Energy**

Contact person
Dipl.-Vw. Barbara Mayer

Tel. +43-1-71128-7624

E-Mail:
barbara.mayer@statistik.gv.at

Contact person
Dr. Wolfgang Bittermann

Tel. +43-1-71128-7315

E-Mail:
wolfgang.bittermann@statistik.gv.at

Contact person
Walter Frech

Tel. +43-1-71128-7254

E-Mail:
walter.frech@statistik.gv.at

Contents

Executive Summary

In recent years the importance of the service sector has increased steadily. This sector is adding a significant contribution to the value of the total economy and covers a large proportion of the workforce. The sector of public and private services in Austria accounts a proportion of around 12% of the final energy consumption in 2008. In addition the transport-related consumption of this sector should be noted.

As part of the energy balances there is data available for the overall service sector at energy sources level but there is only little detailed information available on energy consumption of this sector at sectoral level.

The first survey of energy consumption was carried out for the reference year 2003. Here, the annual energy consumption was collected and the main aim of this survey was to improve the data basis for the energy balance (physical and monetary) and to meet the higher requirements of this accounting system. In recent years, however, there is an increased interest in capturing and presenting the energy consumption in this very heterogeneous sector in detail.

In the framework of the EU Directive on energy efficiency and energy services from 17 May 2006 the availability of detailed data of this sector's also becomes more important to formulate instruments that support energy efficiency, to perform specific energy programs and to measure the success of energy saving programs.

Against this backdrop, the central objective of the survey for the year 2008 is winning substantial information on energy consumption and its structure within the service sector. The results of the survey are incorporated in the calculation of the Austrian energy balances at the overall sectoral level and at a detailed sectoral level in the energy accounts.

-

Title of the Stastics – Important elements	
Main purpose of the statistics	Energy consumption in the service sector
Observed unit / reporting unit / presentation unit	2003: Establishments in the ÖNACE2003 economic section E (of which only division 41), G, H, I, J, K und O (of which only division 92 and 93) with more than two employees or 2008: Enterprises in the ÖNACE2008 economic sections from G to S (divisions 45 to 96) with two and more employees
Type of statistics	Primary statistical survey
Data sources/Survey techniques	Statistics Austria's Business Register (UBR)
Reference period or due day	Reference years 2003 and 2008
Periodicity	Five yearly
Survey participation	voluntarily
Legal bases	Federal Statistics Act 2000 in the current version, private contract
Regional breakdown	Provinces
Availability of the results	Preliminary data: not relevant Final data: t + 10
Other	Residents principle

1. General information

1.1 Objective and purpose, history

The trigger for the introduction of this survey for the reference year 2003 was the original aim of recording energy consumption of the service sector for the purpose of improving the energy consumption and expenditure data in the context of Energy Balances and Energy Accounts (quality assurance measure for the drawing up of Energy Balances and Energy Accounts). The introduction of this survey was prompted by the increased requirements to be met by Energy Balances and Energy Accounts. The original aim of Energy Balances was to depict the general Austrian energy supply situation with the accuracy and timeliness necessary for political decisions of general principle and to describe the role played by energy supply within the Austrian economy (National Accounts relevance). They now have the further purposes of documenting Austria's international commitments to storing energy sources (IEA agreement) and documenting the impacts of promotional measures (such as promotion of solar energy in Salzburg, Cogeneration Directive) and political steering measures (such as the Green Electricity Act) in a great degree of detail. They also serve as the basis of calculation of Austria's Kyoto-relevant, energy-based greenhouse gas emissions (reference analysis) by the Austrian Umweltbundesamt (Austrian Environment Agency) and the EU.

Moreover, changing basic political and economic conditions, such as the liberalisation of the energy market, severely reduce the availability of data for the supply account in the context of producing the balance sheet. These need to be replaced by developing and implementing new models, essentially building on an improved data basis for the consumption side of the balance sheet.

Additionally in the framework of the EU Directive on energy efficiency and energy services from 17 May 2006 the availability of detailed data of this sector's also becomes more important to formulate instruments that support energy efficiency, to perform specific energy programs and to measure the success of energy saving programs.

Against this backdrop, the central objective of the survey for the year 2008 is winning substantial information on energy consumption and its structure within the service sector. The results of the survey are incorporated in the calculation of the Austrian energy balances at the overall sectoral level and at a detailed sectoral level in the energy accounts.

1.2 Contracting entity

- BMWFJ [Federal Ministry of Economics, Family and Youth] and
- BMLFUW [Federal Ministry of Agriculture, Forestry, Environment and Water Management]
- Energie-Control GmbH

1.3 Main users

Statistics Austria, Directorate Spatial Statistics

1.4 Legal basis

- Federal Statistics Act 2000, as amended,
- Five-year contracts with the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) and the Austrian Federal Ministry of Economy, Family and Youth (BMWFJ – formerly BMWA),
- Regulation (EC) No. 1099/2008 of the European Parliament and of the Council of 22 October 2008 on Energy Statistics.

2. Concepts and Processing

2.1 Statistical concepts and methodology

2.1.1 Statistical purpose

The statistics on Energy Consumption in the services sector comprise energy consumption in physical and monetary units in the services sector broken down by energy sources, namely gasoline, diesel, LPG, gas oil (2003 only), fuel oil, natural gas, electricity, district heat, fuel wood (2003 only), wood pellets, wood chips, biogenic energy sources and others.

2.1.2 Observation unit / reporting unit / anayltical unit

Establishments or enterprises in the service sector

2.1.3 Data sources, coverage

The data source used to define the population is Statistics Austria's Business Register (UBR). It forms the basis for defining and determining the survey population and thus to identify the survey units. The timeliness of the information stored in the register plays thus a qualitative key role.

2.1.4 Reporting unit and respondents

For 2003 establishments from the ÖNACE2003 economic section E (of which only division 41), G, H, I, J, K und O (of which only division 92 and 93) with more than two employees

For 2008 enterprises from the ÖNACE2008 economic sections from G to S (divisions 45 to 96) with two and more employees

2.1.5 Survey format

Random sample survey

2.1.6 Sample characteristics

For the year 2003 it is a concentrated random sample of about 2 500 establishments in the ÖNACE2003 economic section E (of which only division 41), G, H, I, J, K und O (of which only division 92 and 93) with more than two employees
For the year 2008 it is a concentrated random sample of 12 000 enterprises in the ÖNACE2008 economic sections from G to S (divisions 45 to 96) with two and more employees. The random sampling procedure is carried out by taking into account the sectoral and regional structure of the enterprises within the population.

2.1.7 Survey techniques / data transmission

By post and electronically, i.e. the survey forms are sent by post but the respondents have the option of obtaining and returning the questionnaire electronically by e-mail. Since 2008 a web-based questionnaire is available.

2.1.8 Survey questionnaire (including explanatory notes)

The questionnaires for the two previously conducted surveys are in Appendix 1. The questionnaires were designed as simple and self-explanatory that no further explanations were necessary. A covering letter explaining the purpose of the survey to the respondents was attached.

2.1.9 Survey participation

Participation in this voluntary survey was 38.89 % or 982 of the 2 525 establishments contacted in 2003.

Participation in this voluntary survey was 29.28 % or 3 513 of the 12 000 enterprises contacted in 2008. In 2008 1 364 or 11.37.3% of the participating enterprises used the web questionnaire.

2.1.10 Survey items, derived data elements, indicators (including definitions)

Energy consumption is broken down by energy sources (gasoline, diesel, LPG, natural gas, electricity, district heat, fuel oil, gas oil (2003 only), fuel wood (2003 only), biogenic energy sources (2003 only), wood pellets (2008 only), wood chips (2008 only) and purpose (transport, heating, hot water and others).

Except for electricity and district heat, energy source quantities could be reported in different units and were then converted into compatible units for the purposes of analysing by using the following factors:

Table 1: Conversion factors

Fuel	Unit	2003	2008
Gasoline	1000 l	750 kg	746 kg
Diesel	1000 l	848 kg	834 kg
LPG	1000 l	580 kg	580 kg
Gasoil	1000 l	844 kg	-
Fuel oil	1000 l	921 kg	921 kg
Fuel wood	1 stere	460 kg	523 kg
Biogenic energy sources	1 m³ bulk volume	372 kg	-
Natural gas	1 m³	11.11 kWh	11.11 kWh
Wood pellets	1 m³ bulk volume	-	652 kg
Wood chips	1 m³ bulk volume	-	350 kg

2.1.11 Classifications

- OENACE 2003 or OENACE 2008 - classification of economic activities
- Sectoral classification of Joint IEA/ECE/EUROSTAT Questionnaires aggregated from NACE categories
- NUTS-classification for statistics on regional representation

2.1.12 Regional breakdown

Laender (NUTS 2, federal provinces of Austria)

2.2 Production of Statistics, Processing, Quality assurance measures

2.2.1 Data capture

Manual data capture by the Department and electronically submitted data

2.2.2 Coding

Due to the design of the Questionnaire or the electronic media reporting a signing (coding) in the statistical-technical sense is not required.

Table 2: Correspondence of Balance sectors und NACE 2003:

Balance Sector	NACE 2003 division	Group 2003	Name of sectors
O1	41		Collection, purification and distribution of water
O1	50, 51, 52		Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel, Wholesale trade and commission trade, except of motor vehicles and motorcycles, Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
O1	55		Hotels and restaurants
O1	60	601	Transport via railways
O1	60	602	Other land transport
O1	60	603	Transport in Rohrfernleitungen
O1	61		Water transport
O1	62		Air transport
O1	63, 64		Supporting and auxiliary transport activities; activities of travel agencies, Post and telecommunications
O1	65, 66, 67		Financial intermediation, except insurance and pension funding, Insurance and pension funding, except compulsory social security, Activities auxiliary to financial intermediation
O1	70, 71, 72, 73, 74		Real estate activities, Renting of machinery and equipment without operator and of personal and household goods, Computer and related activities, Research and development, Other business activities
O1	92, 93		Recreational, cultural and sporting activities, Other service activities

Table 3: Correspondence of Balance sectors und NACE 2008:

Balance Sector	NACE 2008 division	Name of sectors
O1	45	Wholesale and retail trade and repair of motor vehicles and motorcycles
O1	46	Wholesale trade, except of motor vehicles and motorcycles
O1	47	Retail trade, except of motor vehicles and motorcycles
O1	49	Land transport and transport via pipelines

Balance Sector	NACE 2008 division	Name of sectors
O1	50	Water transport
O1	51	Air transport
O1	52	Warehousing and support activities for transportation
O1	53	Postal and courier activities
O1	55	Accommodation
O1	56	Food and beverage service activities
O1	58	Publishing activities
O1	59	Motion picture, video and television programme production, sound recording and music publishing activities
O1	60	Programming and broadcasting activities
O1	61	Telecommunications
O1	62	Computer programming, consultancy and related activities
O1	63	Information service activities
O1	64	Financial service activities, except insurance and pension funding
O1	65	Insurance, reinsurance and pension funding, except compulsory social security
O1	66	Activities auxiliary to financial services and insurance activities
O1	68	Real estate activities
O1	69	Legal and accounting activities
O1	70	Activities of head offices; management consultancy activities
O1	71	Architectural and engineering activities; technical testing and analysis
O1	72	Scientific research and development
O1	73	Advertising and market research
O1	74	Other professional, scientific and technical activities
O1	75	Veterinary activities
O1	77	Rental and leasing activities
O1	78	Employment activities
O1	79	Travel agency, tour operator and other reservation service and related activities
O1	80	Security and investigation activities
O1	81	Services to buildings and landscape activities
O1	82	Office administrative, office support and other business support activities
O1	84	Public administration and defence; compulsory social security
O1	85	Education
O1	86	Human health activities
O1	87	Residential care activities
O1	88	Social work activities without accommodation
O1	90	Creative, arts and entertainment activities

Balance Sector	NACE 2008 division	Name of sectors
O1	91	Libraries, archives, museums and other cultural activities
O1	92	Gambling and betting activities
O1	93	Sports activities and amusement and recreation activities
O1	94	Activities of membership organisations
O1	95	Repair of computers and personal and household goods
O1	96	Other personal service activities

2.2.3 Editing and verification of external data sources

The questionnaires for the survey of energy consumption in the service sector are subject to a qualified review:

- Plausibility check of the stated quantities with reference to the stated values
- Checking the completeness
- Horizontal review of logical dependencies in a survey unit (quantity and value of energy); the following average prices were used:

Fuel	Unit	2003	2008
Gasoline	1 litre	0.9 €	1.1 €
Diesel	1 litre	0.7 €	1.1 €
LPG	1 kg	1.8 €	1.3 €
Gasoil	1 litre	0.5 €	-
Fuel oil	1 litre	0.3 €	0.7 €
Natural gas	1 m³	0.5 €	-
Natural gas	1 kWh	-	0.06 €
Electricity	1 kWh	0.15 €	0.16 €
District heat	1 kWh	0.07 €	0.08 €
Fuel wood	1 stere	30 €	-
Biogenic energy sources	1 m³ bulk volume	15 €	-
Wood pellets	1 kg	-	0.2 €
Wood chips	1 m³ bulk volume	-	19 €

- If available comparison with data from other sources (sustainability reports, energy reports, other secondary statistics, etc.)
- For implausible information contacting the respondents by phone

2.2.4 Imputation (in the case of missing values or incomplete data)

Missing quantities or values are calculated with reference to the corresponding datum, using the average price

Addition to the following specified required criteria of contributors selected on the basis of the following specified hierarchical distance criteria:

Required criteria	Distance criteria (hierarchical)
One heating fuel	Heating system, m² heated surface, number of employees, NACE
Electricity	number of employees

2.2.5 Grossing up procedures (weighting)

2003: Free projection by weighting the individual cases according to their share of the population broken down by 18 sectors (Table 4) at national level.

Table 4: Population by sectors and Laender 2003

Sector	B	C	L	U	S	ST	T	V	VIE	A
41	5	3	13	12	3	18	1	3	0	58
50	199	434	1 177	1 009	407	900	494	260	741	5 621
51	224	473	1 789	1 567	809	898	665	441	2 675	9 541
52	588	1084	2 965	2 650	1 370	2 416	1 719	836	3 383	17 011
55	579	1482	2 791	2 447	2 328	2 764	3 692	1 141	2 911	20 135
60	192	340	878	882	532	833	631	266	866	5 420
63	18	64	191	172	160	115	171	45	420	1 356
64	3	7	37	29	7	23	11	10	76	203
65	45	66	130	162	85	118	101	33	139	879
66	0	1	1	7	5	3	1	1	52	71
67	28	63	184	125	81	122	84	71	288	1 046
70	32	100	239	216	162	269	195	94	972	2 279
71	12	28	77	95	51	62	55	22	160	562
72	46	92	324	315	149	280	122	92	856	2 276
73	6	4	18	15	12	39	17	1	117	229
74	308	859	1 940	2 110	1 206	1 949	1 351	647	4 726	15 096
92	53	111	243	203	195	221	207	72	584	1 889
93	148	358	854	794	354	761	447	222	1 020	4 958
Total	2 486	5 569	13 851	12 810	7 961	11 791	9 964	4 257	19 986	88 630

B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A – Austria

2008, the sample was stratified by OENACE 2-digits and company size (<5, <10, <50, <250, 250 + employees). Within each layer, a free extrapolation was carried out with the weight n / N (where n is the number of cases per layer in the sample, i.e. number per employee size class and NACE), N: number of cases per layer in the population, i.e. number per employee size class and NACE).

Table 5: Population 2008 subdivided according divisions and classes of employees:

Sector	less than 4	5 to 9	10 to 49	50 to 249	more than 250	Total
45	1 520	1 431	1 388	162	23	4 524
46	3 719	2 931	2 959	553	91	10 253
47	9 087	5 968	3 546	260	94	18 955
49	2 294	1 876	1 898	268	34	6 370

Sector	less than 4	5 to 9	10 to 49	50 to 249	more than 250	Total
50	17	12	11	2		42
51	23	29	42	5	2	101
52	164	170	272	77	24	707
53	54	37	30	11	5	137
55	3 276	2 514	2 151	228	15	8 184
56	7 894	5 362	2 354	185	15	15 810
58	185	138	176	40	4	543
59	217	120	93	9	1	440
60	6	13	23	9	1	52
61	42	35	27	7	9	120
62	774	479	417	71	6	1 747
63	362	166	121	33	10	692
64	111	161	463	218	49	1 002
65	13	10	23	21	16	83
66	1 138	446	197	27		1 808
68	1 500	745	534	110	21	2 910
69	2 137	2 054	1 047	43	3	5 284
70	1 252	635	501	82	9	2 479
71	2 198	1 493	893	83	8	4 675
72	78	74	111	39	5	307
73	963	522	365	64	11	1 925
74	471	200	96	14	1	782
75	457	127	14			598
77	299	204	153	25	6	687
78	89	94	291	193	54	721
79	338	264	239	41	2	884
80	49	38	67	15	6	175
81	780	749	478	103	40	2 150
82	258	118	192	60	7	635
84	134	463	1 515	336	120	2 568
85	847	723	667	82	47	2 366
86	6 037	5 510	762	87	60	12 456
87	42	62	232	108	16	460
88	191	229	360	151	58	989
90	199	85	62	19	14	379
91	50	43	53	22	5	173
92	45	38	38	12	7	140
93	502	377	345	43	2	1 269
94	1 059	650	500	132	41	2 382
95	220	81	55	6		362
96	2 711	1 962	597	58	14	5 342
Total	53 802	39 438	26 358	4 114	956	124 668

2.2.6 Processing steps on the way to the final data set, (other) models and statistical estimation techniques used

2003 the regionalization of the grossing up was made in two steps:

1. Data reported for one province was allocated to this directly (see Table 6)

Table 6: Number of respondents by Laender and sector

ÖNACE 2008 division	B	C	L	U	S	ST	T	V	VIE	A
41	2	1	3	3	0	5	0	2	0	16
50	4	4	11	15	5	6	4	4	11	64
51	4	4	29	20	12	14	8	8	40	139
52	7	6	22	19	10	17	12	5	22	120
55	1	6	7	10	5	11	15	5	14	74
60	2	5	20	19	14	21	20	7	14	122
63	0	3	8	6	9	7	5	4	14	56
64	0	0	0	1	0	1	2	0	7	11
65	1	9	14	19	7	10	5	6	11	82
66	0	0	0	1	1	0	0	0	3	5
67	0	1	0	0	0	1	0	1	4	7
70	1	0	2	8	2	3	2	3	18	39
71	0	0	2	1	2	3	0	1	4	13
72	0	2	4	8	1	4	1	0	19	39
73	0	0	2	1	1	4	1	0	12	21
74	3	7	9	20	8	16	5	4	47	119
92	2	0	7	4	2	1	3	1	12	32
93	0	3	4	7	1	2	3	0	3	23
Total	**27**	**51**	**144**	**162**	**80**	**126**	**86**	**51**	**255**	**982**

B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria

2. The data grossed up to Austria were reduced by the data allocated directly and the remaining data were allocated to the provinces according to the distribution of the non response cases (see Table 7)

Table 7: Allocation of the sectoral non response cases by provinces

ÖNACE 2008 division	B	C	L	U	S	ST	T	V	VIE	A
41	7.1%	4.8%	23.8%	21.4%	7.1%	31.0%	2.4%	2.4%	0.0%	100.0%
50	3.5%	7.7%	21.0%	17.9%	7.2%	16.1%	8.8%	4.6%	13.1%	100.0%
51	2.3%	5.0%	18.7%	16.5%	8.5%	9.4%	7.0%	4.6%	28.0%	100.0%
52	3.4%	6.4%	17.4%	15.6%	8.1%	14.2%	10.1%	4.9%	19.9%	100.0%
55	2.9%	7.4%	13.9%	12.1%	11.6%	13.7%	18.3%	5.7%	14.4%	100.0%
60	3.6%	6.3%	16.2%	16.3%	9.8%	15.3%	11.5%	4.9%	16.1%	100.0%

ÖNACE 2008 division	B	C	L	U	S	ST	T	V	VIE	A
63	1.4%	4.7%	14.1%	12.8%	11.6%	8.3%	12.8%	3.2%	31.2%	100.0%
64	1.6%	3.6%	19.3%	14.6%	3.6%	11.5%	4.7%	5.2%	35.9%	100.0%
65	5.5%	7.2%	14.6%	17.9%	9.8%	13.6%	12.0%	3.4%	16.1%	100.0%
66	0.0%	1.5%	1.5%	9.1%	6.1%	4.5%	1.5%	1.5%	74.2%	100.0%
67	2.7%	6.0%	17.7%	12.0%	7.8%	11.6%	8.1%	6.7%	27.3%	100.0%
70	1.4%	4.5%	10.6%	9.3%	7.1%	11.9%	8.6%	4.1%	42.6%	100.0%
71	2.2%	5.1%	13.7%	17.1%	8.9%	10.7%	10.0%	3.8%	28.4%	100.0%
72	2.1%	4.0%	14.3%	13.7%	6.6%	12.3%	5.4%	4.1%	37.4%	100.0%
73	2.9%	1.9%	7.7%	6.7%	5.3%	16.8%	7.7%	0.5%	50.5%	100.0%
74	2.0%	5.7%	12.9%	14.0%	8.0%	12.9%	9.0%	4.3%	31.2%	100.0%
92	2.7%	6.0%	12.7%	10.7%	10.4%	11.8%	11.0%	3.8%	30.8%	100.0%
93	3.0%	7.2%	17.2%	15.9%	7.2%	15.4%	9.0%	4.5%	20.6%	100.0%
Total	**2.8%**	**6.3%**	**15.6%**	**14.4%**	**8.9%**	**13.3%**	**11.3%**	**4.8%**	**22.5%**	**100.0%**

B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria

2.2.7 Other quality assurance measures

- Telephone contact in the case of implausible information (active)
- Telephone advice and assistance in filling (passive)
- Comparing the projected results with other data sources such as industry-specific energy and sustainability reports
- In order to achieve a further improvement of the survey and extrapolation results, 918 data sets from a previous survey on the energy consumption in the service sector specifically for the province of Vienna and the reference year 2006 were taken into account. The heating-relevant data have been updated by using heating degree days. In total 4 431 data sets were incorporated into the analysis. With a sample of 12 000 enterprises this corresponds to a coverage of 36.93%.

2.3 Publication (accessibility)

The publication of the results for the reporting year 2003 is part of the energy balances (on Laender and national level).
The results of the 2008 survey are expected to be published in the first quarter of 2011 on the website of Statistics Austria.

2.3.1 Preliminary results

Not relevant

2.3.2 Final results

10 months after completion of the survey

2.3.3 Revisions

Not relevant

2.3.4 Published in:

The results for 2003 are not published separately but as integrated part of the energy balances and the energy accounts.

The results for 2008 are intended to be published on the website of Statistics Austria - the field of energy statistics.

2.3.5 Confidentiality

Information of individual reporting units will be kept strictly confidential and used only for the purposes of official statistics. Since the data is aggregated at provinces-level or Austria, after calculating energy balances there are no individual data present.

3. Quality

3.1 Relevance

The sole purpose of the survey 2003 is to improve the quality of Energy Balances and the Energy Accounts. The objective of the 2008 survey goes further, with the goal of winning energy-related in-depth information on the essential structure of the energy consumption of the service sector. Based on the results branch-of-industry-specific benchmarks are calculated.

3.2 Accuracy

3.2.1 Sampling effects,

No effects of the sample are observable, the representativeness is high. Tables 8 and 9 provide a summary of the sampling errors by sectors and energy sources. In the empty cells, the number of cases is too low (<2) to calculate a sampling error. Whereas the sampling error is within acceptable limits for the service sector as a whole, the uncertainty with respect to individual energy sources in some sectors is very high. This is due to the high variance in the energy source quantities consumed in combination with low numbers of cases.

The only way to improve the sectoral structure is full coverage combined with more intensive respondent follow-up in order to improve the response rate. However, due to cost considerations this is currently not realistic. The primary aim of showing energy consumption by enterprises in the service sector with sufficient accuracy has already been achieved.

Greater expenditure would be justified only in the case of the energy sources recorded exclusively in terms of consumption (fuel wood and solid biofuels), as this elicitation impacts upon the total supply of these energy sources in the Energy Balances and Energy Accounts. As regards fossil energy sources and also electricity and district heat, the sectoral fuzziness does not affect the total supply documented in the Energy Balances and Energy Accounts.

Table 8: Percentage sampling errors by sectors and energy sources at 95% statistical certainty 2003

ÖNACE 2008 division	Gaso-line	Diesel	Transport LPG	Gasoil	Fuel Oil	LPG	Natural Gas	Electri-city	Fuel-wood	Biogenic energy sources	District heat
41,0	39.13	54.28	NA	82.93	93.91	NA	37.80	55.38	NA	NA	82.28
50,0	28.52	29.51	NA	28.23	37.68	88.71	57.53	35.95	NA	NA	71.98
51,0	43.69	37.01	NA	41.75	50.39	36.57	55.16	35.03	NA	NA	71.81
52,0	42.55	58.63	NA	44.34	91.58	41.83	55.27	62.41	120.62	120.15	81.17

ÖNACE 2008 division	Gaso-line	Diesel	Transport LPG	Gasoil	Fuel Oil	LPG	Natural Gas	Electri-city	Fuel-wood	Biogenic energy sources	District heat
55,0	39.44	36.48	NA	62.13	47.20	45.27	50.07	38.47	76.98	NA	97.61
60,0	134.12	24.11	110.40	74.33	83.42	29.33	63.27	61.27	31.88	7.59	83.87
63,0	93.36	56.34	NA	134.52	56.70	31.95	88.11	56.47	NA	NA	61.29
64,0	102.56	23.62	NA	44.21	NA	NA	198.52	29.36	NA	NA	158.70
65,0	42.70	52.83	NA	54.97	34.89	204.31	72.12	52.28	NA	NA	101.82
66,0	72.12	76.50	NA	NA	NA	NA	103.23	77.98	NA	NA	67.56
67,0	52.28	108.27	NA	18.03	NA	NA	49.55	86.04	NA	NA	97.48
70,0	47.03	44.59	NA	147.02	152.97	3.56	90.50	64.61	NA	NA	115.14
71,0	81.47	101.84	NA	237.75	NA	NA	67.99	155.82	NA	NA	55.49
72,0	59.91	73.75	NA	93.60	NA	NA	48.76	53.91	NA	NA	56.36
73,0	20.99	73.11	NA	73.30	52.06	NA	38.37	82.57	NA	NA	86.01
74,0	33.13	45.96	NA	38.74	37.46	17.16	68.51	63.50	NA	NA	75.13
61,62,75-91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
92,0	96.74	54.27	NA	55.53	77.45	NA	80.92	92.33	NA	NA	52.03
93,0	30.58	97.66	NA	72.24	164.08	14.81	114.49	15.39	NA	NA	183.50
Total	17.93	27.29	121.98	29.30	28.93	71.99	27.03	22.20	64.54	26.46	37.39

Table 9: Percentage sampling errors by sectors and energy sources at 95% statistical certainty 2008

ÖNACE 2008 division	Gaso-line	Diesel	LPG	Fuel Oil	Natural Gas	District heat	Hard Coal	Electricity	Wood pellets	Wood chips	Fuel-wood	Wood waste	Waste	Coke	Biogenic energy sources
45	108.2	56.4	108.9	77.8	35.2	121.0	NA	45.1	161.0	113.6	187.1	NA	NA	187.9	NA
46	92.4	45.5	69.9	69.5	48.7	46.7	NA	63.3	91.7	113.1	189.8	NA	NA	NA	189.9
47	30.8	54.7	153.2	58.3	152.7	102.4	186.6	50.8	190.1	129.0	170.5	195.4	NA	NA	NA
49	85.6	41.2	67.0	50.9	55.8	75.7	NA	48.7	154.8	119.5	189.1	NA	NA	NA	NA
50	95.2	104.8	160.0	159.9	77.0	132.8	NA	56.1	160.0	NA	176.4	NA	NA	NA	NA
51	101.3	149.0	178.9	179.8	172.5	150.6	NA	93.1	NA	NA	NA	NA	NA	NA	NA
52	73.3	60.0	135.5	67.8	77.0	57.1	NA	30.6	NA	NA	NA	NA	NA	NA	NA
53	174.7	100.1	NA	177.9	75.7	126.6	NA	56.4	NA	NA	NA	NA	NA	NA	NA
55	51.6	46.7	85.9	34.0	40.0	49.2	156.8	58.7	115.7	94.9	104.1	156.8	NA	NA	NA
56	37.2	93.6	94.9	66.4	43.4	77.0	NA	37.4	144.2	153.2	128.5	NA	NA	NA	NA
58	166.8	62.1	169.7	99.1	73.7	132.9	NA	73.1	NA	NA	NA	NA	NA	NA	NA
59	66.1	105.7	171.6	159.7	96.2	153.7	NA	84.9	NA	NA	NA	NA	NA	NA	NA
60	120.0	99.2	NA	104.9	111.4	104.2	NA	127.9	NA	NA	NA	NA	NA	NA	NA
61	83.0	88.9	150.3	82.4	163.6	66.4	NA	62.2	NA	NA	NA	NA	NA	NA	NA
62	84.3	97.7	142.2	133.5	84.1	65.1	NA	105.0	NA	163.1	166.8	NA	NA	NA	NA

ÖNACE 2008 division	Gaso-line	Diesel	LPG	Fuel Oil	Natural Gas	District heat	Hard Coal	Electricity	Wood pellets	Wood chips	Fuel-wood	Wood waste	Waste	Coke	Biogenic energy sources
63	50.6	61.4	139.3	92.6	54.9	52.2	NA	41.6	NA	147.0	NA	NA	NA	NA	NA
64	65.3	91.1	111.0	85.1	65.3	156.5	NA	81.0	119.5	148.2	122.6	NA	192.5	NA	NA
65	74.9	57.1	NA	88.6	116.2	79.5	NA	88.2	NA	120.0	NA	NA	NA	NA	NA
66	51.8	101.7	145.6	125.3	150.3	67.3	NA	72.7	NA	153.1	NA	NA	NA	NA	NA
68	43.0	43.1	114.1	69.3	70.9	81.7	NA	69.9	NA	111.9	138.5	184.0	NA	NA	NA
69	85.2	43.3	88.6	46.4	45.8	69.6	NA	30.0	72.6	93.6	179.0	NA	NA	NA	NA
70	46.5	61.6	139.2	69.3	48.3	42.7	NA	39.6	NA	NA	174.0	194.9	NA	NA	NA
71	36.6	62.1	79.7	45.6	38.1	49.0	NA	38.1	175.9	120.2	110.5	NA	NA	NA	NA
72	51.0	41.7	130.3	43.9	43.1	97.7	NA	60.2	130.3	NA	NA	NA	NA	NA	NA
73	64.9	56.7	147.9	48.6	54.0	133.2	182.7	65.8	NA	182.7	182.7	NA	NA	NA	NA
74	83.9	89.5	160.0	108.0	66.1	43.1	NA	32.0	114.5	127.1	170.1	NA	NA	NA	NA
75	67.4	73.9	137.5	78.8	71.3	86.7	NA	43.9	136.5	185.5	NA	NA	NA	NA	NA
77	65.7	81.8	178.7	88.9	87.7	42.0	NA	34.5	178.7	NA	NA	NA	NA	NA	NA
78	79.9	91.9	147.5	109.5	94.6	134.6	NA	60.2	50.8	182.9	170.8	NA	NA	NA	NA
79	99.3	66.3	181.3	60.2	93.7	79.2	NA	67.5	NA	135.7	181.3	NA	NA	NA	NA
80	73.6	90.8	NA	166.2	74.7	99.3	NA	36.7	NA	NA	192.1	NA	NA	NA	NA
81	51.0	48.7	98.3	38.9	78.1	90.0	NA	37.9	95.7	NA	NA	NA	NA	NA	NA
82	101.6	118.9	81.0	103.2	127.5	165.9	NA	122.1	NA	NA	159.4	NA	NA	NA	NA
84	41.5	36.8	86.5	45.5	65.2	44.1	NA	42.5	192.1	128.6	181.6	192.1	NA	NA	NA
85	46.6	115.7	160.5	81.0	38.5	93.4	NA	37.5	NA	173.3	NA	NA	190.0	NA	NA
86	51.8	37.6	130.1	87.3	60.4	65.8	NA	48.4	195.3	170.7	108.4	NA	NA	NA	NA
87	134.0	64.8	125.8	87.1	105.3	80.8	NA	37.1	131.5	NA	NA	NA	NA	NA	NA
88	52.2	66.6	171.0	67.3	59.2	57.1	NA	55.9	132.7	NA	NA	NA	NA	NA	NA
90	100.0	89.8	NA	114.6	125.0	101.7	NA	88.8	NA	NA	176.4	149.1	NA	NA	NA
91	77.7	54.0	NA	89.2	127.7	85.8	NA	51.5	141.1	141.1	NA	NA	NA	NA	NA
92	148.0	173.8	179.4	NA	89.1	101.3	NA	76.1	NA	NA	NA	NA	NA	NA	NA
93	169.2	75.9	NA	127.2	95.2	80.0	NA	40.1	NA	135.3	193.8	NA	NA	NA	NA
94	49.1	75.2	166.4	39.7	38.7	60.6	NA	42.5	108.8	87.6	153.1	NA	NA	NA	NA
95	116.9	142.2	NA	75.4	98.1	76.0	NA	108.9	NA	NA	163.6	NA	NA	NA	NA
96	59.4	70.6	173.6	72.7	42.8	100.9	NA	123.1	NA	180.7	189.2	NA	NA	148.2	NA
Total	**26.6**	**14.1**	**33.2**	**15.1**	**55.4**	**23.6**	**161.3**	**20.9**	**66.8**	**36.0**	**58.2**	**83.2**	**173.5**	**187.2**	**189.9**

3.2.2 Non-sampling effects

None known

3.2.2.1 *Quality of data sources*

Not relevant

3.2.2.2 *Coverage (misclassifications. undercoverage/overcoverage)*

As the comparison shows. the sectoral coverage of the respondence cases corresponds approximately to that of the population.

Table 10: Sectoral distribution of population. sample and respondence cases 2003

ÖNACE 2008 division	Population	Sample	Respondence cases
41	0.07%	1.07%	1.63%
50	6.34%	6.34%	6.52%
51	10.76%	10.30%	14.15%
52	19.19%	13.53%	12.22%
55	22.72%	10.73%	7.54%
60	6.12%	9.07%	12.42%
63	1.53%	5.74%	5.70%
64	0.23%	1.35%	1.12%
65	0.99%	6.06%	8.35%
66	0.08%	0.87%	0.51%
67	1.18%	1.19%	0.71%
70	2.57%	4.59%	3.97%
71	0.63%	2.02%	1.32%
72	2.57%	3.92%	3.97%
73	0.26%	1.94%	2.14%
74	17.03%	12.36%	12.12%
92	2.13%	4.44%	3.26%
93	5.59%	4.48%	2.34%
Total	**100.00%**	**100.00%**	**100.00%**

Table 11: Sectoral distribution of population. sample and respondence cases 2008

ÖNACE 2008 division	Population	Sample	Respondence cases
45	3.63%	3.62%	4.15%
46	8.22%	5.91%	9.91%
47	15.20%	8.55%	8.94%
49	5.11%	4.44%	5.35%
50	0.03%	0.26%	0.25%
51	0.08%	0.54%	0.29%
52	0.57%	1.30%	1.56%
53	0.11%	0.55%	0.18%
55	6.56%	5.16%	5.64%
56	12.68%	7.66%	4.47%
58	0.44%	1.08%	0.63%
59	0.35%	0.90%	0.68%
60	0.04%	0.38%	0.32%
61	0.10%	0.50%	0.41%

ÖNACE 2008 division	Population	Sample	Respondence cases
62	1.40%	2.04%	2.08%
63	0.56%	1.18%	1.22%
64	0.80%	1.61%	2.10%
65	0.07%	0.54%	0.59%
66	1.45%	2.09%	1.29%
68	2.33%	2.78%	3.02%
69	4.24%	3.98%	7.00%
70	1.99%	2.53%	2.69%
71	3.75%	3.68%	4.85%
72	0.25%	0.84%	1.08%
73	1.54%	2.17%	1.92%
74	0.63%	1.25%	0.97%
75	0.48%	1.08%	0.84%
77	0.55%	1.16%	1.04%
78	0.58%	1.36%	1.02%
79	0.71%	1.35%	1.24%
80	0.14%	0.64%	0.32%
81	1.72%	2.32%	2.10%
82	0.51%	1.18%	0.97%
84	2.06%	2.71%	4.13%
85	1.90%	2.45%	2.12%
86	9.99%	6.63%	5.10%
87	0.37%	1.07%	0.88%
88	0.79%	1.58%	1.29%
90	0.30%	0.83%	0.59%
91	0.14%	0.63%	0.74%
92	0.11%	0.54%	0.25%
93	1.02%	1.68%	0.77%
94	1.91%	2.47%	2.30%
95	0.29%	0.80%	0.52%
96	4.28%	3.99%	2.23%
Total	**100.00%**	**100.00%**	**100.00%**

3.2.2.3 *Missing values (unit non-response. item non-response)*

61.11 % (2003) and 70.72 % (2008) Unit Non Response. Item Non Response is not relevant; firstly because missing individual data were calculated with the corresponding datum (quantity-value data pairs) with the respective average price.

3.2.2.4 *Measurement errors (keying in errors)*

None known

3.2.2.5 *Processing errors*

None known

3.2.2.6 *Model based effects*

Concentration of the prices of the imputed cases with the average prices used is likely.

3.3 Timeliness and punctuality

The results are available for the final energy balance of the reporting year

3.4 Comparability

3.4.1 Comparability over time

The surveys for 2003 and 2008 are not fully comparable due to the change of the sampling criterion "number of employees" from more than 3 to more than 2 employees. Due to the fundamental revision of the economic statistical classifications from ÖNACE 2003 to ÖNACE 2008 the comparability at the level of ÖNACE-divisions (NACE 2-digit) does no longer exist.

3.4.2 Comparability over region

The comparability over region with other EU and IEA Member States in the frame of energy reporting is given.

3.4.3 Comparability over other domains

Not relevant

3.5 Coherence

Coherence with comparable primary statistics used as data sources for Energy Balances (Material Input Statistics. Sample Survey on Energy Consumption in the Service Sector. Sample Survey on Energy Consumption of Households and Useful Energy Analysis) is fulfilled.

4. Outlook

For the future a survey frequency of 5 years is planned.

Reference to supplementary documentation/publications

Energy balances 1970 – 2009: Documentation of Methods – Quality Report. Statistics Austria. Vienna 2011

Annex

Annex 1:
Questionnaire 2003

STATISTIK AUSTRIA
Die Informationsmanager

Directorate Spatial statistics
Official in charge: Richard Riess
Telefone: (01) 71128-7304
Fax: (01) 71128-8155
e-mail: richard.riess@statistik.gv.at

Name

Adress

Code

Survey of energy consumption in the service sector 2003

No of registered vehicles

of which trucks above 3,5 t

Transport fuels	Unit	Amount	Value in Euro (gross-net) [2]	Purpose [3] Car	other [4]
Gasoline	litre				
Diesel	litre				
LPG	kg [3] litre				

heated area (m²) of the establishment

Mainly used heating system [3]

District heating	Central heating system	Floor heating system
Gas convector	Electric Heating (fix installed)	Stove

Other fuels used	Unit	Amount	Value in Euro (gross-net) [2]	Purposes [3] Space heating [5]	Others [4]
Gas oil	litre				
Fuel oil	litre				
LPG	kg [3] litre				
Natural gas [1]	m³				
Electricity [1]	kWh				
District heat [1]	kWh				
Fuel wood	stere [3] kg				
Biogenic energy sources (Wood chips, bark, pellets etc.)	stere [3] kg				
Solar pannels	m²		PV pannels [3]	Heat [3]	

[1] We kindly ask you to use your last annual bill when filling in
Value = total price
[2] Delete one of these as appropriate; [3] Tick appropriate
[4] such as emergency power generators, stationary engines, process heat etc.; 5) incl. cooking, water heating etc.

Contact for futher inquieries:

Name: Telefone:
e-mail: Fax:

STATISTIK AUSTRIA
Die Informationsmanager

Directorate Spatial statistics
Official in charge: Herr Frech
Telefone: (01) 71128-7573
Fax: (01) 71128-8155
e-mail: walter.frech@statistik.gv.at

Survey of energy consumption in the service sector 2008

Healthcare

Transport fuels	Unit	Amount	Value in Euro	gross[1]	net[1]	Purposes[1] Car	Others[2]
Gasoline	litre			☐	☐	☐	☐
Diesel	litre			☐	☐	☐	☐
LPG	☐ kg[1] litre[1] ☐			☐	☐	☐	☐
Natural gas	m³			☐	☐	☐	☐

Other fuels used	Unit	Amount	Value in Euro	gross[1]	net[1]	Purposes[1] Space heating	Cooking, water heating	Others[2]
Electricity[3]	kWh					☐	☐	☐

Period of the last electricity charge: from [dd.mm.yy] to [dd.mm.yy] or enter the number of days: [ ]

	Unit	Amount	Value in Euro	gross[1]	net[1]	Space heating	Cooking, water heating	Others[2]
Natural gas[3]	kWh			☐	☐	☐	☐	☐
District heating[3]	kWh			☐	☐	☐	☐	☐
Fuel oil and gas oil	litre			☐	☐	☐	☐	☐
LPG	☐ kg[1] litre[1] ☐			☐	☐	☐	☐	☐
Pellets	☐ kg[1] stere[1] ☐			☐	☐	☐	☐	☐
Wood chips, bark	stere			☐	☐	☐	☐	☐
Others, please specify[4]	[ ] (Unit)			☐	☐	☐	☐	☐

We kindly ask you to fill in amounts and/or values for at least one fuel used for space heating. If this is impossible because space heating is included in the operating costs of the rent for your premises please tick the box ahead. ☐

Heat pumps	Installed capacity in kW	[ ]		Space heating ☐	Water heating ☐
Solar pannels	Surface area in m²	[ ]		Space heating ☐	Water heating ☐
PV pannels	Surface area in m²	[ ]			

Overall area of the enterprise (building areas only) in m² [ ] **of which heated during winter** in m² [ ] **and airconditioned during summer** in m² [ ] **Number of office workplaces in the enterprise** [ ]

Mainly used heating system[1] (number) Central heating system [ ] District heating [ ] Other [ ] Number [ ]

Age of the heating system[1] (number) below 5 [ ] 5 until below 10 [ ] 10 until below 20 [ ] 20 and older [ ]

Number of nursing (hospital) beds [ ]

[1] Tick appropriate
[2] e.g. lightning, computing, process heat, power sets etc
[3] Please use your last annual bill; Value = Overall price including all fees and taxes
[4] e.g. hard coal, lignite coal briquettes, coke, fuel wood etc.; **please specify the unit!**

Contact for futher inquieries:	
Name:	Telefone:
e-mail:	Fax:

Annex 2: Results for 2003 by Laender. sector and energy source

Laender	ÖNACE 2003	Gasoline t	Diesel t	Transport LPG t	Gasoil t	Fuel oil t	LPG t	Natural gas TSD m³	Electricity MWh	Fuel wood t	Biogenic sources t	District heat MWh
B	41	1	133	0	1	2	0	50	8.741	2	0	9
B	50	211	819	0	385	365	35	914	10.310	0	0	2.422
B	51	194	3.283	0	423	400	19	1.569	15.194	25	34	3.942
B	52	194	1.663	0	605	414	49	3.342	180.965	108	71	5.420
B	55	113	322	0	574	2.074	640	1.899	40.045	601	0	10.653
B	60	56	34.551	6	543	598	31	1.818	31.890	138	639	24.741
B	63	22	325	0	25	14	11	38	889	0	0	3.830
B	64	5	130	0	15	7	0	28	6.500	0	0	2.484
B	65	96	367	0	349	968	0	1.348	64.720	0	0	15.687
B	66	0	0	0	0	0	0	0	0	0	0	0
B	67	9	37	0	10	0	0	26	235	2	0	310
B	70	16	31	0	2	45	2	39	3.028	0	0	2.993
B	71	24	150	0	44	0	0	6	237	0	0	134
B	72	25	151	0	8	2	0	19	2.071	0	0	1.077
B	73	1	3	0	3	15	0	9	184	0	0	453
B	74	329	526	0	76	37	16	693	14.063	0	2	2.898
B	61, 62, 75-91				5.351	2.110	1.268	4.816	33.475	115	106	85.871
B	92	11	59	0	12	9	10	368	16.133	0	0	10.016
B	93	10	55	0	59	225	107	399	11.093	0	0	816
B	**Total**	**1.316**	**42.604**	**7**	**8.482**	**7.285**	**2.189**	**17.382**	**439.774**	**991**	**852**	**173.758**
K	41	1	23	0	1	1	0	27	1.898	1	0	6
K	50	455	1.682	0	836	809	77	1.840	22.334	0	0	6.420
K	51	392	7.036	0	871	1.804	40	2.808	35.773	53	73	10.447
K	52	353	2.785	0	1.198	753	137	6.353	316.868	201	131	14.364
K	55	290	833	0	1.473	5.425	1.637	3.936	98.889	1.552	0	28.232
K	60	100	62.391	10	960	1.093	55	3.232	54.674	262	1.127	65.566
K	63	77	1.648	1	83	88	52	128	3.449	0	0	10.151
K	64	12	304	0	35	16	0	66	15.168	0	0	6.582
K	65	134	547	0	512	1.256	0	1.743	88.551	0	0	41.572
K	66	0	1	0	0	0	0	2	19	0	0	21
K	67	20	87	0	22	0	0	58	531	4	0	821
K	70	34	89	0	1	145	6	126	9.643	0	0	7.933
K	71	56	350	0	102	1	0	15	553	0	0	355
K	72	56	295	0	15	40	0	38	4.615	0	0	2.855
K	73	1	2	0	2	10	0	6	123	0	0	1.202
K	74	919	1.405	0	197	107	46	1.938	38.901	0	4	7.681
K	61, 62, 75 - 91				35.075	4.065	339	2.710	85.593	1.412	15.011	227.569
K	92	19	122	0	10	19	23	801	33.935	0	0	26.544
K	93	24	132	0	143	748	257	967	27.228	0	0	2.163
K	**Total**	**2.942**	**79.733**	**12**	**41.536**	**16.379**	**2.669**	**26.795**	**838.744**	**3.485**	**16.346**	**460.482**

Laender	ÖNACE 2003	Gasoline t	Diesel t	Transport LPG t	Gasoil t	Fuel oil t	LPG t	Natural gas TSD m³	Electricity MWh	Fuel wood t	Biogenic sources t	District heat MWh
N	41	1	357	9	14	5	4	16	11.234	7	0	137
N	50	1.259	4.561	0	2.165	2.271	208	5.218	60.490	0	0	18.393
N	51	1.522	25.451	3	3.379	2.584	148	10.402	113.959	198	311	29.933
N	52	979	9.366	0	3.245	3.357	248	19.617	945.357	589	402	41.154
N	55	554	1.574	0	2.764	10.003	3.081	7.798	185.045	2.893	0	80.889
N	60	299	171.247	26	2.503	3.007	165	9.362	150.489	628	2.975	187.858
N	63	291	5.715	2	276	142	114	553	107.558	0	0	29.084
N	64	63	1.609	0	183	87	0	350	80.171	0	0	18.860
N	65	280	1.004	0	966	2.577	1	3.754	172.528	0	0	119.109
N	66	0	1	0	0	0	0	2	19	0	0	21
N	67	59	242	0	67	0	0	173	1.545	13	0	2.353
N	70	80	210	0	1	343	14	300	22.908	0	0	22.728
N	71	158	1.326	0	927	2	0	49	3.707	0	0	1.017
N	72	175	1.052	0	54	15	6	143	14.542	0	0	8.181
N	73	4	30	0	7	263	0	1.420	12.477	0	0	3.443
N	74	2.093	6.745	0	446	242	114	4.427	88.834	0	10	22.007
N	61, 62, 75 - 91				31.350	8.725	5.950	25.634	141.747	174	47.202	651.939
N	92	44	278	0	22	39	55	1.735	75.405	0	0	76.053
N	93	57	320	0	378	1.293	617	2.304	65.342	0	0	6.196
N	**Total**	**7.919**	**231.088**	**41**	**48.747**	**34.954**	**10.726**	**93.256**	**2.253.355**	**4.502**	**50.899**	**1.319.356**
O	41	0	77	1	5	5	0	15	4.760	6	0	28
O	50	1.085	3.995	0	1.905	2.025	177	4.386	53.097	0	0	8.680
O	51	1.351	21.193	2	3.127	2.370	139	7.997	92.350	174	241	14.126
O	52	875	6.807	0	2.955	2.146	220	15.793	779.939	493	319	19.421
O	55	491	1.423	0	2.462	8.980	2.704	6.558	161.407	2.532	0	38.171
O	60	259	164.467	29	2.504	2.719	146	8.316	142.246	688	2.999	88.650
O	63	206	3.975	2	235	334	103	449	11.982	0	0	13.724
O	64	48	1.218	0	142	66	0	265	60.826	0	0	8.900
O	65	458	1.229	0	1.192	3.259	1	4.501	223.683	0	0	56.208
O	66	6	11	0	0	0	0	11	233	0	0	875
O	67	40	164	0	45	0	0	117	1.050	9	0	1.110
O	70	86	274	0	1	428	12	265	20.538	0	0	10.725
O	71	191	1.179	0	342	3	0	65	1.965	0	0	480
O	72	180	1.081	0	61	15	1	155	22.226	0	0	3.861
O	73	3	7	0	6	35	0	21	588	0	0	1.625
O	74	2.319	3.515	0	497	258	112	4.818	93.973	0	11	10.385
O	61, 62, 75 - 91				46.988	14.454	4.299	12.909	125.209	367	38.880	306.821
O	92	36	227	0	19	33	41	1.502	61.307	0	0	35.889
O	93	56	395	0	316	1.324	581	4.039	65.064	0	0	2.924
O	**Total**	**7.690**	**211.237**	**34**	**62.802**	**38.454**	**8.538**	**72.183**	**1.922.442**	**4.269**	**42.450**	**622.603**

Laender	ÖNACE 2003	Gasoline t	Diesel t	Transport LPG t	Gasoil t	Fuel oil t	LPG t	Natural gas TSD m³	Electricity MWh	Fuel wood t	Biogenic sources t	District heat MWh
S	41	0	20	0	1	2	0	1	1.338	2	0	9
S	50	434	2.094	0	780	1.008	72	1.815	27.763	0	0	2.214
S	51	681	11.179	1	1.578	1.243	77	3.969	46.272	90	124	3.603
S	52	504	3.318	0	1.392	1.299	114	7.702	396.069	253	165	4.954
S	55	463	1.299	0	2.306	8.532	2.572	6.195	154.142	2.583	0	9.737
S	60	237	100.912	16	1.733	1.633	86	4.957	94.668	377	1.742	22.615
S	63	236	5.283	2	241	120	94	384	9.866	0	0	3.501
S	64	12	304	0	35	16	0	66	15.168	0	0	2.270
S	65	196	1.560	0	778	2.194	1	2.520	127.572	0	0	14.339
S	66	8	23	0	0	0	0	7	714	0	0	729
S	67	26	106	0	29	0	0	76	680	6	0	283
S	70	59	148	0	1	231	9	203	15.517	0	0	2.736
S	71	98	708	0	178	3	0	39	1.012	0	0	122
S	72	85	492	0	25	7	1	62	6.718	0	0	985
S	73	3	21	0	5	86	0	17	562	0	0	414
S	74	1.284	1.912	0	289	149	71	2.750	53.662	0	6	2.649
S	61, 62, 75 - 91				20.057	4.250	683	7.633	79.247	275	19.098	77.762
S	92	33	215	0	21	32	40	1.393	59.549	0	0	9.155
S	93	24	131	0	142	541	255	952	26.653	0	0	746
S	**Total**	**4.383**	**129.725**	**19**	**29.590**	**21.346**	**4.076**	**40.741**	**1.117.171**	**3.587**	**21.135**	**158.826**
ST	41	1	131	1	6	15	1	6	11.197	20	0	71
ST	50	948	3.473	0	1.662	1.702	178	3.883	46.598	0	0	13.914
ST	51	771	12.127	1	1.793	1.273	75	4.453	52.364	100	137	22.644
ST	52	797	6.133	0	2.542	1.689	203	14.386	719.389	447	291	31.132
ST	55	543	1.580	0	2.767	10.059	3.060	7.399	183.885	2.860	0	61.190
ST	60	254	164.973	27	2.518	2.650	140	8.199	138.723	591	2.926	142.109
ST	63	137	5.408	1	150	98	79	228	8.338	0	0	22.001
ST	64	37	1.064	0	114	51	3	208	47.795	0	0	14.267
ST	65	242	909	0	956	2.381	1	3.296	160.012	0	0	90.103
ST	66	1	4	0	0	0	0	6	56	0	0	62
ST	67	43	172	0	60	0	0	113	1.026	9	0	1.780
ST	70	95	247	0	2	384	15	363	25.712	0	0	17.193
ST	71	121	757	0	216	2	0	32	1.203	0	0	769
ST	72	148	910	0	47	13	1	122	12.702	0	0	6.189
ST	73	7	19	0	23	88	1	69	1.145	0	0	2.605
ST	74	2.098	3.103	1	471	246	104	4.929	93.958	0	10	16.648
ST	61, 62, 75 - 91				47.177	6.782	1.749	12.867	194.909	1.544	28.574	493.159
ST	92	38	243	0	20	37	45	2.261	70.565	0	0	57.532
ST	93	52	309	0	305	1.154	549	2.050	56.898	0	0	4.687
ST	**Total**	**6.333**	**201.561**	**31**	**60.829**	**28.625**	**6.205**	**64.870**	**1.826.477**	**5.572**	**31.939**	**998.054**

Laender	ÖNACE 2003	Gasoline t	Diesel t	Transport LPG t	Gasoil t	Fuel oil t	LPG t	Natural gas TSD m³	Electricity MWh	Fuel wood t	Biogenic sources t	District heat MWh
T	41	0	7	0	0	1	0	0	446	1	0	3
T	50	517	2.048	0	925	952	87	2.087	25.279	0	0	2.924
T	51	561	8.577	1	1.303	928	55	3.288	37.796	74	102	4.758
T	52	556	4.295	0	1.768	1.167	150	9.671	497.223	318	207	6.542
T	55	731	2.093	0	3.838	14.078	4.139	10.340	248.362	3.829	0	12.858
T	60	253	119.475	18	1.887	2.466	139	5.847	136.665	445	2.055	29.861
T	63	204	3.299	2	709	129	111	347	14.093	0	0	4.623
T	64	15	468	0	46	21	0	87	20.149	0	0	2.998
T	65	214	831	0	862	2.131	2	2.936	143.064	0	0	18.933
T	66	0	1	0	0	0	0	2	19	0	0	21
T	67	27	110	0	30	0	0	79	705	6	0	374
T	70	65	368	0	1	340	18	243	21.784	0	0	3.613
T	71	110	688	0	200	2	0	30	1.086	0	0	162
T	72	65	462	0	20	6	1	51	5.504	0	0	1.300
T	73	3	10	0	10	40	0	25	650	0	0	547
T	74	1.456	2.258	0	311	193	72	3.121	61.718	0	10	3.498
T	61, 62, 75 - 91				49.021	8.982	228	6.286	137.888	16	5.024	103.630
T	92	35	229	0	21	197	42	1.492	63.394	0	0	12.089
T	93	33	165	0	185	686	321	1.198	35.242	0	0	985
T	**Total**	**4.848**	**145.384**	**22**	**61.136**	**32.318**	**5.366**	**47.131**	**1.451.067**	**4.689**	**7.398**	**209.717**
V	41	1	12	0	3	1	0	0	3.346	1	0	3
V	50	279	1.012	0	514	480	46	1.120	13.407	0	0	625
V	51	380	5.802	0	806	742	37	2.190	25.280	49	67	1.017
V	52	270	2.034	0	846	566	70	4.710	242.133	155	101	1.398
V	55	223	640	0	1.128	4.110	1.260	3.058	74.784	1.180	0	2.747
V	60	78	50.068	8	741	858	45	2.514	44.180	189	871	6.381
V	63	52	1.730	0	56	37	33	86	4.363	0	0	988
V	64	17	435	0	49	23	0	95	21.668	0	0	641
V	65	67	248	0	283	613	53	968	42.210	0	0	4.046
V	66	0	1	0	0	0	0	2	19	0	0	21
V	67	22	94	0	25	0	0	66	598	9	0	80
V	70	38	95	0	8	151	12	114	8.837	0	0	772
V	71	42	263	0	76	1	0	13	420	0	0	35
V	72	49	301	0	16	4	0	39	4.142	0	0	278
V	73	0	1	0	0	3	0	2	31	0	0	117
V	74	748	1.056	0	159	134	35	1.465	28.919	0	3	747
V	61, 62, 75 - 91				11.247	1.167	1.917	4.472	34.535	156	312	22.125
V	92	13	82	0	7	12	15	520	21.759	0	0	2.583
V	93	15	82	0	89	338	161	599	16.639	0	0	210
V	**Total**	**2.293**	**63.957**	**9**	**16.054**	**9.240**	**3.682**	**22.032**	**587.270**	**1.739**	**1.355**	**44.813**

Laender	ÖNACE 2003	Gasoline t	Diesel t	Transport LPG t	Gasoil t	Fuel oil t	LPG t	Natural gas TSD m³	Electricity MWh	Fuel wood t	Biogenic sources t	District heat MWh
VIE	41	0	0	0	0	0	0	0	0	0	0	0
VIE	50	886	3.160	0	1.388	1.379	130	3.200	41.761	0	0	34.544
VIE	51	2.354	36.872	3	5.031	3.984	222	13.955	151.972	300	410	56.217
VIE	52	1.098	8.751	0	3.407	3.817	282	21.301	1.046.499	626	408	77.290
VIE	55	591	1.624	0	2.876	10.423	3.206	7.859	198.765	3.016	0	151.914
VIE	60	265	211.205	15.134	4.907	7.102	141	23.948	148.392	621	2.865	352.810
VIE	63	653	7.618	7	571	373	253	1.097	23.801	0	0	54.621
VIE	64	362	7.687	0	860	499	1	2.008	383.387	0	0	35.420
VIE	65	436	3.143	0	1.014	4.340	1	5.850	290.681	0	0	223.695
VIE	66	23	125	0	0	0	5	198	2.117	0	0	2.680
VIE	67	113	485	0	124	0	0	306	3.037	20	0	4.419
VIE	70	347	883	0	6	1.379	56	1.471	97.911	0	0	42.685
VIE	71	462	2.238	0	568	4	0	87	3.447	0	0	1.910
VIE	72	552	3.345	0	142	40	4	380	46.669	0	0	15.365
VIE	73	25	91	0	47	309	10	173	6.126	0	0	6.466
VIE	74	5.090	7.942	1	1.136	600	258	10.983	213.911	0	24	41.330
VIE	61, 62, 75 - 91				6.218	6.845	3	12.938	1.029.648	419	174	1.222.001
VIE	92	108	1.192	0	53	105	117	6.234	247.782	0	0	142.833
VIE	93	193	437	0	409	1.571	738	4.281	78.575	0	0	11.637
VIE	**Total**	**13.557**	**296.800**	**15.146**	**28.757**	**42.770**	**5.427**	**116.269**	**4.014.481**	**5.002**	**3.881**	**2.477.836**
AT	41	5	760	12	31	30	5	117	42.961	40	0	267
AT	50	6.072	22.844	0	10.560	10.992	1.010	24.464	301.039	0	0	90.135
AT	51	8.207	131.521	11	18.311	15.328	812	50.633	570.959	1.062	1.499	146.687
AT	52	5.625	45.152	0	17.958	15.208	1.473	102.875	5.124.443	3.191	2.095	201.673
AT	55	4.000	11.387	2	20.188	73.684	22.297	55.042	1.345.323	21.046	0	396.392
AT	60	1.800	1.079.289	15.274	18.295	22.126	948	68.193	941.927	3.940	18.198	920.591
AT	63	1.878	35.001	18	2.345	1.334	851	3.310	184.340	0	0	142.522
AT	64	571	13.221	0	1.478	787	5	3.175	650.832	0	0	92.421
AT	65	2.122	9.837	0	6.912	19.720	61	26.916	1.313.020	0	0	583.690
AT	66	37	168	0	0	0	5	230	3.195	0	0	4.427
AT	67	359	1.497	0	414	0	0	1.014	9.407	79	0	11.530
AT	70	820	2.345	0	22	3.446	144	3.123	225.877	0	0	111.377
AT	71	1.263	7.660	0	2.653	17	0	336	13.629	0	0	4.983
AT	72	1.336	8.090	0	388	143	15	1.008	119.189	0	0	40.093
AT	73	48	184	0	102	849	13	1.742	21.885	0	0	16.873
AT	74	16.336	28.461	4	3.581	1.967	830	35.124	687.940	0	81	107.844
AT	61, 62, 75 - 91	0	0	0	252.484	57.379	16.437	90.265	1.862.252	4.479	154.382	3.190.878
AT	92	338	2.646	0	184	483	388	16.306	649.830	0	0	372.695
AT	93	463	2.027	0	2.026	7.879	3.585	16.789	382.734	0	0	30.365
AT	**Total**	**51.281**	**1.402.089**	**15.319**	**357.933**	**231.371**	**48.878**	**500.659**	**14.450.781**	**33.837**	**176.255**	**6.465.444**