COUNTRY PRACTICE IN ENERGY STATISTICS

Topic/Statistics: Energy Consumption of Small to Medium-sized Establishments in Manufacturing Industries and construction

Institution/Organization: Statistics Austria

Country: Austria

Date: 28. 02. 2012

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Abstract

Write a short abstract of the statistics, and try to limit it to one page. The purpose of the abstract is to give the reader a general overview of the statistics/topic. It should therefore include a brief overview of the background and the purpose of the statistics, the population, the sample (if relevant), the main data sources, and the main users of the statistics. The abstract should also mention what is the most important contribution or issue addressed in the country practice (e.g. the practice deals with challenges of using administrative data, using of estimation, quality control, etc.). If there are other elements that are considered important, please feel free to include them in the abstract.

Keep in mind that all relevant aspects of the statistical production will be covered in more detail under the different chapters in the template. Therefore, the abstract should be short and focused on the key elements. What the most important elements are can vary from statistics to statistics, but as a help to write an abstract you can use the table below. The table can either replace a text or can be filled out in addition to writing a short text.

The aim of this voluntary survey is to record energy consumption by small to medium-sized establishments in the producing sector to supplement the obligatory Material Consumption Survey for improving the sectoral structure of energy consumption and expenditure on energy 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.

This statistics comprises consumption and the associated expenditure of small to medium-sized establishments in the manufacturing industry, broken down by fuels.

It is a voluntary sample survey with a sample size of 3 000 establishments which are not included in the sample of the Material Input Statistics. The data source used to define the universe is the Business Register.

The results are not published separately but as integrated part of the Energy Balances and the Energy Accounts.

Key elements	
Name of the statistics	Energy Consumption of Small to Medium-sized Establishments in Manufacturing Industries and construction
Background and purpose of the statistics	Energy consumption of small to medium seized industries
Population, sample and data sources	Sample survey with a sample size of 3000 establishments, drawn from the enterprise register
Main users	Statistics Austria: Energy balance, Energy Accounts, National Accounts
Important contribution or issue addressed	Energy balance, Energy Accounts, National 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 of Small to Medium-sized Establishments in Manufacturing Industries and construction

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

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

The survey on Energy Consumption of Small to Medium-sized Establishments in the Manufacturing Industry is a primary survey to supplement the Material Input Statistics with the sole aim of improving the data basis for the Energy Balances and Energy Accounts and thus meeting the increased requirements that apply to these bodies of statistics. It comprises energy consumption in physical and monetary units in the industry sector broken down by energy sources, namely gasoline, diesel, LPG, gas oil, fuel oil, natural gas, electricity, district heat, fuel wood and solid biofuels.

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.

2 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 are not published separately but as integrated part of the Energy Balances and the Energy Accounts.

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, Directorate Makro Economics: National 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

The survey itself is financed from the ordinary budget, the implementation into energy balances and energy accounts is paid by BMLFUW and BMWFJ, of which each covers 50% of the implementation costs

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).

~220 person days, 5 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 on Energy Consumption of Small and Medium-sized Establishments comprise energy consumption in physical and monetary units in the industry sector broken down by energy sources, namely gasoline, diesel, LPG, gas oil, fuel oil, natural gas, electricity, district heat, fuel wood and solid biofuels.

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 (gasoline, diesel, LPG, gas oil (2002 and 2004 only, since 2006 included into fuel oil), fuel oil, natural gas, electricity, district heat, fuel wood and biogenic energy sources).

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.

Except for electricity and district heat, energy source quantities could be reported in different units • l or kg (gasoline, diesel, LPG, gas oil, fuel oil), • Stacked cubic metres or kg (fuel wood and solid biofuels) and • m³ or kWh (natural gas)

and were then converted into compatible units for the purposes of the analysis with the aid of the following factors:

- Natural gas: 1 m³ = 11.11 kWh
- Gasoline: 1 000 l = 745 kg
- Diesel: 1 000 l = 836 kg
- LPG: 1 000 l = 580 kg
- Gas oil: 1 000 l = 844 kg
- Fuel oil: 1 000 l = 921 kg
- Wood pellets: 1 srm = 652 kg
- Wood chips: 1 srm = 350 kg
- Fuelwood: 1fm = 615 kg
- Fuelwood: 1rm = 523 kg
- Fuelwood: 1srm = 308 kg
- Wood waste: 1fm = 600 kg
- Sawdust: 1srm = 165 kg
- Sawdust: 1fm = 500 kg
- Bark: 1srm = 236 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).

Industrial establishments those are not included in the sample of the Material Input Statistics survey.

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 Categories C (Division 14 only), D and F with more than 9 employees (2002 and 2004) and more than 2 employees (all following surveys).
- Observational unit: Industrial establishments those are not included in the sample of the Material Input Statistics survey.
- Analytical unit: Nace 2 digit level, 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.*

This is a concentrated random sample of 3 000 establishments in NACE categories C, D and F not included in the random sample for the Material Input Statistics (Austria's around 2 000 top-selling businesses) and employing more than nine (2002 and 2004) or two employees (all following surveys) in the survey period, respectively.

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 2006 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 57.8% or 1 733 of the 2 999 establishments contacted in 2002, 44.9% or 1 353 of the 3 013 establishments contacted in 2004, only 27.9% or 838 of the 2 989 establishments contacted in 2006, 36.3% or 1089 of the 2 999 establishments contacted in 2008 and 45.1% or 1 348 of 2987 establishments contacted in 2010. In 2008 133 or 10 % of the participants and in 2010 502 or 37% 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*

Two-stage imputation process:
Stage 1: missing quantities or values are calculated with reference to the corresponding datum, using the average price
Stage 2: 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	Land, NACE, number of employees
Electricity	NACE, 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 broken down by 13 sectors at national level.

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 use 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 independent publication does 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.

Not relevant

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 producing 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. Due to the already relatively large sample size of nearly 30% (2002 & 2004) or 10% (2006-2010) of the universe, 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 small and medium-sized establishments in the producing 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.

For sampling errors see tales 6 a-e 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.

42.2% (2002). 55.1% (2004), 82.1% (2006), 63.7% (2008) and 54.9% (2010) 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 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, the representativeness is high.

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 (current year under review 2012).

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.

In those cases where the universe of a sector in a Land contains only a small number of establishments, breaks in the time sequence occur in some instances when there are minor changes within a sector when incorporating the results for the two surveys conducted in 2002 and 2004. The main reason for this is that certain establishments are no longer active or are active again or active for the first time and are therefore disregarded or taken into account for the first time, respectively in the projection.

The comparability between 2006 and former years is problematically in case of exclusive use of the sample survey. Due to the low response rate in 2006 the results in several sectors differ widely in fuels used and quantities consumed compared to results from 2002 and 2004. To smooth the resulting breaks in time series in the energy balances the fuel consumption of the establishments which reported data of high quality in 2004 and were extant in 2006 was estimated by assuming a constant consumption structure. In case of fuels use for space heating the extrapolation was done with heating degree days. In case of all other purposes it was done with the relation of sectoral consumption patterns between 2004 and 2006.

Since 2008 the respondence rate increases slowly but the 2006 implemented methodology is applied again because it improves the results significantly.

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.

Spatial comparability (sectoral and with regard to the energy sources included) with other EU or IEA member states (in the context of energy balances) is fulfilled.

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.?

To save resources a reduction of survey frequency from two to four years is discussed for the future.

Annexes

Standard documentation
Meta information

(Definitions, explanations, methods, quality)

on the Random Sample Surveys

Energy Consumption of Small to Medium-sized Establishments in Manufacturing Industries and construction

This documentation is valid as of the reporting periods:

2002 - 2010

Status: **February 2012**

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Annex 39

Executive Summary

The survey on Energy Consumption of Small to Medium-sized Establishments in the Manufacturing Industry is a primary survey to supplement the Material Input Statistics with the sole aim of improving the data basis for the Energy Balances and Energy Accounts and thus meeting the increased requirements that apply to these bodies of statistics. Due to the specific nature of this survey, which makes the results on their own not very meaningful, it is not published independently.

This statistics comprises consumption and the associated expenditure of small to medium-sized establishments in the manufacturing industry, broken down by fuels.

It is a voluntary sample survey with a sample size of 3 000 establishments which are not included in the sample of the Material Input Statistics. The data source used to define the universe is the Business Register.

The results are not published separately but as integrated part of the Energy Balances and the Energy Accounts.

Important elements	
Main purpose of the statistics	Energy consumption of small to medium seized industries
Observed unit / reporting unit / presentation unit	Establishments with more than 9 (until 2004) or more than (since 2006) respectively, that are not included in the sample of material input statistics
Type of statistics	Primary statistics
Data sources/Survey techniques	Sample survey with a sample size of 3000 establishments, drawn from the enterprise register
Reference period or due day	Even numbered years (2002, 2004, 2006, 2008,)
Periodicity	Two yearly
Survey participation	Voluntary survey
Legal bases	Five-year contracts with the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management and the Austrian Federal Ministry of Economy, Family and Youth, Federal Statistics Act 2000 in the current version, Regulation (EC) No. 1099/2008 of the European Parliament and of the Council of 22 October 2008 on Energy Statistics.
Regional breakdown	Laender of Austria
Availability of the results	Preliminary figures: not relevant Final figures: t + 4
Other	Residence principle

1. General Information

1.1 Objective and purpose, history

The aim of this voluntary survey is to record energy consumption by small to medium-sized establishments in the producing sector to supplement the obligatory Material Input Survey for improving the sectoral structure of energy consumption and expenditure on energy 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.

1.2 Contracting entity

- Federal Statistics Act 2000, as amended,
- Austrian Federal Ministry of Economics, Family and Youth (BMWFJ, formerly BMWA) and
- Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW).

1.3 Main users

Statistics Austria, Directorate Spatial Statistics

1.4 Legal basis

- Federal Statistics Act 2000, as amended,
- Regulation (EC) No. 1099/2008 of the European Parliament and of the Council of 22 October 2008 on Energy Statistics.
- Five-year contracts with BMLFUW and BMWFJ

2. Conception and production

2.1 Statistical concepts and methodology

2.1.1 Statistical purpose

The statistics on Energy Consumption of Small and Medium-sized Establishments comprise energy consumption in physical and monetary units in the industry sector broken down by energy sources, namely gasoline, diesel, LPG, gas oil, fuel oil, natural gas, electricity, district heat, fuel wood and solid biofuels.

2.1.2 Observed unit / reporting unit / presentation unit

Industrial establishments those are not included in the sample of the Material Input Statistics survey.

2.1.3 Data sources, coverage

The data source used to define the universe is the Business Register (UR).

2.1.4 Reporting unit and respondents

Establishments in NACE Categories C (Division 14 only), D and F with more than 9 employees (2002 and 2004) and more than 2 employees (all following surveys)

2.1.5 Survey format

Random sample survey

2.1.6 Sample characteristics

This is a concentrated random sample of 3 000 establishments in NACE categories C, D and F not included in the random sample for the Material Input Statistics (Austria's around 2 000 top-selling businesses) and employing more than nine (2002 and 2004) or two employees (all following surveys) in the survey period, respectively.

2.1.7 Survey techniques / data transmission

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 2006 a web-based questionnaire (eQuest) is available.

2.1.8 Survey questionnaire (including explanatory notes)

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.

2.1.9 Survey participation

Participation in this voluntary survey was 57.8% or 1 733 of the 2 999 establishments contacted in 2002, 44.9% or 1 353 of the 3 013 establishments contacted in 2004, only 27.9% or 838 of the 2 989 establishments contacted in 2006, 36.3% or 1089 of the 2 999 establishments contacted in 2008 and 45.1% or 1 348 of 2987 establishments contacted in 2010. In 2008 133 or 10 % of the participants and in 2010 502 or 37% 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, gas oil (2002 and 2004 only, 2006 included into fuel oil), fuel oil, natural gas, electricity, district heat, fuel wood and biogenic energy sources).

Except for electricity and district heat, energy source quantities could be reported in different units

- l or kg (gasoline, diesel, LPG, gas oil, fuel oil),
- Stacked cubic metres or kg (fuel wood and solid biofuels) and
- m^3 or kWh (natural gas)

and were then converted into compatible units for the purposes of the analysis with the aid of the following factors:

• Natural gas:	1 m^3	=	11.11 kWh
• Gasoline:	1000 l	=	745 kg
• Diesel:	1000 l	=	836 kg
• LPG:	1000 l	=	580 kg
• Gas oil:	1000 l	=	844 kg
• Fuel oil:	1000 l	=	921 kg
• Wood pellets:	1 srm	=	652 kg
• Wood chips:	1 srm	=	350 kg
• Fuelwood:	1fm	=	615 kg
• Fuelwood:	1rm	=	523 kg
• Fuelwood:	1srm	=	308 kg
• Wood waste:	1fm	=	600 kg
• Sawdust:	1srm	=	165 kg
• Sawdust:	1fm	=	500 kg
• Bark:	1srm	=	236 kg

2.1.11 Classifications used

- 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 of the results

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

Coding of NACE 2-digit/3-digit/4-digit selection criterion for Sectoral Structure of Energy Balances in accordance to Table 1.

Table 1: Balance Sector– NACE Correspondence:

Balance Sector	NACE 2003 division	Group 2003	NACE 2008 division	Group 2008	Name of the sectors
I 1		271,272,273, 2751, 2752		241,242,243, 2451, 2452	Making of iron, steel and ferrous alloys and pipes, other first processing of iron and steel
I 2	24		20, 21		Making of chemicals and chemical products
I 3		274,2753, 2754		244,2453, 2454	Making and first processing of nonferrous metals, light metal casting, heavy metal casting
I 4	26		23		Making and processing of glass, making of stone and earthenware
I 5	34, 35		29, 30		Vehicle construction
I 6	29		26, 27, 28		Mechanical engineering
I 7	13,14		07,08	099	Mining of ores, mining of stones and earth, other mining
I 8	15, 16		10, 11, 12		Production of food and semi-luxury products, beverages, tobacco processing
I 9	21, 22		17, 18		Manufacture and processing of paper and board, publishing, printing, duplication of pre-recorded sound, picture and data carriers
I 10	20		16		Working and processing of wood (excl. furniture manufacture)
I 11	45		41, 42, 43		Building
I 12	17,18, 19		13, 14, 15		Manufacture of textiles, textile goods and clothing, leather making and processing, footwear manufacture
I 13	25, 28, 30 - 33, 36		22, 31, 32		Other producing sector

2.2.3 Editing and verification of data sources used

Plausibility check of the stated quantities with reference to the stated values and the following average prices:

Table 2: Average (gross) prices of fuels surveyed

Fuel	Unit	Prices per unit				
		2002	2004	2006	2008	2010
Gasoline:	1 litre	€ 0.90	€ 0.94	€ 1.15	€ 1.05	€ 1,05
Diesel:	1 litre	€ 0.75	€ 0.82	€ 0.95	€ 1.09	€ 1,09
LPG:	1 kg	€ 1.80	€ 2.00	€ 1.80	€ 1.80	€ 1,80
Gas oil	1 litre	€ 0.35	€ 0.56	--	--	--
Fuel oil:	1 litre	€ 0.20	€ 0.46	€ 0.67	€ 0.85	€ 0,85
Natural gas:	1 m3	€ 0.45	€ 0.53	€ 0.45	€ 0.54	€ 0,54
Electricity:	1 kWh	€ 0.15	€ 0.15	€ 0.14	€ 0.14	€ 0,14
District heat:	1 kWh	€ 0.07	€ 0.07	€ 0.07	€ 0.06	€ 0,06
Fuel wood	1 stacked m3	€ 30.00	€ 30.00	--	--	--
Fuel wood	1 kg	--	--	€ 0.110	€ 0.15	€ 0,15
Solid biofuels	1 stacked m3	€ 15.00	€ 15.00	--	--	--
Solid biofuels	1 kg	--	--	€ 0.20	--	--
Wood pellets	1 srm	--	--	--	€ 117.00	€ 117,00
Wood chips	1 srm	--	--	--	€ 13.20	€ 13,20

In addition, respondents were contacted by telephone if data were implausible.

2.2.4 Imputation (where responses are missing or data incomplete)

Two-stage imputation process:

Stage 1: missing quantities or values are calculated with reference to the corresponding datum, using the average price

Stage 2: 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	Land, NACE, number of employees
Electricity	NACE, number of employees

2.2.5 Grossing up procedures (Weighting)

Free projection by weighting the individual cases according to their share of the universe broken down by 13 sectors (Table 3a-e) at national level.

Table 3a: Universe subdivided by sectors and Laender 2002

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	0	7	0	2	1	2	0	1	13
I2	1	6	23	22	8	11	8	6	41	126
I3	0	0	5	4	3	3	3	0	6	24
I4	17	17	53	53	19	55	15	16	18	263
I5	2	3	15	27	7	19	4	7	10	94
I6	30	96	273	338	101	222	126	92	214	1 492

I7	9	8	21	13	10	24	13	3	1	102
I8	39	67	237	260	87	135	101	55	75	1 056
I9	14	17	57	59	29	58	36	30	114	414
I10	11	42	93	99	56	74	46	32	36	489
I11	184	312	864	662	306	582	396	222	659	4 187
I12	6	13	39	69	17	29	25	96	39	333
I13	34	75	235	303	75	144	92	56	115	1 129
Total	347	656	1 922	1 909	720	1 357	867	615	1 329	9 722
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 3b: Universe subdivided by sectors and Laender 2004

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	2	7	0	2	2	2	0	1	16
I2	2	10	27	26	11	15	13	6	36	146
I3	0	1	4	5	3	3	2	1	2	21
I4	15	17	64	50	21	52	13	17	20	269
I5	3	3	16	35	9	19	7	7	10	109
I6	41	115	288	387	110	246	130	101	208	1 626
I7	10	8	24	13	8	28	15	5	0	111
I8	42	62	251	267	100	140	101	55	69	1 087
I9	14	16	54	63	26	60	40	25	124	422
I10	15	45	99	88	53	78	44	30	35	487
I11	209	314	937	730	332	632	421	210	801	4 586
I12	3	13	35	60	17	22	24	89	36	299
I13	38	75	220	286	76	137	99	55	104	1 090
Total	392	681	2 026	2 010	768	1 434	911	601	1 446	10 269
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 3c: Universe subdivided by sectors and Laender 2006

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	2	8	1	2	3	1	0	3	20
I2	4	19	57	48	18	26	19	14	63	269
I3	0	2	7	10	5	4	4	3	6	42
I4	48	52	162	130	60	133	60	36	54	735
I5	7	7	38	50	15	33	19	18	23	210
I6	109	326	702	880	293	553	333	245	461	3 902
I7	15	20	45	37	18	40	26	7	1	209
I8	154	174	679	670	214	388	274	170	167	2 890
I9	21	51	148	116	74	125	93	47	329	1 004
I10	44	130	302	353	165	258	199	126	80	1 657
I11	656	1 077	2 803	2 264	1 195	2 026	1 530	789	2 412	14 752
I12	17	40	75	106	47	67	49	183	117	701
I13	115	280	669	725	288	555	410	219	391	3 652
Total	1 190	2 180	5 696	5 390	2 394	4 211	3 017	1 857	4 107	30 041
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 3d: Universe subdivided by sectors and Laender 2008

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	1	8	2	1	2	1	2	3	20
I2	7	15	49	41	17	24	18	19	61	251
I3	1	2	7	11	3	4	3	3	4	38
I4	38	39	152	129	50	116	56	34	49	663
I5	4	3	33	49	15	33	17	18	14	186
I6	94	271	579	766	248	493	288	233	426	3398
I7	14	18	50	39	13	40	24	9	0	207
I8	150	158	653	659	216	387	258	168	173	2822
I9	14	40	95	92	45	66	50	40	161	603
I10	27	84	239	298	119	186	127	98	64	1242
I11	559	924	2635	2172	1140	1801	1365	785	2273	13654
I12	13	35	72	107	56	67	47	163	95	655
I13	102	245	577	641	279	480	347	200	315	3186
Total	1023	1835	5149	5006	2202	3699	2601	1772	3638	26925
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 3e: Universe subdivided by sectors and Laender 2010

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	3	20	9	1	19	4	2	4	62
I2	11	25	71	59	27	32	24	18	73	340
I3	1	5	18	21	5	9	7	4	6	76
I4	35	51	161	157	51	124	67	39	49	734
I5	7	10	43	70	24	50	21	22	23	270
I6	115	331	674	963	286	602	334	278	487	4.070
I7	12	17	47	38	20	46	21	10	0	211
I8	160	175	698	734	228	430	272	178	205	3.080
I9	17	46	113	115	57	77	56	49	166	696
I10	37	102	229	316	127	190	132	90	59	1282
I11	564	888	2.677	2.305	1.152	1.912	1.407	784	2.532	14.221
I12	16	36	68	117	60	76	55	161	95	684
I13	100	264	613	718	293	486	354	209	340	3.377
Total	1.075	1.953	5.432	5.622	2.331	4.053	2.754	1.844	4.039	29.103
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

2.2.6 Compilation of the final data set, (other) models and statistical estimation techniques used

Regionalisation of the projection to the Laender of Austria takes place in two stages:

1. The data reported directly in respect of a province are attributed to that province (cf. Table 4 a-e)

Table 4a: Number of respondents by Laender and sectors 2002

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	0	1	0	0	0	0	0	0	1
I2	0	3	4	3	0	0	1	0	5	16
I3	0	0	1	0	1	0	1	0	2	5
I4	2	1	11	5	1	13	2	3	3	41
I5	1	0	3	1	0	2	0	1	1	9
I6	5	16	43	63	14	34	18	16	33	242

Sector	B	C	L	U	S	ST	T	V	VIE	A
I7	2	1	4	4	2	8	2	1	0	24
I8	8	17	43	55	18	16	13	9	12	191
I9	1	3	7	5	3	11	8	4	17	59
I10	3	6	17	18	8	21	11	6	8	98
I11	49	50	172	132	54	117	78	44	116	812
I12	0	2	5	7	1	6	5	14	2	42
I13	5	13	36	59	16	19	15	11	17	191
Total	76	112	347	352	118	247	154	109	216	1731
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, AU - Austria										

Table 4b: Number of respondents by Laender and sectors 2004

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	0	1	0	1	0	0	0	1	3
I2	2	4	7	7	2	3	1	0	8	34
I3	0	0	0	0	1	1	1	1	2	6
I4	5	6	16	9	6	12	2	5	1	62
I5	1	0	5	6	3	8	2	2	5	32
I6	5	22	36	54	20	34	21	18	24	234
I7	3	4	8	6	2	11	6	2	0	42
I8	8	8	29	42	14	16	16	9	5	147
I9	1	2	14	14	4	8	8	4	23	78
I10	3	12	13	28	8	21	14	9	3	111
I11	13	18	61	59	20	46	23	17	34	291
I12	2	5	11	23	6	7	6	20	7	87
I13	11	17	42	51	18	31	26	9	21	226
Total	54	98	243	299	105	198	126	96	134	1353
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 4c: Number of respondents by Laender and sectors 2006

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	0	1	0	1	0	0	0	2	4
I2	3	4	7	7	2	4	1	0	11	39
I3	0	0	0	0	1	1	2	1	1	6
I4	5	6	23	13	7	17	5	5	2	83
I5	1	0	4	8	4	10	3	3	5	38
I6	8	33	54	80	24	52	32	24	37	344
I7	3	5	10	8	2	13	6	2	0	49
I8	16	16	55	64	18	24	24	13	8	238
I9	2	3	20	18	7	11	13	6	35	115
I10	3	17	21	41	13	27	17	13	5	157
I11	33	40	137	117	47	103	70	41	71	659
I12	2	5	12	24	7	8	8	26	7	99
I13	14	23	60	79	25	51	38	14	30	334
Total	90	152	404	459	158	321	219	148	214	2165
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 4d: Number of respondents by Laender and sectors 2008

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	1	2	0	1	1	0	0	1	6

Sector	B	C	L	U	S	ST	T	V	VIE	A
I2	1	2	9	7	3	3	5	3	8	41
I3	0	0	1	1	0	0	2	0	1	5
I4	4	6	15	12	3	12	5	5	2	64
I5	0	0	4	6	2	4	3	0	1	20
I6	7	21	43	61	18	46	19	16	27	258
I7	4	3	8	7	3	8	5	1	0	39
I8	14	12	56	50	10	22	17	12	8	201
I9	2	5	7	6	6	7	5	3	7	48
I10	0	11	19	26	10	17	7	9	4	103
I11	23	43	128	96	53	87	73	36	78	617
I12	0	3	7	15	6	5	7	21	6	70
I13	5	14	42	63	16	33	27	9	18	227
Total	60	121	341	350	131	245	175	115	161	1699
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 4e: Number of respondents by Laender and sectors 2010

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	0	1	5	1	1	2	1	0	1	12
I2	2	6	17	10	5	11	8	6	17	82
I3	0	1	3	5	1	1	1	1	1	14
I4	5	9	24	21	7	17	6	8	1	98
I5	0	3	5	11	3	7	2	1	2	34
I6	9	41	80	101	30	77	40	30	52	460
I7	5	6	10	18	7	16	10	3	0	75
I8	19	8	42	47	16	32	28	22	16	230
I9	4	6	8	9	7	19	6	6	12	77
I10	6	18	40	57	22	38	31	19	5	236
I11	27	49	144	128	66	118	78	43	133	786
I12	1	6	14	36	9	7	13	31	10	127
I13	13	26	63	83	29	52	39	24	31	360
Total	91	180	455	527	203	397	263	194	281	2591
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

2. The consumption data projected for Austria are reduced by the reports and distributed over the Laender according to the distribution of the rest of the universe (= universe less random sample cases less unit non response cases) (Table 5 a-e)

Table 5a: Distribution of sectoral non response cases across Laender 2002 in percent

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	*0.0*	*0.0*	*50.0*	*0.0*	*16.7*	*8.3*	*16.7*	*0.0*	*8.3*	*100.0*
I2	*0.9*	*2.7*	*17.3*	*17.3*	*7.3*	*10.0*	*6.4*	*5.5*	*32.7*	*100.0*
I3	*0.0*	*0.0*	*21.1*	*21.1*	*10.5*	*15.8*	*10.5*	*0.0*	*21.1*	*100.0*
I4	*6.8*	*7.2*	*18.9*	*21.6*	*8.1*	*18.9*	*5.9*	*5.9*	*6.8*	*100.0*
I5	*1.2*	*3.5*	*14.1*	*30.6*	*8.2*	*20.0*	*4.7*	*7.1*	*10.6*	*100.0*
I6	*2.0*	*6.4*	*18.4*	*22.0*	*7.0*	*15.0*	*8.6*	*6.1*	*14.5*	*100.0*
I7	*9.0*	*9.0*	*21.8*	*11.5*	*10.3*	*20.5*	*14.1*	*2.6*	*1.3*	*100.0*
I8	*3.6*	*5.8*	*22.4*	*23.7*	*8.0*	*13.8*	*10.2*	*5.3*	*7.3*	*100.0*
I9	*3.7*	*3.9*	*14.1*	*15.2*	*7.3*	*13.2*	*7.9*	*7.3*	*27.3*	*100.0*

Sector	B	C	L	U	S	ST	T	V	VIE	A
I10	*2.0*	*9.2*	*19.4*	*20.7*	*12.3*	*13.6*	*9.0*	*6.6*	*7.2*	*100.0*
I11	*4.0*	*7.8*	*20.5*	*15.7*	*7.5*	*13.8*	*9.4*	*5.3*	*16.1*	*100.0*
I12	*2.1*	*3.8*	*11.7*	*21.3*	*5.5*	*7.9*	*6.9*	*28.2*	*12.7*	*100.0*
I13	*3.1*	*6.6*	*21.2*	*26.0*	*6.3*	*13.3*	*8.2*	*4.8*	*10.4*	*100.0*
Total	*3.4*	*6.8*	*19.7*	*19.5*	*7.5*	*13.9*	*8.9*	*6.3*	*13.9*	*100.0*
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 5b: Distribution of sectoral non response cases across Laender 2004 in percent

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	*0.0*	*15.4*	*46.2*	*0.0*	*7.7*	*15.4*	*15.4*	*0.0*	*0.0*	*100.0*
I2	*0.0*	*5.4*	*17.9*	*17.0*	*8.0*	*10.7*	*10.7*	*5.4*	*25.0*	*100.0*
I3	*0.0*	*6.7*	*26.7*	*33.3*	*13.3*	*13.3*	*6.7*	*0.0*	*0.0*	*100.0*
I4	*4.8*	*5.3*	*23.2*	*19.8*	*7.2*	*19.3*	*5.3*	*5.8*	*9.2*	*100.0*
I5	*2.6*	*3.9*	*14.3*	*37.7*	*7.8*	*14.3*	*6.5*	*6.5*	*6.5*	*100.0*
I6	*2.6*	*6.7*	*18.1*	*23.9*	*6.5*	*15.2*	*7.8*	*6.0*	*13.2*	*100.0*
I7	*10.1*	*5.8*	*23.2*	*10.1*	*8.7*	*24.6*	*13.0*	*4.3*	*0.0*	*100.0*
I8	*3.6*	*5.7*	*23.6*	*23.9*	*9.1*	*13.2*	*9.0*	*4.9*	*6.8*	*100.0*
I9	*3.8*	*4.1*	*11.6*	*14.2*	*6.4*	*15.1*	*9.3*	*6.1*	*29.4*	*100.0*
I10	*3.2*	*8.8*	*22.9*	*16.0*	*12.0*	*15.2*	*8.0*	*5.6*	*8.5*	*100.0*
I11	*4.6*	*6.9*	*20.4*	*15.6*	*7.3*	*13.6*	*9.3*	*4.5*	*17.9*	*100.0*
I12	*0.5*	*3.8*	*11.3*	*17.5*	*5.2*	*7.1*	*8.5*	*32.5*	*13.7*	*100.0*
I13	*3.1*	*6.7*	*20.6*	*27.2*	*6.7*	*12.3*	*8.4*	*5.3*	*9.6*	*100.0*
Total	*3.8*	*6.5*	*20.0*	*19.2*	*7.4*	*13.9*	*8.8*	*5.7*	*14.7*	*100.0*
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 5c: Distribution of sectoral non response cases across Laender 2006 in percent

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	*0.0*	*12.5*	*43.8*	*6.3*	*6.3*	*18.8*	*6.3*	*0.0*	*6.3*	*100.0*
I2	*0.4*	*6.5*	*21.7*	*17.8*	*7.0*	*9.6*	*7.8*	*6.1*	*22.6*	*100.0*
I3	*0.0*	*5.6*	*19.4*	*27.8*	*11.1*	*8.3*	*5.6*	*5.6*	*13.9*	*100.0*
I4	*6.6*	*7.1*	*21.3*	*17.9*	*8.1*	*17.8*	*8.4*	*4.8*	*8.0*	*100.0*
I5	*3.5*	*4.1*	*19.8*	*24.4*	*6.4*	*13.4*	*9.3*	*8.7*	*10.5*	*100.0*
I6	*2.8*	*8.2*	*18.2*	*22.5*	*7.6*	*14.1*	*8.5*	*6.2*	*11.9*	*100.0*
I7	*7.5*	*9.4*	*21.9*	*18.1*	*10.0*	*16.9*	*12.5*	*3.1*	*0.6*	*100.0*
I8	*5.2*	*6.0*	*23.5*	*22.9*	*7.4*	*13.7*	*9.4*	*5.9*	*6.0*	*100.0*
I9	*2.1*	*5.4*	*14.4*	*11.0*	*7.5*	*12.8*	*9.0*	*4.6*	*33.1*	*100.0*
I10	*2.7*	*7.5*	*18.7*	*20.8*	*10.1*	*15.4*	*12.1*	*7.5*	*5.0*	*100.0*
I11	*4.4*	*7.4*	*18.9*	*15.2*	*8.1*	*13.6*	*10.4*	*6.3*	*16.6*	*100.0*
I12	*2.5*	*5.8*	*10.5*	*13.6*	*6.6*	*9.8*	*6.8*	*26.1*	*18.3*	*100.0*
I13	*3.0*	*7.7*	*18.4*	*19.5*	*7.9*	*15.2*	*11.2*	*6.2*	*10.9*	*100.0*
Total	*3.9*	*7.3*	*19.0*	*17.7*	*8.0*	*14.0*	*10.0*	*6.1*	*14.0*	*100.0*
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 5d: Distribution of sectoral non response cases across Laender 2008 in percent

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	*0.0*	*0.0*	*42.9*	*14.3*	*0.0*	*7.1*	*7.1*	*14.3*	*14.3*	*100.0*

Sector	B	C	L	U	S	ST	T	V	VIE	A
I2	*2.9*	*6.2*	*19.0*	*16.2*	*6.7*	*10.0*	*6.2*	*7.6*	*25.2*	*100.0*
I3	*3.0*	*6.1*	*18.2*	*30.3*	*9.1*	*12.1*	*3.0*	*9.1*	*9.1*	*100.0*
I4	*5.7*	*5.5*	*22.9*	*19.5*	*7.8*	*17.4*	*8.5*	*4.8*	*7.8*	*100.0*
I5	*2.4*	*1.8*	*17.5*	*25.9*	*7.8*	*17.5*	*8.4*	*10.8*	*7.8*	*100.0*
I6	*2.8*	*8.0*	*17.1*	*22.5*	*7.3*	*14.2*	*8.6*	*6.9*	*12.7*	*100.0*
I7	*6.0*	*8.9*	*25.0*	*19.0*	*6.0*	*19.0*	*11.3*	*4.8*	*0.0*	*100.0*
I8	*5.2*	*5.6*	*22.8*	*23.2*	*7.9*	*13.9*	*9.2*	*6.0*	*6.3*	*100.0*
I9	*2.2*	*6.3*	*15.9*	*15.5*	*7.0*	*10.6*	*8.1*	*6.7*	*27.7*	*100.0*
I10	*2.4*	*6.4*	*19.3*	*23.9*	*9.6*	*14.8*	*10.5*	*7.8*	*5.3*	*100.0*
I11	*4.1*	*6.8*	*19.2*	*15.9*	*8.3*	*13.1*	*9.9*	*5.7*	*16.8*	*100.0*
I12	*2.2*	*5.5*	*11.1*	*15.7*	*8.5*	*10.6*	*6.8*	*24.3*	*15.2*	*100.0*
I13	*3.3*	*7.8*	*18.1*	*19.5*	*8.9*	*15.1*	*10.8*	*6.5*	*10.0*	*100.0*
Total	*3.8*	*6.8*	*19.1*	*18.5*	*8.2*	*13.7*	*9.6*	*6.6*	*13.8*	*100.0*
B – Burgenland, C – Carinthia, L – Lower Austria, U – Upper Austria, S – Salzburg, ST – Styria, T – Tyrol, V – Vorarlberg, VIE – Vienna, A - Austria										

Table 5e: Distribution of sectoral non response cases across Laender 2010 in percent

Sector	B	C	L	U	S	ST	T	V	VIE	A
I1	*0,0*	*4,0*	*30,0*	*16,0*	*0,0*	*34,0*	*6,0*	*4,0*	*6,0*	*100,0*
I2	*3,5*	*7,4*	*20,9*	*19,0*	*8,5*	*8,1*	*6,2*	*4,7*	*21,7*	*100,0*
I3	*1,6*	*6,5*	*24,2*	*25,8*	*6,5*	*12,9*	*9,7*	*4,8*	*8,1*	*100,0*
I4	*4,7*	*6,6*	*21,5*	*21,4*	*6,9*	*16,8*	*9,6*	*4,9*	*7,5*	*100,0*
I5	*3,0*	*3,0*	*16,1*	*25,0*	*8,9*	*18,2*	*8,1*	*8,9*	*8,9*	*100,0*
I6	*2,9*	*8,0*	*16,5*	*23,9*	*7,1*	*14,5*	*8,1*	*6,9*	*12,0*	*100,0*
I7	*5,1*	*8,1*	*27,2*	*14,7*	*9,6*	*22,1*	*8,1*	*5,1*	*0,0*	*100,0*
I8	*4,9*	*5,9*	*23,0*	*24,1*	*7,4*	*14,0*	*8,6*	*5,5*	*6,6*	*100,0*
I9	*2,1*	*6,5*	*17,0*	*17,1*	*8,1*	*9,4*	*8,1*	*6,9*	*24,9*	*100,0*
I10	*3,0*	*8,0*	*18,1*	*24,8*	*10,0*	*14,5*	*9,7*	*6,8*	*5,2*	*100,0*
I11	*4,0*	*6,2*	*18,9*	*16,2*	*8,1*	*13,4*	*9,9*	*5,5*	*17,9*	*100,0*
I12	*2,7*	*5,4*	*9,7*	*14,5*	*9,2*	*12,4*	*7,5*	*23,3*	*15,3*	*100,0*
I13	*2,9*	*7,9*	*18,2*	*21,0*	*8,8*	*14,4*	*10,4*	*6,1*	*10,2*	*100,0*
Total	*3,7*	*6,7*	*18,8*	*19,2*	*8,0*	*13,8*	*9,4*	*6,2*	*14,2*	*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

Contact by telephone in the case of implausible information (active), advice and assistance by telephone with completing the questionnaire (passive).

Due to the low response rate in 2006 the results in several sectors differ widely in fuels used and quantities consumed compared to results from 2002 and 2004. To smooth the resulting breaks in time series in the Energy Balances the fuel consumption of the establishments which reported data of high quality in 2004 and were extant in 2006 was estimated by assuming a constant consumption structure. In case of fuels use for space heating the extrapolation was done with heating degree days. In case of all other purposes it was done with the relation of sectoral consumption patterns between 2004 and 2006 derived from the results of the Material Input Statistics 2004 and 2006.

Than both data sets – extrapolation from 2004 and survey 2006 – were newly weighted and grossed up jointly.

The same methodology like 2006 was applied to all subsequent surveys.

2.3. Publication (accessibility)

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 independent publication does not appear useful.

2.3.1 Preliminary results

Not relevant

2.3.2 Final results

2 month after the closing the survey

2.3.3 Revisions

Not relevant

2.3.4 Published in:

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

2.3.5 Treatment of confidential data

Not relevant

3. Quality

3.1. Relevance

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

3.2. Accuracy

3.2.1. Sampling effects, representativeness

No effects of the sample are observable, the representativeness is high.

Table 6 a-e provides 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 producing 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. Due to the already relatively large sample size of nearly 30 (2002 & 2004) or 10 (2006) of the universe, 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 small and medium-sized establishments in the producing 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 6a: Percentage sampling errors by sectors and energy sources at 95 statistical certainty 2002

Sector	Gasoline	Diesel	LPG	Gas oil	Fuel oil	Natural gas	Electricity	District heat	Fuel wood	Biofuels
I1										
I2	51.29	38.41		61.30	138.79	56.50	73.04			
I3	48.61	107.37		22.94			55.26			
I4	43.27	58.01		55.26	59.02	69.24	46.81	49.46		
I5	86.02	44.26		121.97	133.79	43.61	84.30	87.11		
I6	16.60	17.95	33.79	23.25	32.09	53.17	17.00	28.78	69.11	137.49
I7	69.00	33.72		74.45	75.24		75.99		27.73	
I8	20.97	24.51	99.03	17.00	34.72	41.40	18.14	60.66	62.27	158.11
I9	33.96	138.47		30.15	80.96	106.23	33.96	73.52		
I10	34.45	35.70	41.41	53.60	80.08	47.08	29.11	122.84	49.92	39.88
I11	12.93	13.47	43.02	9.63	25.83	21.65	11.27	30.55	30.02	60.14
I12	26.52	51.03	57.01	24.98	73.88	81.37	37.76	35.98		
I13	19.03	18.74	79.21	26.39	49.88	66.16	23.46	85.61	37.91	17.08
Total	7.98	12.38	29.91	9.50	22.37	22.92	9.38	28.42	23.41	27.77

Table 6b: Percentage sampling errors by sectors and energy sources at 95 statistical certainty 2004

Sector	Gasoline	Diesel	LPG	Gas oil	Fuel oil	Natural gas	Electricity	District heat	Fuel wood	Biofuels
I1	59.71	65.10		237.89	220.54	237.89	50.52			
I2	68.50	49.46	126.47	117.19	125.06	92.34	49.76	127.91		
I3	212.41	90.66	129.37	117.12		212.41	54.10			
I4	58.21	53.54	163.05	69.43	112.15	108.76	33.88	138.57	134.11	181.57
I5	57.81	44.04	194.59	79.71	69.10	87.20	63.00	115.83	188.81	
I6	28.17	19.15	82.49	33.69	38.80	35.85	21.31	58.38	176.92	178.24
I7	96.07	31.99		96.22	86.04	176.71	46.48		137.33	193.51
I8	41.37	27.31	195.62	29.04	38.17	41.99	20.58	79.23	66.31	191.97
I9	35.21	32.76	190.94	72.99	74.44	52.83	44.07	67.57	195.86	148.88
I10	74.93	23.25	154.42	87.22	166.61	116.57	30.04	105.87	94.50	39.70
I11	25.65	23.19	114.31	28.76	46.48	41.00	20.99	51.68	62.11	68.91
I12	36.94	22.92	99.38	43.55	53.36	73.96	26.35	112.14	168.53	119.16
I13	25.34	19.08	93.51	39.98	48.82	57.90	27.62	88.12	73.94	33.65
Total	15.40	15.58	65.07	15.10	19.61	20.20	11.25	27.88	39.72	27.87

Table 6c: Percentage sampling errors by sectors and energy sources at 95 statistical certainty 2006 (including the extrapolation 2004)

Sector	Gasoline	Diesel	LPG	Gas oil	Fuel oil	Natural gas	Electricity	District heat	Fuel wood	Biofuels
I1	*122.0*	*92.6*	*178.6*	*178.6*	*178.6*	*177.9*	*111.3*			
I2	*58.4*	*56.5*	*169.8*	*102.8*	*118.6*	*76.3*	*54.1*	*120.4*	*178.6*	
I3	*126.0*	*97.9*	*156.8*	*141.5*	*178.6*	*178.6*	*118.5*	*178.6*		

Sector	Gasoline	Diesel	LPG	Gas oil	Fuel oil	Natural gas	Electricity	District heat	Fuel wood	Biofuels
I4	*54.3*	*38.4*	*144.1*	*47.3*	*107.9*	*63.2*	*41.5*	*132.8*	*143.5*	*118.3*
I5	*37.7*	*33.4*	*123.8*	*56.9*	*60.3*	*75.0*	*47.9*	*134.2*	*166.6*	*176.3*
I6	*20.1*	*15.4*	*39.7*	*26.2*	*29.6*	*29.8*	*20.5*	*42.0*	*145.1*	*98.5*
I7	*95.6*	*26.5*	*143.2*	*86.4*	*104.4*	*110.9*	*32.2*		*111.9*	*133.4*
I8	*39.4*	*21.1*	*143.5*	*24.3*	*27.5*	*42.4*	*18.6*	*115.9*	*57.7*	*153.5*
I9	*30.7*	*25.9*	*151.0*	*49.6*	*57.9*	*41.4*	*34.5*	*54.4*	*131.6*	*113.0*
I10	*66.2*	*27.9*	*182.0*	*138.9*	*115.9*	*87.3*	*44.4*	*89.1*	*51.7*	*73.4*
I11	*23.4*	*21.1*	*36.8*	*82.3*	*21.5*	*25.5*	*63.9*	*52.0*	*77.7*	*40.5*
I12	*33.8*	*24.3*	*166.2*	*33.9*	*48.9*	*96.0*	*32.6*	*113.3*	*144.6*	*76.6*
I13	*24.7*	*13.9*	*72.4*	*33.1*	*37.8*	*31.5*	*22.6*	*62.5*	*50.1*	*23.6*
Total	*13.9*	*14.0*	*49.9*	*29.4*	*17.7*	*22.9*	*13.2*	*28.9*	*31.8*	*60.7*

Table 6d: Percentage sampling errors by sectors and energy sources at 95 statistical certainty 2008 (including the extrapolation 2006)

Sector	Gasoline	Diesel	LPG	Fuel oil	Natural gas	Electricity	District heat	Fuel wood	Biofuels
I1	*124.8*	*151.7*	*172.9*	*172.9*	*91.2*	*156.8*			*172.9*
I2	*64.4*	*43.9*	*117.3*	*85.7*	*85.3*	*73.3*	*133.2*	*186.5*	*188.3*
I3	*109.3*	*104.4*	*179.5*	*107.5*	*128.3*	*70.1*			
I4	*111.8*	*42.0*	*174.9*	*115.4*	*87.4*	*39.8*		*138.6*	*145.8*
I5	*67.2*	*49.5*	*189.5*	*40.8*	*122.2*	*37.8*	*122.9*		*155.3*
I6	*29.4*	*13.7*	*52.8*	*39.9*	*65.1*	*23.2*	*49.9*	*100.5*	*107.1*
I7	*135.6*	*21.7*	*124.5*	*49.0*	*86.1*	*36.7*	*123.5*		*173.1*
I8	*42.7*	*18.8*	*152.5*	*23.9*	*42.4*	*15.7*	*69.8*	*93.3*	*105.4*
I9	*68.2*	*28.1*	*174.9*	*70.9*	*54.3*	*38.9*	*70.5*		*91.8*
I10	*68.5*	*38.7*	*171.8*	*95.9*	*164.2*	*33.6*	*107.5*	*95.1*	*53.8*
I11	*73.8*	*41.1*	*105.1*	*23.0*	*21.0*	*14.5*	*51.6*	*109.6*	*34.8*
I12	*64.7*	*25.9*	*136.2*	*67.1*	*120.6*	*77.5*	*99.8*	*147.1*	*101.1*
I13	*40.7*	*16.6*	*92.7*	*51.2*	*67.1*	*15.7*	*58.2*	*76.4*	*26.6*
Total	*50.8*	*25.0*	*72.1*	*103.1*	*146.2*	*40.2*	*35.0*	*75.0*	*102.3*

Table 6e: Percentage sampling errors by sectors and energy sources at 95 statistical certainty 2010 (including the extrapolation 2008)

Sector	Gasoline	Diesel	LPG	Fuel oil	Natural gas	Electricity	District heat	Fuel wood	Biofuels
I1	*192,5*	*189,7*	*193,3*	*158,4*	*186,6*	*106,8*			*140,8*
I2	*180,1*	*125,2*	*100,9*	*145,0*	*70,6*	*85,5*	*71,1*		*116,5*
I3	*95,9*	*53,5*	*86,5*	*90,0*	*91,5*	*89,7*			
I4	*98,4*	*76,9*	*95,0*	*80,5*	*134,5*	*31,5*	*130,6*	*192,0*	*114,8*
I5	*71,7*	*14,9*	*169,5*	*143,0*	*187,9*	*139,6*	*184,5*		*126,2*
I6	*38,3*	*21,9*	*68,0*	*39,3*	*43,3*	*24,3*	*63,8*	*105,5*	*98,9*
I7	*79,8*	*47,3*	*89,7*	*38,4*	*82,1*	*103,4*	*96,5*		*153,6*
I8	*66,6*	*33,1*	*76,5*	*38,4*	*51,5*	*19,2*	*66,9*	*140,7*	*91,0*
I9	*77,6*	*54,5*	*128,3*	*94,2*	*143,8*	*45,0*	*144,9*		*167,5*
I10	*75,4*	*45,1*	*121,8*	*132,9*	*120,5*	*27,3*	*60,9*	*108,5*	*39,5*
I11	*105,0*	*32,1*	*94,6*	*33,0*	*40,4*	*17,4*	*45,0*	*92,4*	*61,9*
I12	*50,3*	*31,3*	*141,5*	*58,6*	*115,0*	*35,4*	*103,9*	*169,5*	*61,6*

Sector	Gasoline	Diesel	LPG	Fuel oil	Natural gas	Electricity	District heat	Fuel wood	Biofuels
I13	*35,5*	*17,5*	*92,2*	*46,7*	*36,9*	*32,0*	*57,3*	*69,7*	*29,8*
Total	*86,9*	*25,2*	*45,7*	*23,4*	*32,0*	*13,1*	*35,3*	*56,6*	*30,4*

3.2.2. Non-sampling effects

3.2.2.1 Quality of data sources used

Not relevant

3.2.2.2 Coverage (misclassifications, undercoverage/overcoverage)

As the comparison in Table 7 a-d shows the sectoral cover of the respondence cases corresponds approximately to the universe.

Table 7a: Sectoral distribution of universe, sample and respondence cases 2002 in percent

Sector	Universe	Sample	Respondence cases
I1	*0.13*	*0.10*	*0.06*
I2	*1.30*	*1.27*	*0.92*
I3	*0.25*	*0.27*	*0.29*
I4	*2.71*	*2.67*	*2.37*
I5	*0.97*	*1.00*	*0.52*
I6	*15.35*	*15.34*	*13.98*
I7	*1.05*	*1.10*	*1.39*
I8	*10.86*	*10.87*	*11.03*
I9	*4.26*	*4.24*	*3.41*
I10	*5.03*	*5.04*	*5.66*
I11	*43.07*	*43.03*	*46.91*
I12	*3.43*	*3.40*	*2.43*
I13	*11.61*	*11.64*	*11.03*
Total	*100.00*	*100.00*	*100.00*

Table 7b: Sectoral distribution of universe, sample and respondence cases 2004 in percent

Sector	Universe	Sample	Respondence cases
I1	*0.16*	*0.40*	*0.22*
I2	*1.42*	*2.22*	*2.51*
I3	*0.20*	*0.63*	*0.44*
I4	*2.62*	*4.15*	*4.58*
I5	*1.06*	*2.62*	*2.37*
I6	*15.83*	*17.46*	*17.29*
I7	*1.08*	*1.96*	*3.10*
I8	*10.59*	*9.86*	*10.86*
I9	*4.11*	*6.07*	*5.76*
I10	*4.74*	*6.84*	*8.20*
I11	*44.66*	*24.83*	*21.51*
I12	*2.91*	*6.14*	*6.43*
I13	*10.61*	*16.83*	*16.70*
Total	*100.00*	*100.00*	*100.00*

Table 7c: Sectoral distribution of universe, sample and respondence cases 2006 (including extrapolation 2004) in percent

Sector	Universe	Sample	Respondence cases
I1	*0.07*	*0.00*	*0.18*
I2	*0.90*	*0.74*	*1.80*
I3	*0.14*	*0.03*	*0.28*
I4	*2.45*	*1.71*	*3.83*
I5	*0.70*	*0.57*	*1.76*
I6	*12.99*	*13.55*	*15.89*
I7	*0.70*	*1.60*	*2.26*
I8	*9.62*	*10.57*	*10.99*
I9	*3.34*	*3.88*	*5.31*
I10	*5.52*	*5.82*	*7.25*
I11	*49.11*	*48.28*	*30.44*
I12	*2.33*	*1.87*	*4.57*
I13	*12.16*	*12.41*	*15.43*
Total	*100.00*	*100.00*	*100.00*

Table 7d: Sectoral distribution of universe, sample and respondence cases 2008 (including extrapolation 2006) in percent

Sector	Universe	Sample	Respondence cases
I1	*0,07*	*0,30*	*0,35*
I2	*0,93*	*2,70*	*2,41*
I3	*0,14*	*0,86*	*0,29*
I4	*2,46*	*4,09*	*3,77*
I5	*0,69*	*2,21*	*1,18*
I6	*12,62*	*21,72*	*15,19*
I7	*0,77*	*1,88*	*2,30*
I8	*10,48*	*10,17*	*11,83*
I9	*2,24*	*3,90*	*2,83*
I10	*4,61*	*5,59*	*6,06*
I11	*50,71*	*24,87*	*36,32*
I12	*2,43*	*5,85*	*4,12*
I13	*11,83*	*15,87*	*13,36*
Total	*100,00*	*100,00*	*100,00*

Table 7e: Sectoral distribution of universe, sample and respondence cases 2010 (including extrapolation 2008) in percent

Sector	Universe	Sample	Respondence cases
I1	*0,21*	*0,40*	*0,46*
I2	*1,17*	*2,36*	*3,16*
I3	*0,26*	*0,58*	*0,54*
I4	*2,52*	*3,23*	*3,78*
I5	*0,93*	*1,52*	*1,31*
I6	*13,98*	*14,57*	*17,75*
I7	*0,73*	*1,52*	*2,89*
I8	*10,58*	*9,39*	*8,88*
I9	*2,39*	*3,12*	*2,97*
I10	*4,41*	*18,12*	*9,11*
I11	*48,86*	*27,65*	*30,34*

Sector	Universe	Sample	Respondence cases
I12	*2,35*	*4,64*	*4,90*
I13	*11,60*	*12,90*	*13,89*
Total	*100,00*	*100,00*	*100,00*

3.2.2.3 Missing responses (unit non-response, item non-response)

42.2% (2002). 55.1% (2004), 82.1% (2006), 63.7% (2008) and 54.9% (2010) 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 and – secondly - missing required criteria were imputed.

3.2.2.4 Measurement errors (entry errors)

None known

3.2.2.5 Processing errors

None known

3.2.2.6 Model assumption effects

Concentration of imputed cases with the average prices used is likely. Changes in the fuel consumption structure are underestimated potentially because of the extrapolation 2004 (see chapter other quality measures)

3.3. Timeliness and punctuality

The results are available for the final Energy Balances of the respective year under review (current year under review 2012).

3.4. Comparability

3.4.1 Comparability over time

In those cases where the universe of a sector in a Land contains only a small number of establishments, breaks in the time sequence occur in some instances when there are minor changes within a sector when incorporating the results for the two surveys conducted in 2002 and 2004. The main reason for this is that certain establishments are no longer active or are active again or active for the first time and are therefore disregarded or taken into account for the first time, respectively in the projection.

The comparability between 2006 and former years is problematically in case of exclusive use of the sample survey. Due to the low response rate in 2006 the results in several sectors differ widely in fuels used and quantities consumed compared to results from 2002 and 2004. To smooth the resulting breaks in time series in the energy balances the fuel consumption of the establishments which reported data of high quality in 2004 and were extant in 2006 was estimated by assuming a constant consumption structure. In case of fuels use for space heating the extrapolation was done with heating degree days. In case of all other purposes it was done with the relation of sectoral consumption patterns between 2004 and 2006.

Since 2008 the respondence rate increases slowly but the 2006 implemented methodology is applied again because it improves the results significantly.

3.4.2 International and regional comparability

Spatial comparability (sectoral and with regard to the energy sources included) with other EU or IEA member states (in the context of energy balances) is fulfilled.

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

To save resources a reduction of survey frequency from two to four years is discussed for the future.

Reference to supplementary documentation/publications

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

Annex

- Questionnaire 2002
- Questionnaire 2004
- Questionnaire 2006
- Questionnaire 2008
- Results for 2002 by Laender. Sector and Energy Source
- Results for 2004 by Laender. Sector and Energy Source
- Results for 2006 by Laender. Sector and Energy Source
- Results for 2008 by Laender. Sector and Energy Source

Questionnaire 2002

STATISTIK AUSTRIA
Die Informationsmanager

Establishment Adress Code

Direktorate Spatial statistics
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e-mail: richard.riess@statistik.gv.at

Survey on energy consumption in manufacturing industries 2002

Transport fuels	**Unit**	**Amount**	**Value in €**	**Purposes** [2] Car	others [3]
Gasoline	litre			☐	☐
Diesel	litre			☐	☐
LPG	litre			☐	☐

Other fuels used				Space heating [4]	others [3]
Gasoil	litre			☐	☐
Fuel oil	litre			☐	☐
LPG	litre			☐	☐
Natural gas [1]	m^3			☐	☐
Elektricity [1]	kWh			☐	☐
District heating [1]	kWh			☐	☐
Fuelwood	☐ rm [2] ☐ kg			☐	☐
Biomass (chips, pellets, briquettes)	☐ rm [2] ☐ kg			☐	☐

[1] Please use your last annual bill and fill in the respective periods (z.B.: 10/2002 - 09/2003) :

../20.. - ../20..
../20.. - ../20..

[2] Tick appropriate
[3] e.g. lightning, computing, process heat, power sets etc
[4] including cooking and water heating

Thank you for attending the survey. Please submit the filled in questionnaire to Statistics Austria until

30th of January 2004
latest

Contact for further inquieries
Name Telefone Fax e-mail

Questionnaire 2004

STATISTIK AUSTRIA
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Establishment
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e-mail: richard.riess@statistik.gv.at

Survey on energy consumption in manufacturing industries 2004

No of registered vehicles ☐

No of unregistered vehicles ☐
(e.g.. diggers, forklifts etc.)

Transport fuels	**Unit**	**Amount**	**Value in €** (gross-net) [2]	**Purposes** [3] Car	others [4] —> please specify
Gasoline	litre	☐	☐	☐	☐ ☐
Diesel	litre	☐	☐	☐	☐ ☐
LPG	☐ Kg [3] litre ☐	☐	☐	☐	☐ ☐

Other fuels used				**Purposes** [3] Space heating [5]	others [4] —> please specify
Gasoil	litre	☐	☐	☐	☐ ☐
Fuel oil	litre	☐	☐	☐	☐ ☐
LPG	☐ Kg [3] litre ☐	☐	☐	☐	☐ ☐
Natural gas [1]	m^3	☐	☐	☐	☐ ☐
Elektricity [1]	kWh	☐	☐	☐	☐ ☐
District heating [1]	kWh	☐	☐	☐	☐ ☐
Fuelwood	☐ stere [3] kg ☐	☐	☐	☐	☐ ☐
Biomass (chips, pellets, briquettes)	☐ stere [3] kg ☐	☐	☐	☐	☐ ☐
Other fuels [6]	... ..	☐	☐	☐	☐ ☐

heated area in m² ☐

[1] Please use your last annual bill—>Value = Overall price incl. Network and ather charges
[2] Delete as applicable
[3] Tick appropriate
[4] e.g. lightning, computing, process heat, power sets etc
[5] including cooking and water heating
[6] e.g. Hardcoal, lignite, coke, solar, heat pumps etc.. Please specify (also units, in case of solar m² collector area)

Thank you for attending the survey. Please submit the filled in questionnaire to Statistics Austria until

30. September 2005
latest

Contact for further inquieries
Name
Telefone
Fax
e-mail

Questionnaire 2006

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Survey on energy consumption in manufacturing industries 2006

No of registered vehicles: until 3,5 t ☐ Annualy driven kilometers ☐ ; above 3,5 t ☐ Annualy driven kilometers ☐

No of unregistered vehicles (e.g.. diggers, forklifts etc.) ☐

Transport fuels	Unit	Amount	Value in Euro	gross [1]	net	Purposes [1] Car	Others [2]
Gasoline	litre			☐	☐	☐	☐
Diesel	litre			☐	☐	☐	☐
LPG	☐ kg [1] litre ☐			☐	☐	☐	☐
Natural gas	m^3			☐	☐	☐	☐

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

Heat pumps	Installed capacity in kW ☐	Space heating ☐	Others [2] ☐
Solar pannels	Surface area in m^2 ☐	Space heating ☐	Others [2] ☐
PV pannels	Surface area in m^2 ☐		

Overall area of the establishment (building areas only) in m^2 ☐ of which heated during winter in m^2 ☐ and airconditioned during summer respectively in m^2 ☐

Mainly used heating system [1] Central heating system ☐ Stove ☐ Other ☐

Age of the heating system [1] below 5 ☐ 5 until below 10 ☐ 10 until below 20 ☐ 20 and older ☐

[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:

Questionnaire 2008

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Survey on energy consumption in manufacturing industries 2008

No of registered vehicles: until 3,5 t ☐ Annualy driven kilometers ☐ ; above 3,5 t ☐ Annualy driven kilometers ☐

No of unregistered vehicles (e.g.. diggers, forklifts etc.) ☐

Transport fuels	Unit	Amount	Value in Euro	gross [1]	net	Purposes [1] Car	Others [2]
Gasoline	litre			☐	☐	☐	☐
Diesel	litre			☐	☐	☐	☐
LPG	☐ kg [1] litre ☐			☐	☐	☐	☐
Natural gas	m^3			☐	☐	☐	☐

Other fuels used	Unit	Amount	Value in Euro	gross [1]	net	Purposes [1] Space heating	Cooking, water heating	Others [2]
Electricity [3]	kWh			☐	☐	☐	☐	☐
Natural gas [3]	kWh			☐	☐	☐	☐	☐
District heating [3]	kWh			☐	☐	☐	☐	☐
Fuel oil and gas oil	litre			☐	☐	☐	☐	☐
LPG	☐ kg [1] litre ☐			☐	☐	☐	☐	☐
Pellets	stere			☐	☐	☐	☐	☐
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 m^2 ☐	Space heating ☐	Water heating ☐
PV pannels	Surface area in m^2 ☐		

Overall area of the establishment (building areas only) in m^2 ☐ of which heated during winter in m^2 ☐ and airconditioned during summer respectively in m^2 ☐

Mainly used heating system [1] Central heating system ☐ Stove ☐ Other ☐

Age of the heating system [1] below 5 ☐ 5 until below 10 ☐ 10 until below 20 ☐ 20 and older ☐

[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:

Questionnaire 2010

Survey on energy consumption in manufacturing industries 2010

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	kg						

Other fuels used	Unit	Amount	Value in Euro	gross [1]	net [1]	Purposes [1] Space heating	Cooking, water heating	Others [2]
Electricity [3]	kWh							
Natural gas [4]	kWh							
District heating [3]	kWh							
Fuel oil and gas oil	litre							
LPG	kg [1] litre [1]							
Pellets, Woodbriquettes	kg [1] stere [1]							
Wood chips	stere							
Fuel wood	kg [1] stere [1]							
Waste wood	kg [1] stere [1]							
Wood residues [4]	kg [1] stere [1]							
Bark	kg [1] stere [1]							
Others, please specify [5]	(unit)							

Period of the latest annual electricity bill: from DD.MM.YY to DD.MM.YY OR number of days:

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 establishment (building areas only) in m² of which heated during in m² and airconditioned during summer respectively in m²

Mainly used heating systems (number) Central heating District heating Others please specify number

Age of the heating system (number) below 5 5 to below 10 10 to below 20 20 and older

[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. Off-cuts, shavings, sawdust
[5] e.g. hard coal, lignite coal briquettes, coke, etc.; **please specify the unit!**

Contact for futher inquieries:

Name: Telefone:

e-mail: Fax:

Results for 2002 by Laender. Sector and Energy Source

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10^3m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
B	I1	0	0	0	0	0	0	0	0	0	0
	I2	2	6	0	33	15	126	255	1	0	0
	I3	0	0	0	0	0	0	0	0	0	0
	I4	10	1 561	0	124	259	526	2 219	220	1	0
	I5	0	10	0	1	19	50	46	10	0	0
	I6	80	281	3	159	102	253	3 479	758	43	130
	I7	3	3 299	1	109	520	779	7 485	0	3	0
	I8	25	690	7	640	409	1 409	11 344	251	33	411
	I9	18	217	0	32	15	187	2 907	1 746	0	0
	I10	14	367	2	16	16	46	2 607	241	812	4 870
	I11	251	5 620	13	409	184	1 145	7 143	784	268	758
	I12	7	28	0	42	130	594	871	62	3	7
	I13	34	287	2	78	114	233	4 826	358	226	1 229
C	I1	0	0	0	0	0	0	0	0	0	0
	I2	14	30	1	107	51	488	1 271	4	0	0
	I3	0	0	0	0	0	0	0	0	0	0
	I4	11	2 058	0	142	290	561	2 100	235	1	0
	I5	1	6	0	3	58	25	100	31	0	0
	I6	234	968	12	548	361	1 180	9 783	2 574	339	33
	I7	2	2 465	1	109	482	779	7 537	0	3	0
	I8	39	933	4	975	488	2 081	12 912	489	94	774
	I9	29	247	0	61	16	199	3 617	2 006	0	0
	I10	52	1 634	32	58	57	66	11 475	1 178	3 652	21 229
	I11	472	9 980	35	746	273	2 131	12 913	1 791	456	1 674
	I12	13	55	0	114	239	1 090	1 997	113	5	13
	I13	100	674	5	151	339	481	10 315	764	455	2 252
L	I1	1	21	0	0	0	0	2 533	868	0	0
	I2	30	152	10	1 121	286	4 148	7 568	25	0	0
	I3	5	32	0	317	22	23	2 142	0	0	0
	I4	40	3 927	0	236	746	1 678	6 199	617	4	0
	I5	5	31	0	27	264	143	611	267	0	0
	I6	695	2 733	30	1 393	1 109	2 803	26 393	8 902	392	96
	I7	5	6 276	2	392	1 353	1 892	20 538	0	7	0
	I8	163	3 508	13	3 369	1 755	11 030	54 096	1 683	251	4 972
	I9	74	1 468	0	139	63	1 150	15 229	11 337	0	0
	I10	119	3 702	18	172	127	177	25 889	2 290	16 910	45 932
	I11	1 277	25 477	49	2 116	623	6 123	33 714	4 181	1 350	5 615
	I12	41	185	1	289	900	3 368	5 928	350	17	40
	I13	259	2 141	18	537	895	1 415	36 828	2 502	1 148	8 087
U	I1	0	0	0	0	0	0	0	0	0	0
	I2	30	129	5	623	516	2 438	6 816	25	0	0
	I3	5	20	0	181	11	23	1 828	0	0	0
	I4	36	4 264	0	266	894	2 863	8 546	705	2	0
	I5	7	60	0	28	506	215	880	304	0	0
	I6	1 162	3 277	37	1 896	1 209	3 932	35 742	9 162	563	114
	I7	3	3 437	1	141	630	1 002	9 109	0	13	1
	I8	155	3 873	22	4 136	2 068	8 010	52 823	2 306	346	2 718
	I9	72	897	0	135	62	761	11 925	7 689	0	0
	I10	110	3 724	19	159	231	152	26 408	2 441	8 658	52 686
	I11	1 024	20 179	37	1 649	608	4 475	25 991	4 384	934	3 282
	I12	80	346	1	509	1 708	10 141	11 329	638	30	115
	I13	314	2 776	24	777	1 201	2 263	47 130	3 036	1 577	10 129
S	I1	0	5	0	0	0	0	527	209	0	0
	I2	12	50	2	262	120	1 005	2 038	10	0	0
	I3	2	10	0	90	6	33	1 410	0	0	0
	I4	13	1 743	0	99	311	631	2 947	264	1	0
	I5	2	14	0	7	136	58	234	73	0	0
	I6	264	974	34	516	610	985	18 802	2 535	148	36
	I7	2	2 859	1	159	551	890	8 420	0	3	0

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10^3m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I8	55	1 318	5	1 329	532	2 837	18 136	649	75	917
	I9	35	444	0	79	30	523	11 274	3 491	0	0
	I10	65	2 197	11	82	76	89	16 901	3 546	4 904	28 213
	I11	469	8 523	21	842	208	2 135	12 955	1 531	460	1 613
	I12	18	76	0	113	347	1 679	2 380	165	8	19
	I13	80	649	5	144	262	420	10 845	828	618	2 391
ST	I1	0	3	0	0	0	0	263	104	0	0
	I2	17	69	3	361	165	1 382	2 802	14	0	0
	I3	4	15	0	136	9	17	1 371	0	0	0
	I4	36	5 148	0	294	795	1 495	7 890	1 219	2	0
	I5	8	40	0	21	337	184	708	178	0	0
	I6	555	2 175	24	1 434	957	2 033	23 410	6 207	324	79
	I7	4	9 300	4	437	2 345	4 291	43 000	0	7	0
	I8	85	1 997	8	1 928	1 004	4 850	26 608	1 579	128	1578
	I9	65	805	0	136	58	669	11 491	6 912	0	0
	I10	87	2 893	13	121	122	141	19 848	1 957	5 399	33 615
	I11	847	18 586	41	1 505	476	8 477	40 525	3 181	973	3 060
	I12	31	120	0	201	810	2 281	5 255	237	11	27
	I13	153	1 248	11	340	503	825	22 626	1 625	730	4 765
T	I1	0	5	0	0	0	0	527	209	0	0
	I2	13	58	2	233	105	903	1 825	9	0	0
	I3	2	11	0	98	6	12	1 865	0	0	0
	I4	9	1 165	0	68	744	456	2 699	191	1	0
	I5	1	8	0	4	78	33	134	42	0	0
	I6	315	1 151	19	681	480	1 097	11 656	3 289	184	45
	I7	5	4 172	1	177	836	1 224	14 116	0	4	0
	I8	72	1 570	7	1 571	885	3 471	21 163	713	95	1 185
	I9	47	511	0	101	52	385	8 013	3 776	0	0
	I10	48	3 617	8	64	60	65	33 847	1 055	3 550	66 320
	I11	659	12 139	24	1 100	339	2 696	15 876	2 076	542	2 042
	I12	27	144	1	192	446	1 981	3 961	206	37	23
	I13	94	856	19	221	340	489	13 593	1 360	420	3 248
V	I1	0	0	0	0	0	0	0	0	0	0
	I2	9	37	2	197	90	754	1 528	8	0	0
	I3	0	0	0	0	0	0	0	0	0	0
	I4	9	1 520	0	68	248	460	2 750	191	1	0
	I5	2	14	0	6	117	58	252	63	0	0
	I6	226	798	12	459	348	817	9 290	2 215	136	32
	I7	0	973	0	31	138	223	4 109	0	1	0
	I8	42	746	3	742	513	1 865	14 950	373	50	610
	I9	35	430	0	73	30	358	5 735	3 491	0	0
	I10	40	1 097	6	46	41	48	7 640	783	2 644	15 682
	I11	356	6 565	25	563	160	1 487	9 811	1 106	1 029	2 110
	I12	124	403	1	633	1 863	8 195	14 493	1 030	40	96
	I13	63	455	4	140	177	321	8 716	555	325	1 674
VIE	I1	0	3	0	0	0	0	263	104	0	0
	I2	67	253	10	1 187	542	4 554	10 004	67	0	0
	I3	9	23	0	204	11	23	2 683	0	0	0
	I4	16	1 305	0	78	259	553	2 137	220	1	0
	I5	2	26	0	10	463	75	742	94	0	0
	I6	562	1 929	25	1 039	762	2 196	21 550	7 046	322	75
	I7	0	329	0	16	69	111	1 005	0	0	0
	I8	50	1 333	4	1 131	486	3 038	18 337	510	68	835
	I9	149	1 638	0	254	148	1 465	24 577	14 577	0	0
	I10	47	1 230	7	73	44	119	9 212	1 243	3 076	16 600
	I11	1 202	21 175	37	1 855	467	4 570	35 560	4 490	898	3 130
	I12	42	178	1	261	803	3 666	5 473	605	18	43
	I13	140	936	8	311	563	646	15 467	2 774	558	3 259
A	I1	2	37	0	0	0	0	4 113	1 495	0	0
	I2	194	785	36	4 124	1 891	15 799	34 108	163	0	0

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10³m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I3	27	111	0	1 025	65	132	11 298	0	0	0
	I4	180	22 692	1	1 374	4 546	9 223	37 486	3 862	12	0
	I5	28	210	0	108	1 978	841	3 706	1 064	0	0
	I6	4 091	14 285	196	8 127	5 937	15 297	160 105	42 687	2 451	640
	I7	23	33 111	11	1 572	6 924	11 192	115 320	0	41	3
	I8	685	15 968	72	15 821	8 139	38 591	230 370	8 553	1 140	14 000
	I9	525	6 657	0	1 009	472	5 698	94 769	55 026	0	0
	I10	582	20 462	117	792	773	902	153 827	14 734	49 605	285 145
	I11	6 557	128 242	282	10 786	3 338	33 240	194 490	23 525	6 908	23 284
	I12	382	1 536	5	2 353	7 247	32 995	51 688	3 406	170	383
	I13	1 238	10 021	96	2 698	4 394	7 093	170 346	13 802	6 056	37 035

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Results for 2004 by Laender. Sector and Energy Source

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10³m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
B	I1	0	0	0	0	0	0	0	0	0	0
	I2	8	10	0	0	0	534	3 793	0	0	0
	I3	0	0	0	0	0	0	0	0	0	0
	I4	7	894	0	62	170	1 240	4 290	43	21	16
	I5	6	17	0	11	27	30	370	52	1	0
	I6	52	377	6	167	136	392	6 270	640	25	25
	I7	3	3 178	0	115	309	755	8 168	0	6	28
	I8	17	485	4	407	313	392	8 818	249	57	114
	I9	21	70	0	15	34	77	2 068	248	0	6
	I10	19	237	1	56	2	3	3 186	305	139	6 186
	I11	246	7 774	12	1 008	102	426	10 669	1 658	321	1 191
	I12	1	29	0	4	7	112	525	531	0	2
	I13	43	290	2	78	123	152	6 725	236	194	1 141
C	I1	1	2	0	0	1	0	3 754	0	0	0
	I2	3	89	0	27	147	107	1 819	207	0	0
	I3	1	3	1	30	0	0	345	260	0	0
	I4	10	704	0	74	207	1 407	4 556	47	23	18
	I5	3	16	0	14	28	37	477	77	2	0
	I6	136	1 114	17	397	483	857	18 437	1 679	66	66
	I7	15	2 570	0	457	227	152	7 256	0	4	16
	I8	25	835	7	469	547	514	12 934	467	89	180
	I9	23	76	0	45	36	81	2 480	268	0	7
	I10	113	702	2	156	7	7	11 899	838	572	19 527
	I11	365	11 184	18	1 511	172	650	15 952	2 512	499	1 536
	I12	9	23	1	50	67	236	1 688	78	1	54
	I13	79	595	4	134	275	145	22 792	557	263	2 000
L	I1	4	7	0	0	4	0	13 646	0	0	0
	I2	15	272	1	58	559	723	5 861	692	0	0
	I3	3	11	3	121	0	0	1 382	1 042	0	0
	I4	30	3 572	3	212	772	7 816	19 831	205	101	79
	I5	10	82	0	52	148	136	3 348	2 678	16	0
	I6	332	2 824	45	917	935	2 928	42 217	4 494	181	178
	I7	13	7 947	0	297	1 522	448	14 474	0	38	65
	I8	116	3 162	27	2 169	1 801	2 442	53 686	1 341	281	742
	I9	90	277	0	83	110	340	7 064	787	5	35
	I10	125	1 617	6	411	17	19	23 610	2 793	1 008	45 711
	I11	1 065	35 721	50	4 556	470	2 186	48 032	7 778	1 768	4 720
	I12	25	87	0	120	406	808	6 018	466	4	197
	I13	167	1912	5	429	886	512	39 391	1 719	912	6 484
U	I1	0	0	0	0	0	0	0	0	0	0
	I2	18	309	1	77	382	426	5 559	657	0	0
	I3	4	14	4	151	0	0	1 727	1 302	0	0

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10^3m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I4	20	2 463	1	235	779	7 334	20 361	258	99	67
	I5	32	202	0	137	345	507	6 404	747	17	0
	I6	429	3 808	73	1 239	1 350	3 324	61 801	7 779	277	433
	I7	4	3 173	0	124	347	677	7 041	0	16	28
	I8	124	3 771	28	2 153	2 105	2 514	55 617	1 595	318	763
	I9	100	352	0	62	249	492	10 921	1 285	2	23
	I10	101	1 422	6	280	14	17	19 989	1 742	1 130	35 654
	I11	880	26 336	39	3 481	371	1 538	46 092	6 496	1 131	3 621
	I12	61	201	1	264	440	1 282	7 383	594	6	89
	I13	219	2 380	7	634	1 014	771	48 004	3 029	1 119	9 405
S	I1	1	4	0	0	7	0	2 253	0	0	0
	I2	5	106	0	29	178	161	2 533	311	0	0
	I3	9	13	1	61	0	0	3 275	3 126	0	0
	I4	7	1 134	0	87	238	1 980	6 613	64	31	25
	I5	7	43	0	165	55	74	1 085	155	4	0
	I6	122	1 050	14	344	326	864	15 810	1 776	62	64
	I7	3	3 184	0	157	224	167	4 484	0	6	24
	I8	44	1 272	10	818	709	802	19 947	627	97	287
	I9	39	148	0	33	120	127	4 990	494	1	11
	I10	68	869	3	214	9	10	12 585	1 630	730	24 276
	I11	377	11 981	18	1 592	172	709	16 916	3 122	532	1 607
	I12	10	37	0	69	142	340	2 338	116	2	18
	I13	53	597	3	152	287	178	14 673	1 015	303	1 985
ST	I1	1	2	0	0	1	0	3 754	0	0	0
	I2	8	144	1	33	267	214	4 053	731	0	0
	I3	1	12	4	170	0	0	922	521	0	0
	I4	20	2 853	1	207	1 259	5 748	15 316	324	83	66
	I5	30	105	0	80	149	194	2 357	311	7	0
	I6	281	2 321	38	769	742	2 274	40 513	3 954	147	150
	I7	10	9 497	0	579	832	474	14 355	0	20	69
	I8	62	1 880	15	1 308	1 072	1 339	28 935	976	171	414
	I9	103	312	0	72	135	299	9 944	1 488	2	43
	I10	150	1 531	11	832	30	37	26 829	2 295	727	56 980
	I11	740	22 341	32	3 018	333	1 333	31 849	5 621	992	2 972
	I12	15	61	0	108	221	443	3 431	147	7	24
	I13	100	1 631	8	323	443	335	24 064	1 004	434	3 876
T	I1	1	2	0	0	1	0	3 754	0	0	0
	I2	7	123	0	35	237	214	2 661	415	0	0
	I3	1	4	1	35	0	0	473	260	0	0
	I4	8	860	0	62	168	1 304	4 093	47	23	18
	I5	6	30	0	29	46	65	818	129	3	0
	I6	141	1 190	23	402	443	1 090	19 737	2 497	585	77
	I7	7	4 384	0	155	414	256	11 195	0	8	36
	I8	46	1 201	31	913	729	798	19 470	559	96	284
	I9	75	186	0	133	98	187	5 788	612	1	15
	I10	51	1 010	2	157	15	7	15 177	762	809	51 337
	I11	491	15 254	30	2 095	213	874	22 064	3 367	651	2 278
	I12	19	64	1	101	163	617	3 419	177	30	29
	I13	80	1 034	2	239	604	180	18 083	733	421	3 413
V	I1	0	0	0	0	0	0	0	0	0	0
	I2	3	61	0	17	118	107	1 316	207	0	0
	I3	0	0	0	6	0	0	95	0	0	0
	I4	14	696	0	129	212	2 543	6 202	51	163	20
	I5	7	31	0	43	46	73	1 066	129	3	0
	I6	115	875	14	285	300	871	16 663	1 475	58	59
	I7	1	1 367	0	49	116	84	4 204	0	3	198
	I8	27	691	6	461	498	644	11 907	273	52	756
	I9	43	154	0	31	65	135	3 669	486	1	10
	I10	40	481	2	103	4	5	6 144	533	474	14 782
	I11	249	7 302	11	998	110	418	10 637	1 877	323	953

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10³m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I12	93	202	2	394	563	3 318	15 748	677	11	111
	I13	49	395	4	111	237	116	11 207	398	181	1 424
VIE	I1	1	4	0	0	0	482	3 130	0	0	0
	I2	24	418	1	132	998	705	8 232	1 714	0	0
	I3	4	1	0	9	0	97	786	0	0	0
	I4	9	995	0	80	290	2 253	6 228	81	41	49
	I5	14	56	0	43	46	194	1 171	129	3	0
	I6	246	1 955	30	598	609	2 030	30 640	5 101	128	130
	I7	0	0	0	0	0	0	0	0	0	0
	I8	29	877	8	606	482	654	13 605	380	73	214
	I9	209	575	0	127	263	834	17 103	2 150	3	48
	I10	51	549	2	148	6	8	8 082	812	372	16 552
	I11	978	28 825	42	4 556	391	1 719	41 629	6 612	1 275	3 787
	I12	30	75	1	150	259	939	5 186	284	4	46
	I13	101	813	2	198	384	293	17 271	826	313	2 584
A	I1	9	20	0	0	15	482	30 290	0	0	0
	I2	93	1 532	5	407	2 886	3 190	35 828	4 935	0	0
	I3	22	59	14	584	0	97	9 005	6 512	0	0
	I4	125	14 171	6	1 148	4 096	31 625	87 492	1 122	586	357
	I5	114	582	1	575	891	1 309	17 097	4 406	55	0
	I6	1 854	15 514	259	5 118	5 325	14 629	252 088	29 394	1 529	1 183
	I7	58	35 299	0	1 934	3 990	3 012	71 177	0	101	465
	I8	491	14 174	136	9 303	8 256	10 099	224 918	6 468	1 235	3 754
	I9	704	2 150	1	601	1 110	2 573	64 026	7 818	15	198
	I10	719	8 416	34	2 356	105	112	127 502	11 709	5 961	271 006
	I11	5 392	166 718	252	22 816	2 334	9 853	243 839	39 042	7 493	22 665
	I12	263	778	7	1 260	2 269	8 095	45 736	3 070	65	569
	I13	891	9 649	37	2 299	4 252	2 681	202 210	9 516	4 140	32 311

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Results for 2006 by Laender. Sector and Energy Source

Land	Sector	Gasoline t	Diesel t	LPGt	Gasoil t	Fuel oil t	Natural gas 10³m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
B	I1	0	0	0	0	0	0	0	0	0	0
	I2	9	10	0	0	0	561	3 807	0	0	0
	I3	0	0	0	0	0	0	0	0	0	0
	I4	21	2 051	163	175	418	3 137	10 094	93	69	15
	I5	12	34	1	41	46	61	927	200	2	10
	I6	99	924	70	345	307	940	15 309	1 556	87	138
	I7	5	3 378	44	150	314	792	9 481	0	7	43
	I8	70	1 672	139	1 308	1 097	1 332	32 160	2 135	146	441
	I9	33	90	1	34	45	134	2 744	246	2	13
	I10	48	777	7	153	16	9	9 057	1 171	647	18 832
	I11	583	16 323	44	1 220	359	944	21 025	4 603	1 172	2 315
	I12	15	81	12	69	117	413	2 637	697	4	33
	I13	98	795	8	189	231	283	14 386	651	735	3 096
C	I1	1	5	2	0	3	263	3 242	0	0	0
	I2	9	146	184	40	236	376	3 982	323	0	0
	I3	3	5	9	41	1	29	1 196	807	0	0
	I4	25	1 910	186	192	463	3 370	10 583	99	73	16
	I5	10	33	1	44	42	65	1 021	233	2	12
	I6	279	2 796	235	960	1 028	2 527	47 170	4 654	252	361
	I7	18	4 410	54	574	399	291	12 119	0	8	53
	I8	78	2 007	154	1 402	1 356	1 414	36 320	2 514	163	505

Land	Sector	Gasoline t	Diesel t	LPGt	Gasoil t	Fuel oil t	Natural gas 10^3m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I9	68	219	2	114	113	312	6 758	701	4	32
	I10	194	2 253	48	419	43	25	28 786	3 189	2 016	56 089
	I11	969	27 291	72	2 032	611	1 586	36 155	7 707	1 409	3 615
	I12	37	125	27	172	272	735	5 528	340	9	114
	I13	226	1 956	20	442	594	496	48 216	1 732	1 504	7 319
L	I1	3	10	4	1	7	526	8 869	0	0	0
	I2	36	486	165	107	909	1 716	13 946	1 158	3	0
	I3	15	23	43	186	6	132	5 380	3 631	0	0
	I4	72	6 498	581	510	1 316	12 568	34 226	296	224	52
	I5	45	167	3	199	234	287	5 936	2 777	19	51
	I6	604	6 155	464	1 994	1 976	6 623	100 105	9 839	571	785
	I7	19	9 960	357	468	1 689	596	22 099	0	43	176
	I8	347	7 631	622	5 626	4 815	5 905	143 782	9 475	579	2 045
	I9	213	683	7	270	315	1 034	19 346	1 693	21	101
	I10	322	5 345	47	1 061	110	64	63 382	8 777	4 476	130 845
	I11	2 482	72 968	198	5 337	1 583	4 420	90 923	19 934	3 907	9 253
	I12	66	246	48	293	701	1 406	11 302	837	15	307
	I13	488	4 818	57	1 125	1 520	1 252	85 016	4 179	3 724	17 471
U	I1	2	9	4	1	7	526	6 485	0	0	0
	I2	33	450	128	109	594	1 154	11 251	916	1	0
	I3	10	15	28	124	4	88	3 587	2 420	0	0
	I4	51	4 927	441	502	1 247	10 802	31 799	334	201	42
	I5	61	224	4	262	318	498	7 581	1 233	11	115
	I6	727	7 651	609	2 622	2 652	7 244	128 148	14 046	732	1 322
	I7	12	7 096	110	377	731	989	16 721	0	26	105
	I8	323	8 052	780	5 616	5 076	5 863	141 945	9 189	583	1 978
	I9	159	549	5	197	368	852	16 818	1 620	9	65
	I10	367	6 528	51	1 153	124	74	73 110	9 038	5 471	146 912
	I11	2 050	57 379	171	4 300	1 287	3 315	82 593	16 948	2 916	7 398
	I12	109	405	67	485	770	1 905	14 000	1 028	20	216
	I13	532	5 217	56	1 311	1 534	1 524	88 347	5 348	4 129	19 776
S	I1	1	8	6	0	10	263	3 619	0	0	0
	I2	10	142	49	36	225	408	4 328	350	1	0
	I3	12	15	14	62	2	44	4 378	3 810	0	0
	I4	22	2 387	530	256	526	3 935	13 339	113	84	19
	I5	18	67	1	212	70	102	2 027	367	3	18
	I6	244	2 535	227	808	801	2 372	40 544	4 455	231	326
	I7	7	4 811	64	275	380	297	9 002	0	10	62
	I8	102	2 449	191	1 770	1 541	1 737	44 543	3 000	168	626
	I9	99	352	3	142	233	437	10 718	952	6	44
	I10	185	3 120	25	624	98	34	35 836	6 879	2 894	72 164
	I11	1 066	30 513	83	2 294	709	1 724	38 835	10 394	1 547	3 977
	I12	39	152	33	216	374	852	6 471	395	10	83
	I13	209	1 978	27	469	617	544	37 017	2 235	1 845	7 202
ST	I1	2	7	3	1	5	395	4 864	0	0	0
	I2	15	202	69	45	341	565	6 659	796	1	0
	I3	5	14	41	170	2	44	2 024	1 210	0	0
	I4	52	5 904	435	477	1 724	9 226	26 875	399	203	60
	I5	57	150	7	174	182	252	3 836	727	6	35
	I6	468	4 789	408	1 559	1 497	4 925	84 129	8 410	428	605

Land	Sector	Gasoline t	Diesel t	LPGt	Gasoil t	Fuel oil t	Natural gas 10^3m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I7	12	9 544	94	626	760	434	18 430	0	19	91
	I8	185	4 506	358	3 317	2 832	3 499	81 031	5 590	344	1 176
	I9	182	564	17	225	281	754	17 434	2 023	10	94
	I10	328	4 875	38	1 417	108	79	63 041	7 426	3 988	133 256
	I11	1 832	50 032	139	3 840	1 181	2 899	65 181	15 024	2 677	6 634
	I12	59	227	45	302	550	1 229	9 574	567	19	122
	I13	400	4 390	40	952	1 100	1 080	68 575	3 339	2 948	14 376
T	I1	1	5	2	0	3	263	3 242	0	0	0
	I2	11	148	56	38	259	471	4 378	404	1	0
	I3	2	5	8	32	5	15	760	403	0	0
	I4	26	2 453	208	223	517	3 920	12 415	118	88	20
	I5	27	79	2	110	98	151	2 381	533	5	26
	I6	276	2 842	225	927	951	2 711	47 151	5 174	764	364
	I7	10	5 586	84	258	516	348	15 084	0	11	72
	I8	130	3 047	245	2 352	1 982	2 224	56 324	5 799	214	819
	I9	136	403	5	244	209	531	12 020	1 036	7	53
	I10	212	3 798	30	693	80	40	47 088	5 173	3 314	118 859
	I11	1 432	38 114	105	2 952	876	2 178	49 756	10 794	1 951	5 340
	I12	45	171	32	251	355	948	7 063	416	37	86
	I13	303	3 126	32	713	1 108	720	51 772	2 508	2 324	11 610
V	I1	1	2	1	0	2	132	1 621	0	0	0
	I2	9	118	45	30	207	376	3 480	323	0	0
	I3	2	3	5	27	1	15	693	403	0	0
	I4	21	1 239	114	186	307	3 254	8 600	65	185	11
	I5	23	69	1	109	85	141	2 314	467	5	24
	I6	208	2 022	161	650	656	2 300	37 673	3 340	190	267
	I7	2	1 493	20	67	121	91	4 859	0	3	203
	I8	87	1 917	154	1 377	1 301	1 965	39 370	2 307	134	1 095
	I9	73	241	2	96	121	302	6 742	641	4	118
	I10	137	2 184	19	425	44	25	25 684	3 964	2 388	56 402
	I11	758	20 091	54	1 488	453	1 105	25 483	5 762	1 012	2 474
	I12	203	639	193	832	1 298	4 872	29 428	1 589	40	342
	I13	171	1 476	17	359	494	421	28 556	1 330	1 176	5 505
VIE	I1	2	9	2	1	3	742	6 378	0	0	0
	I2	42	568	167	165	1 203	1 588	14 872	1 924	2	0
	I3	11	10	19	91	3	153	3 171	1 614	0	0
	I4	33	2 094	203	195	499	3 828	11 332	116	88	37
	I5	32	104	2	122	97	279	2 710	533	5	26
	I6	411	3 997	296	1 238	1 229	4 083	64 665	8 385	368	558
	I7	1	275	5	17	29	23	642	0	1	5
	I8	83	1 901	154	1 366	1 176	1 577	35 003	2 457	136	505
	I9	468	1 384	15	540	704	2 267	41 537	4 074	27	195
	I10	92	1 376	12	280	29	22	16 347	2 147	1 186	34 581
	I11	2 219	60 348	165	5 199	1 327	3 550	79 410	18 312	3 132	7 675
	I12	113	387	85	513	874	2 389	16 623	1 069	27	230
	I13	323	2 706	28	630	825	843	47 146	2 409	2 042	9 618
A	I1	12	55	26	5	40	3 111	38 320	0	0	0
	I2	173	2 269	864	569	3 973	7 216	66 704	6 193	9	0
	I3	61	91	167	734	25	520	21 189	14 299	0	0
	I4	325	29 463	2 861	2 716	7 017	54 041	159 263	1 633	1 216	272
	I5	285	927	21	1 273	1 171	1 836	28 732	7 070	58	317
	I6	3 316	33 712	2 696	11 103	11 098	33 725	564 895	59 858	3 622	4 727
	I7	85	46 553	832	2 812	4 939	3 862	108 436	0	127	810
	I8	1 405	33 184	2 798	24 134	21 177	25 515	610 477	42 465	2 469	9 189
	I9	1 432	4 485	58	1 862	2 389	6 623	134 115	12 985	90	713
	I10	1 884	30 256	277	6 226	651	371	362 330	47 765	26 379	767 941

Land	Sector	Gasoline t	Diesel t	LPGt	Gasoil t	Fuel oil t	Natural gas 10^3m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I11	13 391	373 060	1 032	28 660	8 385	21 720	489 362	109 480	19 723	48 681
	I12	686	2 432	544	3 132	5 311	14 750	102 626	6 938	180	1 533
	I13	2 749	26 463	286	6 190	8 023	7 162	469 029	23 731	20 428	95 973
S: Statistics Austria, Energy statistics. – B: Burgenland, C: Carinthia, L: Lower Austria, U: Upper Austria, S: Salzburg, ST: Styria, T: Tyrol, V: Vorarlberg, VIE: Vienna, A: Austria.											

Results for 2008 by Laender. Sector and Energy Source

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10^3 m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
B	I1	0	0	0	0	0	0	0	0	0	0
	I2	7	67	0	0	130	426	4 606	217	6	1
	I3	0	5	0	0	10	17	59	0	0	0
	I4	21	2 350	1	228	543	2 798	9 432	0	7	3 298
	I5	2	12	0	17	20	13	288	109	0	9
	I6	49	620	1	172	154	1 156	11 470	2 273	22	846
	I7	2	2 133	34	41	85	27	6 056	108	0	13
	I8	34	1 150	10	981	823	587	19 964	1 501	85	892
	I9	17	46	0	14	18	48	1 502	226	0	69
	I10	10	861	16	24	3	78	6 424	1 941	54	4 974
	I11	638	14 308	14	627	184	602	9 955	3 068	686	3 023
	I12	5	39	0	31	53	232	1 991	195	2	15
	I13	33	409	0	73	88	190	7 613	997	80	3 717
C	I1	0	0	0	0	0	0	0	0	0	0
	I2	14	146	0	18	264	922	9 979	470	13	2
	I3	1	10	0	9	10	33	117	0	0	0
	I4	20	2 281	1	218	530	2 716	9 154	0	7	3 201
	I5	2	9	0	19	9	10	216	82	0	7
	I6	141	1 781	3	150	787	3 323	32 960	6 532	63	2 432
	I7	3	3 199	51	132	57	41	9 084	162	0	20
	I8	36	1 234	10	953	984	630	21 432	1 612	92	957
	I9	50	135	0	15	77	140	4 381	661	0	202
	I10	28	2 327	43	24	48	210	17 368	5 248	147	13 448
	I11	1 048	23 518	24	593	740	990	16 363	5 042	1 128	4 969
	I12	13	97	0	33	175	571	4 901	480	4	36
	I13	79	973	1	67	316	452	18 130	2 375	191	8 851
L	I1	3	423	0	7	55	60	9 885	0	0	106
	I2	43	448	0	92	775	2 838	30 705	1 446	41	7
	I3	2	30	0	56	2	99	352	0	0	0
	I4	83	9 468	4	867	2 237	11 275	38 004	0	29	13 288
	I5	15	89	0	123	145	95	2 088	789	0	67
	I6	303	3 819	6	1 009	1 000	7 124	70 666	14 005	135	5 215
	I7	9	8 958	143	115	414	114	25 435	453	0	56
	I8	148	5 047	42	4 267	3 652	2 575	87 636	6 591	375	3 914
	I9	127	340	0	107	124	353	11 015	1 661	0	509
	I10	85	7 014	129	198	20	632	52 342	15 817	442	40 527
	I11	2 983	66 923	67	2 926	868	2 817	46 562	14 348	3 210	14 140
	I12	27	197	0	124	298	1 161	9 954	976	8	73
	I13	183	2 254	1	378	511	1 048	41 990	5 499	442	20 499
U	I1	1	141	0	2	18	20	3 295	0	0	35
	I2	37	381	0	114	623	2 413	26 099	1 229	35	6

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10^3 m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I3	4	50	0	94	3	166	586	0	0	0
	I4	71	8 086	3	760	1 890	9 629	32 456	0	24	11 348
	I5	22	132	0	179	218	140	3 096	1 170	0	100
	I6	399	5 023	8	1 313	1 328	9 370	92 947	18 421	177	6 859
	I7	7	6 826	109	137	265	87	19 379	345	0	43
	I8	151	5 149	43	4 243	3 835	2 627	89 397	6 723	383	3 993
	I9	124	332	0	79	147	345	10 764	1 623	0	497
	I10	105	8 672	160	244	26	782	64 714	19 555	547	50 106
	I11	2 470	55 417	55	2 418	724	2 333	38 558	11 881	2 659	11 709
	I12	38	278	0	231	366	1 643	14 089	1 381	11	104
	I13	198	2 435	2	442	518	1 132	45 365	5 941	478	22 146
S	I1	0	0	0	0	0	0	0	0	0	0
	I2	15	157	0	303	262	993	10 747	506	14	3
	I3	1	15	0	29	1	50	176	0	0	0
	I4	29	3 248	1	1 065	716	3 868	13 038	0	10	4 559
	I5	7	40	0	120	30	42	936	354	0	30
	I6	130	1 639	3	862	429	3 057	30 323	6 010	58	2 238
	I7	2	2 133	34	126	73	27	6 056	108	0	13
	I8	51	1 742	14	2 733	1 272	889	30 239	2 274	129	1 351
	I9	56	151	0	103	64	156	4 882	736	0	226
	I10	42	3 475	64	108	15	313	25 933	7 836	219	20 079
	I11	1 293	29 017	29	1 645	388	1 222	20 189	6 221	1 392	6 131
	I12	21	151	0	325	206	893	7 657	751	6	56
	I13	90	1 108	1	437	248	515	20 642	2 703	218	10 077
ST	I1	1	70	0	1	9	10	1 648	0	0	18
	I2	23	235	0	53	403	1 490	16 120	759	22	4
	I3	2	20	0	38	0	66	235	0	0	0
	I4	63	7 188	3	510	1 846	8 559	28 849	0	22	10 087
	I5	15	89	0	131	137	95	2 088	789	0	67
	I6	253	3 185	5	854	821	5 941	58 932	11 680	112	4 349
	I7	7	6 826	109	182	221	87	19 379	345	0	43
	I8	90	3 086	26	2 612	2 230	1 574	53 580	4 030	229	2 393
	I9	85	228	0	69	86	236	7 385	1 113	0	341
	I10	65	5 388	99	156	12	486	40 208	12 150	340	31 132
	I11	2 040	45 754	46	1 984	610	1 926	31 834	9 809	2 195	9 667
	I12	26	187	0	143	260	1 107	9 495	931	7	70
	I13	153	1 883	1	344	398	875	35 084	4 595	370	17 127
T	I1	1	70	0	1	9	10	1 648	0	0	18
	I2	14	146	0	36	245	922	9 979	470	13	2
	I3	0	5	0	8	1	17	59	0	0	0
	I4	31	3 525	1	349	807	4 197	14 147	0	11	4 947
	I5	7	43	0	68	61	46	1 008	381	0	33
	I6	152	1 917	3	497	511	3 575	35 465	7 029	68	2 617
	I7	4	4 053	65	80	159	52	11 506	205	0	25
	I8	60	2 037	17	1 735	1 462	1 040	35 377	2 661	151	1 580
	I9	65	174	0	64	55	180	5 633	849	0	260
	I10	46	3 826	71	107	12	345	28 550	8 627	241	22 106
	I11	1 537	34 489	34	1 508	447	1 452	23 996	7 394	1 655	7 287
	I12	16	121	0	108	152	714	6 126	600	5	45
	I13	109	1 348	1	208	323	627	25 116	3 289	265	12 261

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10³ m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
V	I1	1	141	0	2	18	20	3 295	0	0	35
	I2	17	179	0	43	303	1 135	12 282	579	16	3
	I3	1	15	0	28	1	50	176	0	0	0
	I4	18	2 004	1	248	409	2 387	8 045	0	6	2 813
	I5	9	55	0	94	73	59	1 296	490	0	42
	I6	123	1 546	2	405	408	2 884	28 609	5 670	54	2 111
	I7	2	1 706	27	36	65	22	4 845	86	0	11
	I8	39	1 319	11	1 064	1 005	673	22 900	1 722	98	1 023
	I9	53	143	0	43	54	148	4 631	698	0	214
	I10	34	2 838	52	80	8	256	21 175	6 399	179	16 395
	I11	891	19 994	20	869	265	842	13 911	4 287	959	4 224
	I12	58	429	0	360	562	2 536	21 746	2 132	17	160
	I13	65	805	1	134	184	374	14 991	1 963	158	7 318
VIE	I1	1	141	0	6	15	20	3 295	0	0	35
	I2	58	594	0	139	1 010	3 761	40 684	1 916	54	10
	I3	1	15	0	28	1	50	176	0	0	0
	I4	29	3 248	1	300	765	3 868	13 038	0	10	4 559
	I5	7	40	0	67	53	42	936	354	0	30
	I6	226	2 843	4	750	745	5 303	52 604	10 426	100	3 882
	I7	0	0	0	0	0	0	0	0	0	0
	I8	41	1 395	12	1 176	1 013	712	24 221	1 822	104	1 082
	I9	222	594	0	176	229	617	19 276	2 906	0	891
	I10	23	1 913	35	54	6	172	14 275	4 314	121	11 053
	I11	2 612	58 594	59	2 647	675	2 467	40 768	12 562	2 811	12 380
	I12	37	269	0	214	364	1 589	13 630	1 336	11	100
	I13	101	1 251	1	214	280	582	23 311	3 053	246	11 380
A	I1	7	986	1	20	124	140	23 065	0	0	246
	I2	228	2 353	0	798	4 015	14 902	161 201	7 593	216	39
	I3	12	165	0	293	29	547	1 935	0	0	0
	I4	364	41 397	16	4 543	9 742	49 297	166 162	0	125	58 098
	I5	86	511	0	819	745	542	11 953	4 516	0	386
	I6	1 777	22 372	34	6 013	6 181	41 733	413 976	82 046	789	30 550
	I7	34	35 834	571	847	1 339	456	101 740	1 813	0	223
	I8	650	22 159	184	19 763	16 276	11 305	384 746	28 935	1 648	17 184
	I9	801	2 142	2	669	854	2 224	69 468	10 474	0	3 210
	I10	441	36 315	670	997	150	3 273	270 991	81 887	2 289	209 821
	I11	15 513	348 013	348	15 217	4 902	14 650	242 136	74 612	16 695	73 530
	I12	241	1 769	0	1 568	2 436	10 448	89 589	8 781	70	658
	I13	1 011	12 465	8	2 297	2 866	5 795	232 242	30 416	2 447	113 374

S: Statistics Austria, Energy statistics. – B: Burgenland, C: Carinthia, L: Lower Austria, U: Upper Austria, S: Salzburg, ST: Styria, T: Tyrol, V: Vorarlberg, VIE: Vienna, AU: Austria.

Results for 2010 by Laender. Sector and Energy Source

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10³ m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
B	I1	0	0	0	0	0	0	0	0	0	2 066

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10^3 m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I2	28	122	0	0	3	402	1 210	8 070	372	149
	I3	0	2	0	0	1	3	18	205	0	23 194
	I4	13	4 189	0	104	278	767	996	10 553	119	7 994
	I5	4	58	0	0	2	31	288	2 706	622	106
	I6	73	1 044	0	1	70	553	2 672	23 941	4 981	12 295
	I7	3	2 224	8	0	6	375	55	21 725	448	16
	I8	36	1 966	6	9	168	2 805	2 303	41 563	1 989	170
	I9	28	140	0	0	2	18	304	5 347	470	0
	I10	12	844	13	0	0	90	209	8 573	1 034	10 885
	I11	758	13 175	16	1	152	710	1 165	12 915	3 004	73
	I12	6	62	0	0	4	98	334	2 535	206	12 628
	I13	34	521	1	0	22	255	422	21 669	690	615
C	I1	1	604	3	0	0	94	90	2 837	0	3 998
	I2	53	290	0	0	6	914	787	8 757	877	179
	I3	0	6	0	0	2	13	74	855	0	35 042
	I4	22	5 870	0	145	389	1 400	2 206	23 595	166	13 026
	I5	6	64	0	0	2	36	353	2 866	622	191
	I6	196	3 204	1	2	244	1 762	6 698	66 451	14 035	18 021
	I7	2	4 381	13	0	36	205	131	263 014	52	3
	I8	41	2 073	8	10	156	2 407	2 287	38 265	2 487	68
	I9	56	365	0	1	6	57	1 176	13 762	2 251	0
	I10	35	2 929	19	0	1 398	271	580	29 004	5 511	4 609
	I11	1 154	20 721	31	1	242	1 194	1 425	21 501	4 923	32
	I12	13	126	9	0	7	229	488	5 253	715	11 114
	I13	102	1 383	2	0	201	687	931	44 241	2 460	219
L	I1	6	2 721	20	0	0	437	1 009	25 284	0	2 654
	I2	170	920	0	0	22	3 227	4 799	45 989	3 957	149
	I3	3	45	0	0	8	138	312	3 827	0	28 422
	I4	63	21 002	0	474	1 295	3 718	6 403	56 794	560	10 901
	I5	25	341	0	0	16	260	1 597	15 388	3 740	114
	I6	433	6 321	2	4	397	3 262	15 082	143 409	34 111	12 901
	I7	5	11 191	203	0	32	1 037	293	88 513	237	2
	I8	172	8 217	29	40	816	8 989	10 374	161 154	8 834	48
	I9	126	770	0	2	15	221	2 136	31 656	3 928	0
	I10	77	5 885	38	0	1	560	1 360	78 382	15 580	2 342
	I11	3 534	63 269	77	3	718	3 501	4 616	61 491	14 691	36
	I12	27	241	1	0	13	491	1 410	12 690	1 198	5 890
	I13	220	3 416	6	0	140	1 433	2 900	97 231	5 051	139
U	I1	3	1 453	11	0	0	233	460	13 470	0	1 628
	I2	138	752	0	0	17	2 612	2 199	26 147	2 852	128
	I3	1	36	0	0	32	82	442	4 595	0	17 986
	I4	71	20 528	0	748	2 292	3 804	13 508	62 581	1 034	5 556
	I5	50	533	0	0	15	326	2 687	25 540	5 454	279
	I6	576	9 085	3	5	678	4 914	20 211	207 678	47 568	7 569
	I7	2	8 123	23	0	20	904	1 135	61 292	174	3
	I8	184	8 867	46	80	683	10 817	9 765	167 010	11 127	226
	I9	104	747	0	2	23	179	2 027	29 925	3 878	0
	I10	94	7 794	53	0	4	839	1 758	69 794	8 810	3 626
	I11	3 036	56 143	66	4	625	3 092	3 844	54 426	12 959	36
	I12	71	662	2	0	80	732	1 659	18 197	2 038	10 224

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10^3 m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I13	264	3 765	9	0	187	1 945	2 487	115 559	6 549	0
S	I1	0	12	0	0	0	0	14	12	0	1 826
	I2	61	348	0	0	7	1 005	911	9 968	1 230	459
	I3	0	8	0	0	5	13	72	1 014	0	10 702
	I4	19	6 198	1	152	414	1 153	1 458	16 495	213	17 150
	I5	19	231	0	0	5	107	875	8 470	2 293	177
	I6	169	2 660	1	2	179	1 569	5 804	58 923	12 283	11 987
	I7	2	4 845	15	0	13	229	140	31 270	61	2 066
	I8	59	2 789	9	13	205	3 041	3 650	54 189	4 245	149
	I9	49	364	0	1	7	86	1 099	19 961	1 950	23 194
	I10	43	3 408	21	0	1	496	707	38 059	37 618	7 994
	I11	1 513	27 272	33	1	313	1 584	1 888	26 928	7 098	106
	I12	40	208	1	0	13	563	890	8 446	1 162	12 295
	I13	97	1 632	2	0	67	665	1 001	45 758	2 678	16
ST	I1	8	3 060	22	0	0	495	864	24 890	0	170
	I2	92	413	0	0	28	992	926	13 395	1 507	0
	I3	0	21	0	0	4	26	158	2 349	0	10 885
	I4	45	14 786	0	370	1 759	5 828	3 526	47 455	423	73
	I5	27	410	0	0	14	208	1 887	17 410	4 351	12 628
	I6	367	5 779	2	7	417	3 361	14 300	125 779	28 243	615
	I7	5	11 065	36	0	118	1 258	3 407	87 169	141	3 998
	I8	112	5 584	18	25	384	5 870	5 887	97 747	6 026	179
	I9	68	468	0	1	8	147	1 144	20 045	2 888	35 042
	I10	60	5 346	30	0	1	795	3 196	46 443	6 061	13 026
	I11	2 552	47 099	55	3	664	3 261	3 105	45 989	11 738	191
	I12	29	270	1	0	17	659	1 123	11 546	992	18 021
	I13	172	2 527	4	0	126	1 107	2 149	76 001	3 813	3
T	I1	1	543	6	0	0	92	183	4 451	0	68
	I2	47	424	0	0	5	997	760	12 998	662	0
	I3	2	39	0	0	3	43	121	1 392	0	4 609
	I4	26	11 509	0	211	565	1 619	1 977	21 712	241	32
	I5	12	159	0	0	5	91	784	7 367	1 688	11 114
	I6	189	3 199	1	2	241	1 767	7 506	72 366	13 682	219
	I7	9	5 842	13	0	10	253	86	31 076	52	2 654
	I8	61	3 113	11	15	231	3 732	3 685	61 538	3 512	149
	I9	51	365	0	3	23	73	1 150	15 013	2 056	28 422
	I10	45	3 377	137	0	1	336	779	36 555	3 477	10 901
	I11	1 845	33 756	40	2	748	1 831	2 399	34 775	8 069	114
	I12	24	169	1	0	14	483	684	7 782	592	12 901
	I13	118	1 901	3	0	86	1 088	1 227	54 995	2 703	2
V	I1	1	360	3	0	0	58	90	2 392	0	48
	I2	33	174	0	0	43	548	514	6 246	497	0
	I3	0	5	0	0	2	10	773	8 582	0	2 342
	I4	14	4 924	0	107	299	884	1 145	12 260	127	36
	I5	12	188	0	0	5	92	863	8 183	1 865	5 890
	I6	174	2 548	1	2	167	1 388	6 396	59 105	11 574	139
	I7	1	2 486	8	0	6	125	55	17 296	33	1 628
	I8	47	2 104	7	10	146	2 398	2 251	39 390	2 227	128
	I9	43	327	0	1	6	62	848	14 330	1 692	17 986
	I10	28	2 110	15	0	0	213	478	19 075	2 412	5 556

Land	Sector	Gasoline t	Diesel t	LPG t	Gasoil t	Fuel oil t	Natural gas 10^3 m3	Electricity MWh	District heat MWh	Fuel wood t	Biofuels t
	I11	1 049	19 006	26	1	220	1 051	2 051	22 558	4 110	279
	I12	78	512	3	0	32	1 164	4 441	33 417	1 911	7 569
	I13	72	1 048	2	0	63	480	700	35 977	1 568	3
VIE	I1	1	541	4	0	0	88	137	3 593	0	226
	I2	197	958	0	0	19	2 825	12 408	88 665	6 577	0
	I3	0	9	0	0	3	16	108	1 041	0	3 626
	I4	20	6 287	0	166	445	1 216	1 557	16 029	190	36
	I5	13	174	0	0	5	98	943	8 332	1 865	10 224
	I6	304	4 479	1	3	299	2 266	11 985	100 392	22 195	0
	I7	0	0	0	0	0	0	0	0	0	1 826
	I8	53	2 300	8	12	176	2 586	2 851	47 727	4 528	459
	I9	155	1 050	0	2	21	209	3 071	44 013	5 675	10 702
	I10	39	1 893	11	0	0	154	681	13 968	1 887	17 150
	I11	3 780	57 897	72	3	678	3 144	4 293	57 275	13 756	177
	I12	36	320	2	0	21	564	1 435	12 827	1 244	11 987
	I13	120	1 693	3	0	78	769	1 656	54 808	3 365	2 066
A	I1	22	9294	68	0	0	1498	2848	76930	0	137
	I2	818	4401	0	0	152	13522	24513	220236	18530	1 131
	I3	7	171	1	0	61	343	2080	23861	0	0
	I4	292	95293	3	2479	7735	20389	32775	267475	3071	56 137
	I5	168	2159	0	0	68	1249	10277	96262	22500	405
	I6	2480	38318	12	27	2693	20842	90654	858044	188671	90 245
	I7	29	50157	319	0	241	4387	5303	601355	1197	2 910
	I8	764	37014	142	214	2965	42645	43052	708583	44974	28 149
	I9	680	4597	0	12	110	1052	12955	194050	24788	2 173
	I10	433	33586	337	0	1406	3754	9749	339853	82390	253 826
	I11	19222	338339	417	19	4360	19368	24785	337858	80349	99 021
	I12	324	2572	20	0	202	4982	12465	112693	10059	1 992
	I13	1200	17887	32	0	970	8428	13473	546238	28879	126 567

S: Statistics Austria, Energy statistics. – B: Burgenland, C: Carinthia, L: Lower Austria, U: Upper Austria, S: Salzburg, ST: Styria, T: Tyrol, V: Vorarlberg, VIE: Vienna, AU: Austria.