COUNTRY PRACTICE IN ENERGY STATISTICS

Topic/Statistics: Annual Energy Statistics

Institution/Organization: Direcção Geral de Energia e Geologia

Country: PORTUGAL

Date: 05/04/2012

CONTENTS

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.

Key elements	
Name of the statistics	Annual Energy Statistics
Background and purpose of the statistics	The DGEG, since late 2009, has the delegating powers from National Statistics Institute (INE) to the production of national energy statistics. However, the production of energy statistics there are, at least since the ‘40s on supply and consumption of electricity, and at least since the '50s on supply and consumption of fuels. Currently, DGEG produces energy statistics on the supply and consumption of oil products, coal products, gas, electricity (including CHP) and renewables, and also makes the monitoring of energy prices. Its aim is to disseminate annually relevant energy statistics to contribute to knowledge on the structure, magnitude and evolution of the energy sector. This energy statistics information, and the resultant Energy balance, are the support in a prospective analysis of the energy sector and assist in defining national energy strategy or national plans (ex: for energy efficiency or for renewable). At the same time, allows answer to the national obligations report on energy statistics to the EUROSTAT, IEA and UNECE.
Population, sample and data sources	The energy statistics information produced cover all Portugal territory, including the Administrative Regions of Madeira and Azores, by census collection to enterprises or establishment that works on energy sector in the reference year (ex: fuel importers/exporters, electricity and gas companies, power generation plants, etc.). At the same time we make a crosscutting with the administrative data from others DGGE departments or Government Institutions.

Main users	Government Institutions, policy makers, enterprises/business, Consultants, Universities, Banks, Public in general and institutions as INE, EUROSTAT, IEA, UNECE/UNSD.
Important contribution or issue addressed	Not relevant
Other remarks	Not relevant

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.

Annual Energy Statistics: supply and consumption on solids fuel (coal), crude and oil products, natural gas, renewables, electricity and heat

1.2. History and purpose

State when the statistics were first published.

We have no sure about the first publication on Energy Statistics in Portugal. However, at least since the ‘40s there are statistical information on supply and consumption of electricity, and at least since the '50s on supply and consumption of fuels (oil and coal). The Natural Gas consumption starts in Portugal in 1997.

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

The aim is to disseminate annually relevant energy statistics to contribute to knowledge on the structure, magnitude and evolution of the energy sector. The annual energy statistics information, and the resultant Energy Balance, are the support in a prospective analysis of the energy sector and assist in defining national energy strategy or national plans (ex: for energy efficiency or for renewable). At the same time, allows answer to the national obligations report on energy statistics to the EUROSTAT, IEA and UNECE.

1.3. Reference period

State the time period the data are collected for.

The data are collected in year “y” for year “y-1”

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.

Annually

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 energy statistics are available online (www.dgge.pt)

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.

The consumption of electricity, natural gas and oil products the lowest geographical level are the municipalities. The Energy Balance is on national level (global) and, since 2007, for each administrative region (RAM and RAA).

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.

EUROSTAT, IEA, UNECE

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).

Direcção Geral de Energia e Geologia (General Directorate on Energy and Geology)/Divisão de Planeamento e Estatística (Division on Planning and Statistics)

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).

Lei nº 22/2008, from 13th May (National Statistic System Law) (http://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_cont_inst&INST=67921113);

In the big part of the national energy specific legislation there are an article that create the obligation of the operators to report information/data to the DGEG, that allow to produce the statistical data.

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

Not relevant

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 European Parliament and of the Council, of 22nd October 2008, on energy statistics (it is a common framework for the production, transmission, evaluation and dissemination of comparable 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

DGEG ordinary budget/Portuguese Government

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).

In the production of the annual energy statistics there are six staff involved. There is two more staff involved on monitoring the energy prices.

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.).

Eurostat, IEA, UNECE via Joint IEA/Eurostat/UNECE Annual Questionnaires

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 cover supply and use of all major energy products in Portugal, and according the Regulation (EC) nº 1099/2008

2.2. Definitions of main concepts and variables

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

The statistics cover all territory, and the main concepts are according the EU Regulation, and the IEA recommendations. The calorific values used are according the information request to the operators or is used the default values established by EUROSTAT/IEA

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?).

The energy products and the main variables are identical with those described in Regulation (EC) nº 1099/2008 or IEA questionnaires

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.

The data are collected in physical units: Coal and Crude and Oil Products in ton, Natural Gas in m^3 and Electricity in kWh. The NCVs are collected in order to transform the physical units in toe and GJ. Annually, with the Energy Balance, we publish online the conversion factors used (toe/ton; GJ/ton; toe/m^3; GJ/m^3)

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).

Used the EU standards: NACE Rev.2 (portuguese version CAE rev.3 - http://metaweb.ine.pt/sine/UInterfaces/SineVers_Cat.aspx)

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.

Coal – importers; Crude and Oil Products – importers and refineries production; Natural Gas – importers; Electricity and CHP and Renewables – Producers (installation level), TSO, Distribution operator; Biomass in residential sector is estimated based on 2010 HH survey;

2.6. Population

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

The target population is all active enterprises/installations in the reference year, on national territory

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.

The statistical units are reporting units.

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.

Not relevant

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.*

Not relevant

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).

The data are collected through specifics excel file template or questionnaires, and send by the operators via e-mail to DGEG. . For coal, oil and oil products, natural gas and bio fuels – monthly: balance sheets, exchanges between main operators, imports/exports, energy bill; quarterly: sells in internal market (by municipalities and by activities sectors), marine bunkers and aviation; . For electricity, heat and renewable – monthly: administrative data received from TSO; annually: specifics annual questionnaires to each installation (production, fuels consumption, characterization of the equipments, …) and from Distribution operator the electricity consumption by municipalities and by activities sectors

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.

100%

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).

There are informatics applications to transfer the received data to the production database. During this transfer there are some steps that make validation or detect some inconsistent data. Only few information is received by paper and in this case should be manually introduce to the production database.

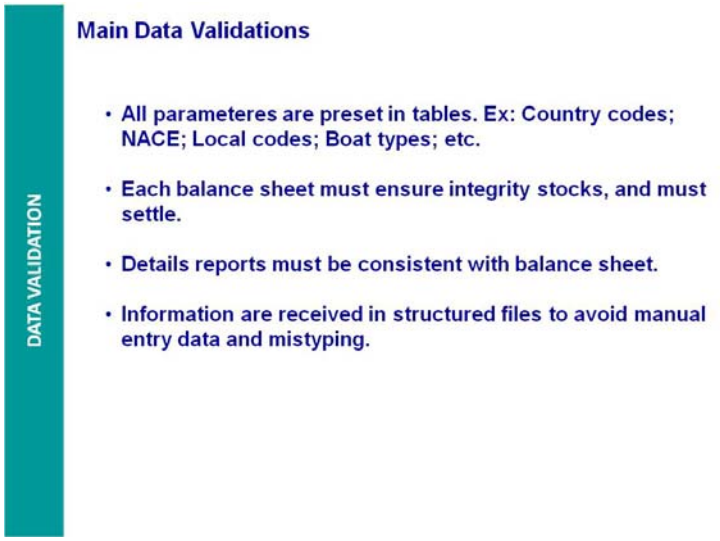
3.2. Data editing

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

It is used to do manual and automatic error-detection and manual correction, data validation procedures and outlier identification. As example, for coal, oil, natural gas and bio fuels:



There are yet tools for validation for exchange between companies, exchanges versus Balance sheet, detail reports are faced to balance sheet,…

During the preparation of the anual Energy Balance, the quantities evolutation are faced over the years for each product and activity sector.

In addition, macro editing and market intelligence are exercised to ensure that the energy statistics are consistent.

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*

When a value for a specific data item is missing or unusable, the first step is asking the operator to send a new data file with the correct information. For all effects we can a manual correction when it is necessary.

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.

Not applicable

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.

No adjustments are performed

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.

All the energy statistics produced are disseminate online in the DGEG site (www.dgge.pt). The INE also disseminate online some energy statistic data, which source is DGEG (http://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_base_dados) The Energy Statistics produced at the same time are sending to the EUROSTAT and IEA. The annual questionnaires are sending to the UNECE.

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

In the HOME page in www.dgge.pt , on the right side you found “Informações”. Above this you click on “Estatísticas e Preços”. Here you can find different energy statistics on . Preços e Fiscalidade (Energy Prices) . Petróleo e Derivados (Oil and oil products) . Carvão (Coal) . Gás Natural (Natural Gas) . Energia eléctrica (Electricity) . Energias Renováveis (Renewable Energy) . Factura Energética (Energy Bill) . Balanços e Indicadores Energéticos (Energy Balances and Energy Indicators)

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

Free of charge

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.)?

Usually historical annual data are not revised. Only if some error is detected this can occurred. No drastic changes have been performed in methodology, so no such revisions have been performed. When methodological updates occur (new variables are collected and computed) the series starts at that point, with no back casting. However, there are two exceptions: . monthly statistical data for the year “n” – it is considered as “Provisory data”, and is signed with a “P”; only with the annual energy questionnaires and energy balance can be considered colosed

. The Energy Balance of the year "n-1" is considered as "Provisory" just too n+2. During this period a detail analyses to series and by municipalities and by activities sectors series is performed. Sometimes there are adjustments, mainly on Final Energy (by activities sectors) but usually at the level on Primary Energy don't.

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.

The microdata are stored on a DGEG server and its management and consultation is only for internal use. The access to the databases and microdata are reserved and controlled by a password and a level of the access.

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

No microdata available for scientific and/or public use

4.4. Confidentiality

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

No restrictions are applied for aggregate data. The Lei nº 22/2008(National Statistic System Law) impose the confidentiality rules as the EUROSTAT rules

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

Not applicable

Describe how confidential data are handled.

Only the statistical staff actually involved in data collection and computation has access to the microdata. Statistical staff are bound by law to keep the confidentiality of statistical data

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

Not applicable

5. Quality

5.1. Relevance

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

The statistical information meets the needs of users

5.2. Accuracy

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

Assessment is not made

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.

Assessment is not made

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.

Not applicable

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

Not relevant

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

Late submission or classification errors of commodities on data reported

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 date is established according to Regulation 1099/2008 and National Annual Statistical Programme. November 30 is the publication date for the data of previous year. Starting this year it was creates a quarterly advance release calendar.

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.

Last year don't are discrepancies. Usually the major discrepancies appear when it is detected errors or late submission by the operators creates problems on validation the data and close the Energy Balance. We already have years where the delay is more than 3 months, mainly for oil statistics. The liberalization of the market creates also bigger problems on collection the statistical data, increasing a lot the number of sources of information.

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)?

Starting 2012, it was creates a quarterly advance release calendar. No restriction to access the statistical data information that is available on DGEG site. There are methodological documents but not available online. Metadata information are in development for to put online

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.

Statistics overtime are comparable

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.

Some differences may occur, but not relevant

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.

Some differences may occur, but 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?

There is a good consistence between monthly, quarterly or yearly statistics. Some differences may occur, as monthly and quarterly data are provisional data and annual are final data.

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

Not relevant

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.?

No

Annexes

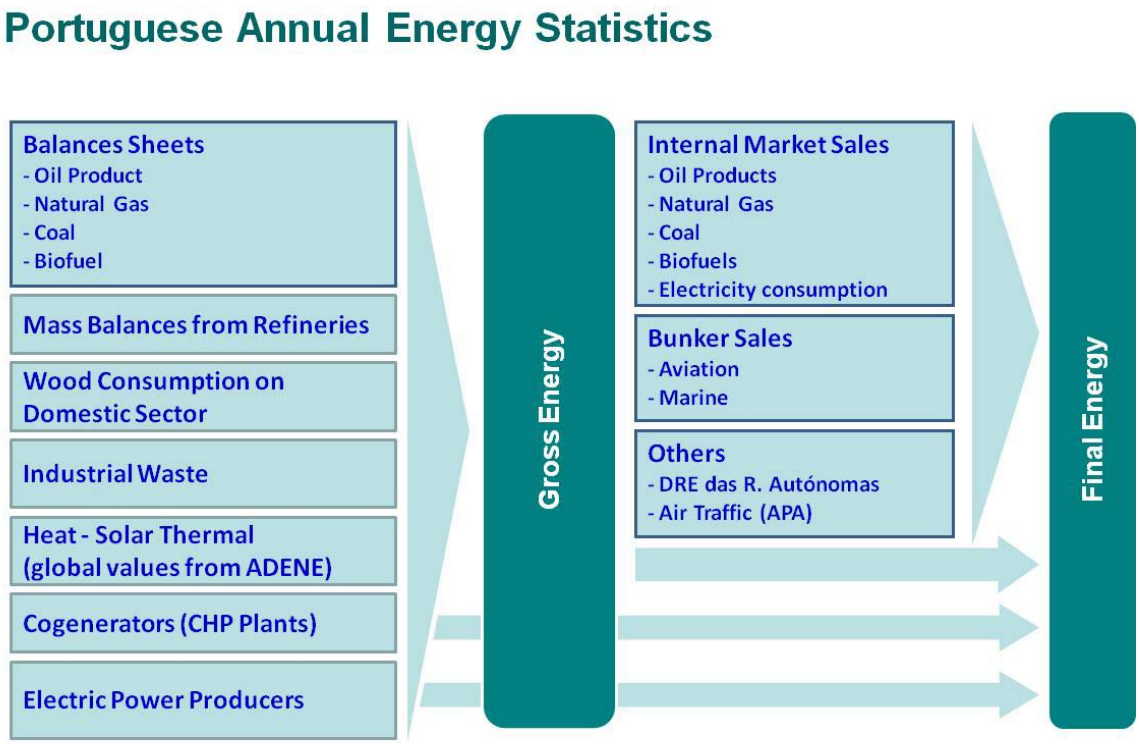
Illustrations and flowcharts

Illustrations and flowcharts are useful to summarize information and to get a better overview of the statistical production process. Illustrations and flowcharts can either be places in annexes or be included under relevant paragraphs in the template.

E.g.:

- A conceptual flowchart which illustrates the flow of data in the production of the statistics.
- A flowchart which illustrates the main tasks in the production process and the dependency between them.

In this illustration are summarize the flow of data in production of the annual energy statistics that are closed with Energy Balance



Time schedule

Include a time schedule for the different phases of the statistical production process. The statistical production process *may* be divided into the following phases. Phase 1-3 may only be relevant for when a new statistics/survey is set up.

1. **Clarify needs** (e.g. map users needs, identify data sources)

2. **Plan and design** (e.g. plan and design population, sample size, how to analyze and edit data)
3. **Build** (e.g. build and maintain production system, test production system)
4. **Collect** (e.g. Establish a frame, draw the sample, collect data)
5. **Edit** (e.g. identify and code micro data, edit data, imputation)
6. **Analyse** (e.g. quality evaluation, interpret, analyse)
7. **Disseminate** (e.g. publish data, user contact)

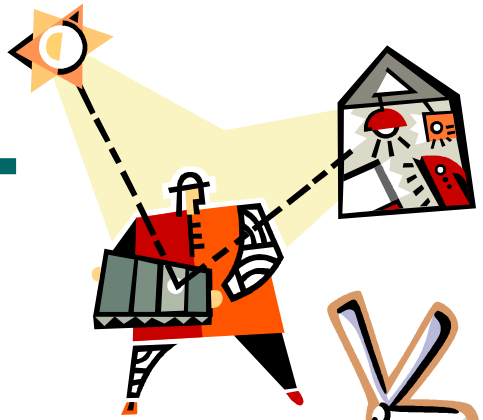
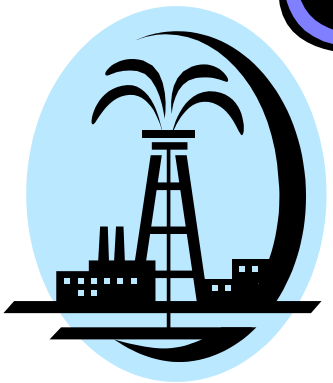
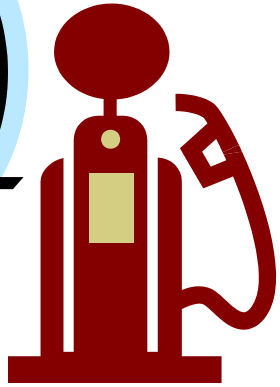
Questionnaires
Include the complete questionnaire(s)/survey form(s) used

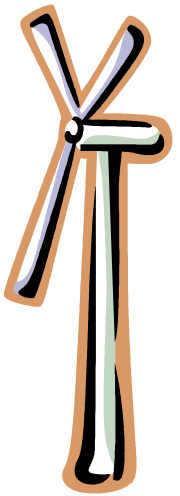
Example of publication tables
Include an example of a typical table published for the statistics. Include web addresses if available online.

Detailed description on analytical methods
If relevant, a detailed description of analytical methods used in the statistical production (like seasonal adjustment, temperature adjustment etc.) may be described in an annex. A short description can also be included in chapter 3.5: Analytical methods or under other suitable chapters.

PORTUGUESE ENERGY STATISTICAL SYSTEM





CONTENTS

- **Energy Statistics**
  - **The Regulation (EC) nº 1099/2008 on Energy statistics**
- **Portuguese Energy Statistics**
  - **National legislation**
  - **Institutional cooperation system between institutions**
  - **Organization of work**
- **Reporting System**

Regulation (EC) nº 1099/2008

- It is a common framework for the production, transmission, evaluation and dissemination of comparable energy statistics.
- EUROSTAT / IEA / UNECE

Energy Products

- Coal
- Oil and oil products
- Natural Gas
- Electricity
- Renewables
- Heat
- Nuclear

Common Purpose

- Definitions
- Data sources
- Time reference and frequency
- Methodologies
- Transmission and dessimination
- Quality assessment

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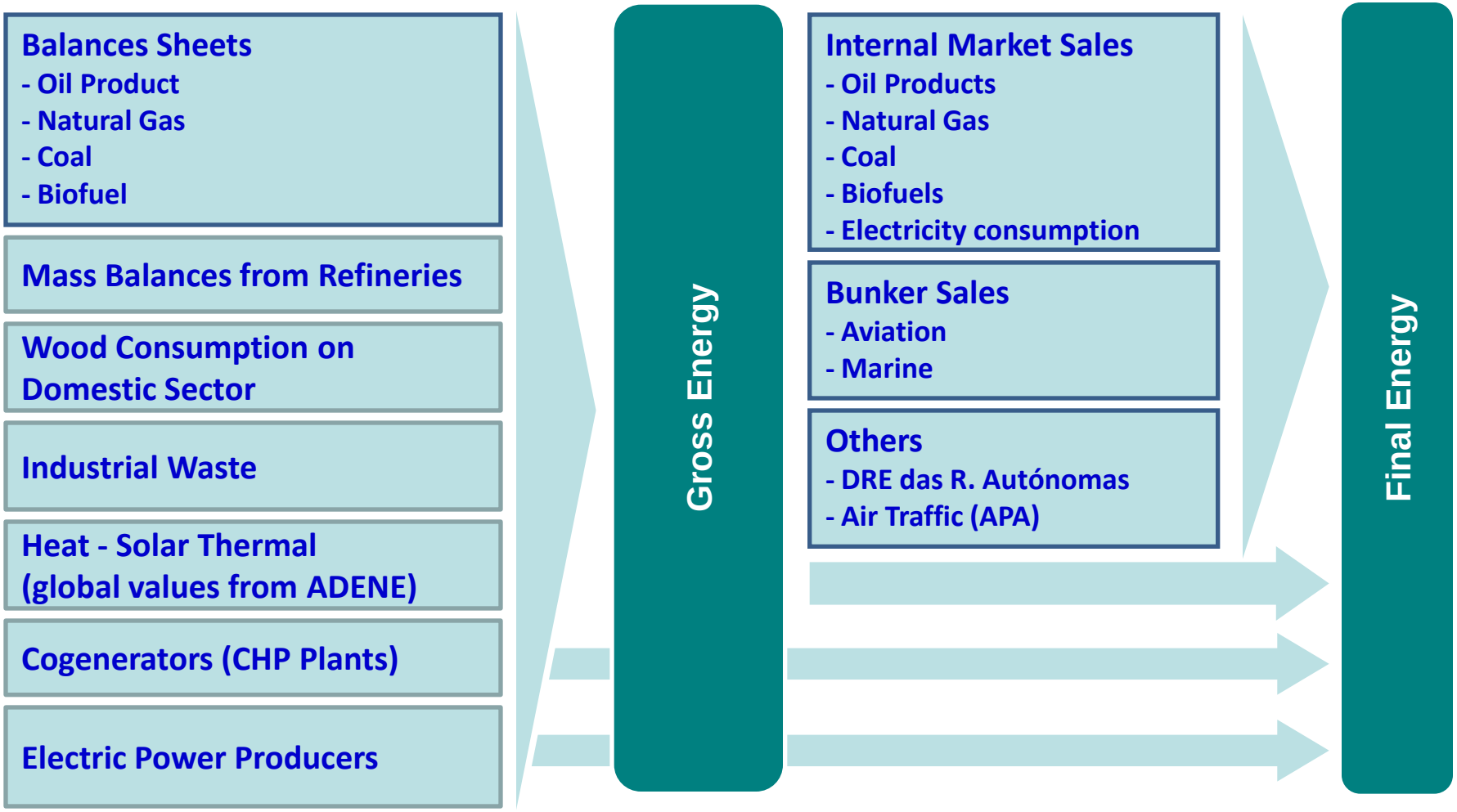
Portuguese Annual Energy Statistics



OIL STATISTICAL SYSTEM

The Oil Statistical System applies to all companies with:

Production

Imports or Exports

Obligation to send periodically of following information:

Monthly

- Balance sheets
- Exchanges
- Imports / Exports
- Energy Bill

Quarterly (3 months)

- Internal Market
- Marine Bunkers
- Aviation

BALANCE SHEETS

- **BALANCE SHEETS** are received monthly.
- Are the basis of whole Oil Statistical System.
- Received up to 20th of next month.
- File structure (xls or csv):

Year; Month; CompCod; NUTsI; ProdCod; MovCod; Qty

Year	**Year referred to**
Month	**Month referred to**
CompCod	**Company code**
NUTsI	**NUTsI code**
ProdCod	**Oil products code**
MovCod	**Movements code**
Qty	**Quantity handled**

BALANCE SHEETS

NutsI – Regional Division

1 – Mainland

2 – Azores Islands

3 – Madeira Islands

Some Products

1000 – Butane

1100 – Propane

1700 – Jet fuel A1

2100 – Diesel

2850 – Fuel oil S<1%

3200 – Motor Gasoline IO95

3400 – Motor Gasoline IO98

4000 – Lubricants

5000 – Bitumen

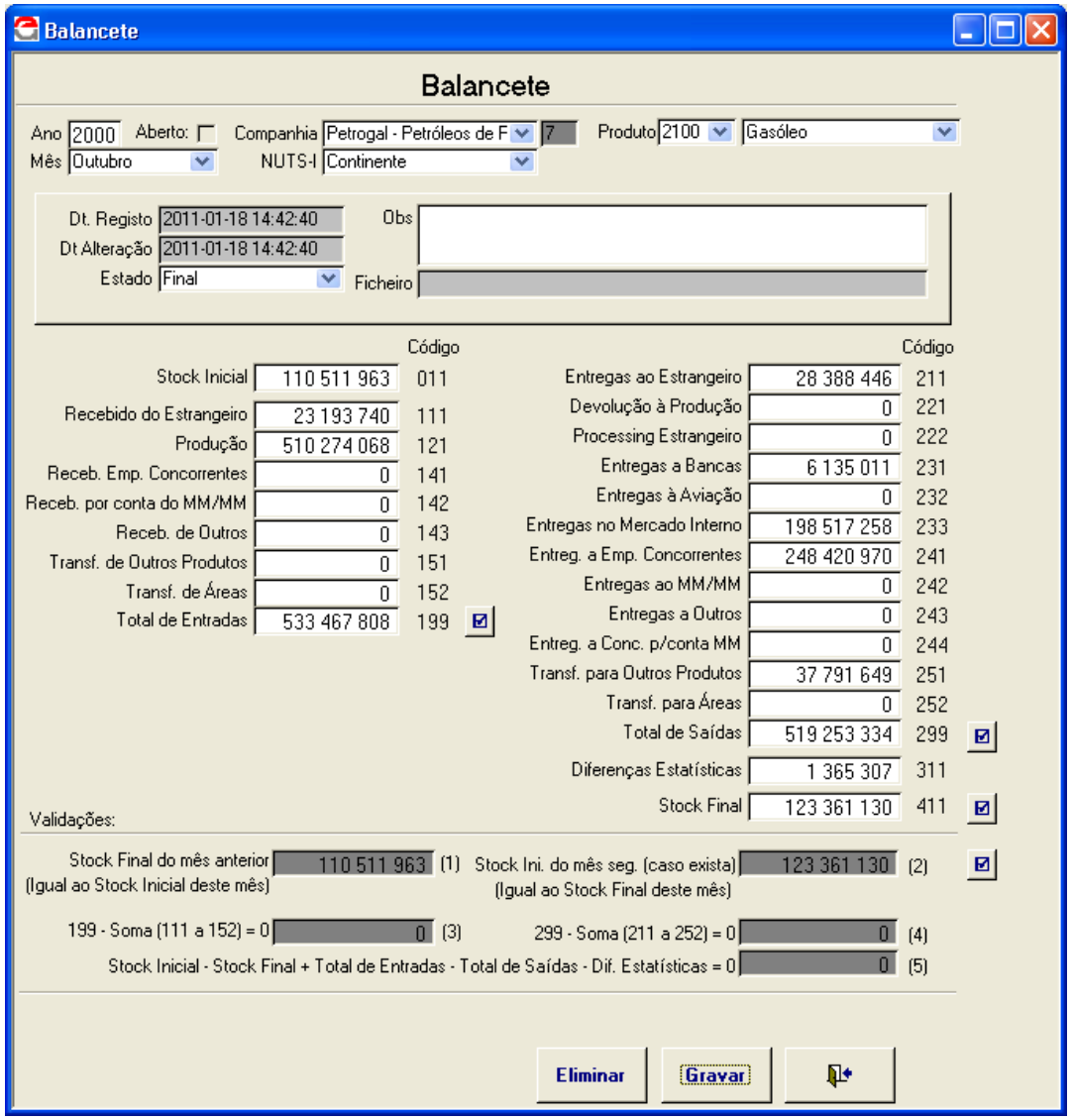
….

Movements Types (codes)

	011	Opening stock
Inputs	111	Imports
	121	Production
	141	Received from other companies
	151	Transfers from other products
	152	Transfers from other areas (NutsI)
	199	Total input
Output	221	Return to production
	231	Supplies to marine bunkers
	232	Supplies to aviation
	233	Supplies to internal market
	241	Supplies to other companies
	251	Transfers to other products
	252	Transfers to other areas (NutsI)
	299	Total outputs
	311	Statistical diferences
	411	Closing stock

BALANCE SHEETS

Form to collect data from balances



EXCHANGES

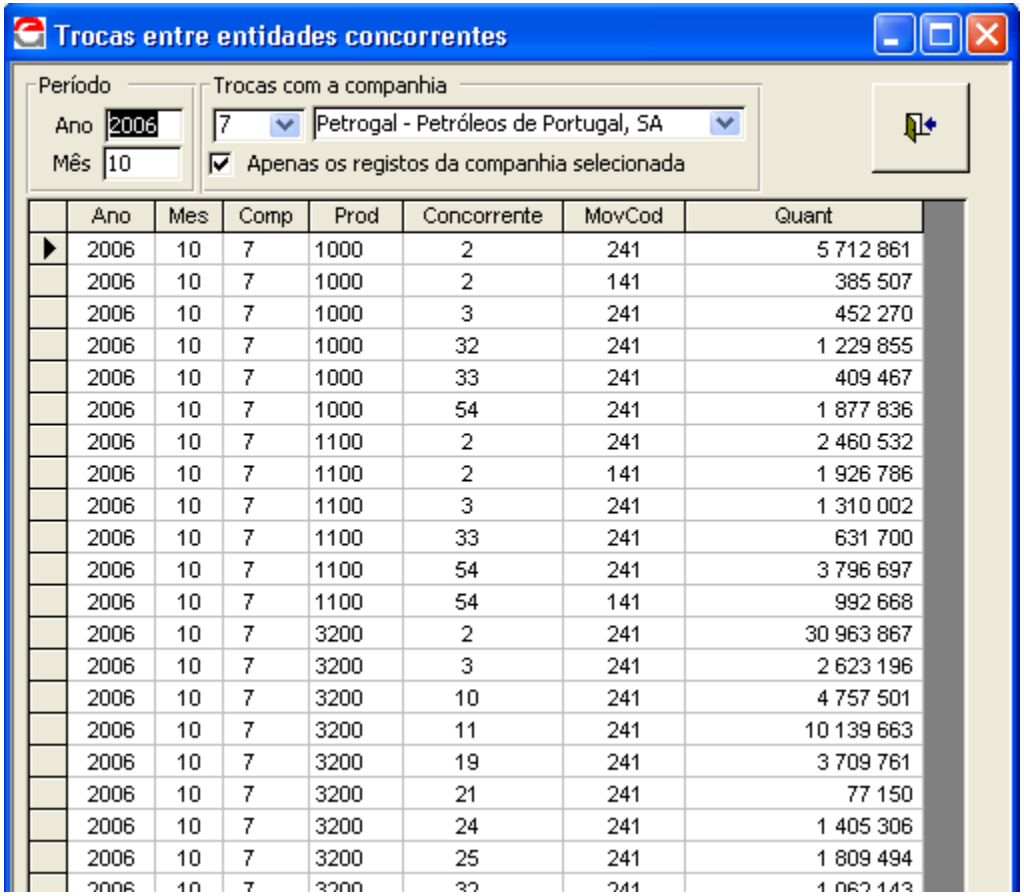
- **EXCHANGES** reports (trading between companies)
- Received monthly.
- Detail of movement codes 141 (receives) and 142 (supplies) from Balance Datasheet.
- Received up to 20th of next month.
- File structure (xls or csv):

Year; Month; CompCod; MovCod; ProdCod;ExchangeCompCod; Qty

Year	**Year referred to**
Month	**Month referred to**
CompCod	**Company code**
MovCod	**Movement code**
ProdCod	**Oil product code**
ExchangeCompCod	**Company which carries out the change**
Qty	**Quantity**

EXCHANGES

Form to collect data from exchanges



Ano	Mes	Comp	Prod	Concorrente	MovCod	Quant
2006	10	7	1000	2	241	5 712 861
2006	10	7	1000	2	141	385 507
2006	10	7	1000	3	241	452 270
2006	10	7	1000	32	241	1 229 855
2006	10	7	1000	33	241	409 467
2006	10	7	1000	54	241	1 877 836
2006	10	7	1100	2	241	2 460 532
2006	10	7	1100	2	141	1 926 786
2006	10	7	1100	3	241	1 310 002
2006	10	7	1100	33	241	631 700
2006	10	7	1100	54	241	3 796 697
2006	10	7	1100	54	141	992 668
2006	10	7	3200	2	241	30 963 867
2006	10	7	3200	3	241	2 623 196
2006	10	7	3200	10	241	4 757 501
2006	10	7	3200	11	241	10 139 663
2006	10	7	3200	19	241	3 709 761
2006	10	7	3200	21	241	77 150
2006	10	7	3200	24	241	1 405 306
2006	10	7	3200	25	241	1 809 494
2006	10	7	3200	32	241	1 062 143

IMPORTS / EXPORTS

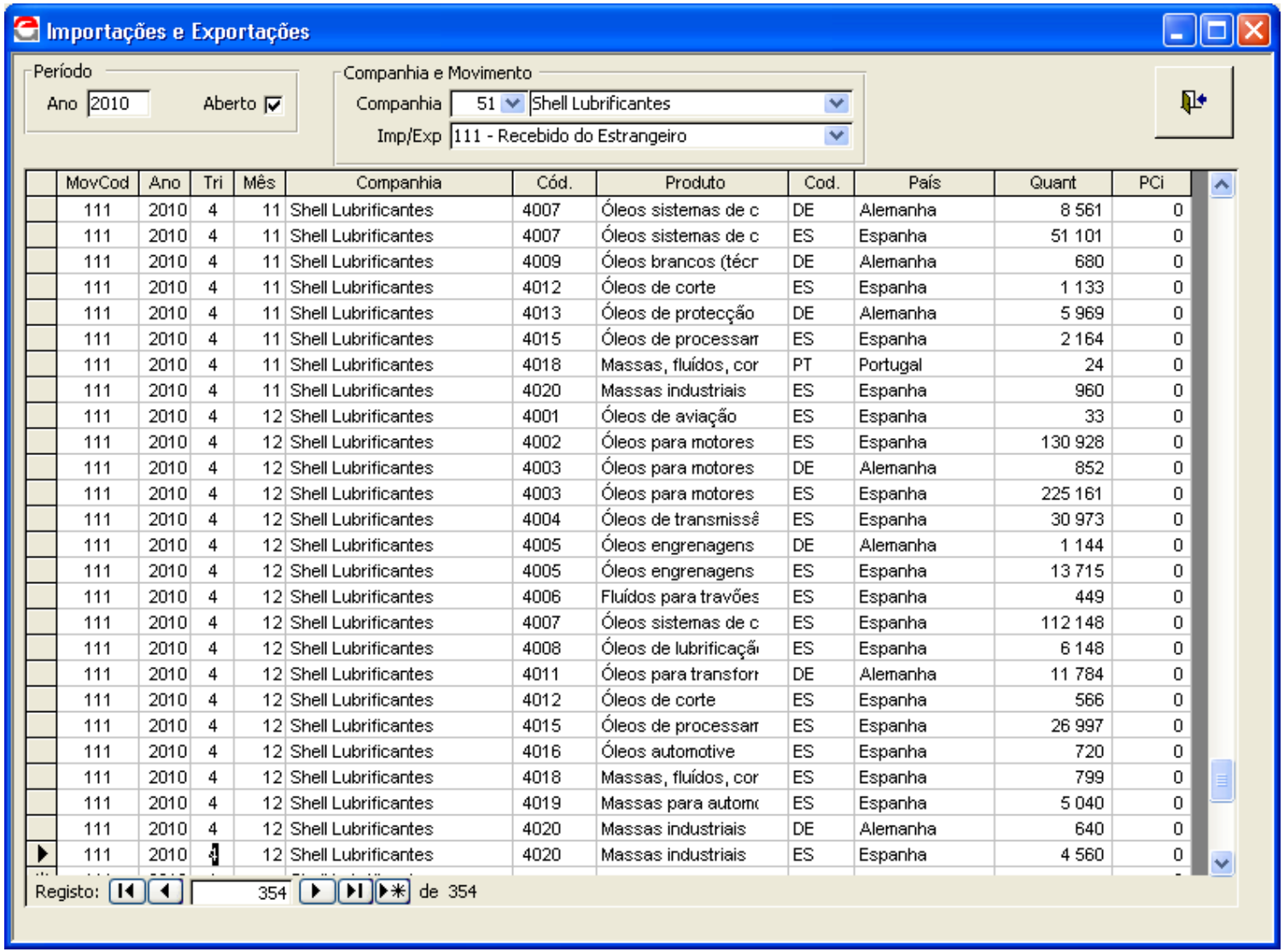
- **IMPORTS/EXPORTS** reports are received monthly
- Detail of movement codes 111 (imports) and 211 (exports) from Balance Datasheet
- Received up to 20th of next month.
- Structure of received file (xls or csv):

Year; Month; CompCod; MovCod; ProdCod; CountryCod; Qty

Year	**Year referred to**
Month	**Month referred to**
CompCod	**Company code**
MovCod	**Movement code**
ProdCod	**Oil product code**
CountryCod	**Origin / Destination country**
Qty	**Quantity**

IMPORTS / EXPORTS

Form to collect data from Imports / Exports



MovCod	Ano	Tri	Mês	Companhia	Cód.	Produto	Cod.	País	Quant	PCi
111	2010	4	11	Shell Lubrificantes	4007	Óleos sistemas de c	DE	Alemanha	8 561	0
111	2010	4	11	Shell Lubrificantes	4007	Óleos sistemas de c	ES	Espanha	51 101	0
111	2010	4	11	Shell Lubrificantes	4009	Óleos brancos (técr	DE	Alemanha	680	0
111	2010	4	11	Shell Lubrificantes	4012	Óleos de corte	ES	Espanha	1 133	0
111	2010	4	11	Shell Lubrificantes	4013	Óleos de protecção	DE	Alemanha	5 969	0
111	2010	4	11	Shell Lubrificantes	4015	Óleos de processam	ES	Espanha	2 164	0
111	2010	4	11	Shell Lubrificantes	4018	Massas, fluídos, cor	PT	Portugal	24	0
111	2010	4	11	Shell Lubrificantes	4020	Massas industriais	ES	Espanha	960	0
111	2010	4	12	Shell Lubrificantes	4001	Óleos de aviação	ES	Espanha	33	0
111	2010	4	12	Shell Lubrificantes	4002	Óleos para motores	ES	Espanha	130 928	0
111	2010	4	12	Shell Lubrificantes	4003	Óleos para motores	DE	Alemanha	852	0
111	2010	4	12	Shell Lubrificantes	4003	Óleos para motores	ES	Espanha	225 161	0
111	2010	4	12	Shell Lubrificantes	4004	Óleos de transmissê	ES	Espanha	30 973	0
111	2010	4	12	Shell Lubrificantes	4005	Óleos engrenagens	DE	Alemanha	1 144	0
111	2010	4	12	Shell Lubrificantes	4005	Óleos engrenagens	ES	Espanha	13 715	0
111	2010	4	12	Shell Lubrificantes	4006	Fluídos para travões	ES	Espanha	449	0
111	2010	4	12	Shell Lubrificantes	4007	Óleos sistemas de c	ES	Espanha	112 148	0
111	2010	4	12	Shell Lubrificantes	4008	Óleos de lubrificaçã	ES	Espanha	6 148	0
111	2010	4	12	Shell Lubrificantes	4011	Óleos para transforr	DE	Alemanha	11 784	0
111	2010	4	12	Shell Lubrificantes	4012	Óleos de corte	ES	Espanha	566	0
111	2010	4	12	Shell Lubrificantes	4015	Óleos de processam	ES	Espanha	26 997	0
111	2010	4	12	Shell Lubrificantes	4016	Óleos automotive	ES	Espanha	720	0
111	2010	4	12	Shell Lubrificantes	4018	Massas, fluídos, cor	ES	Espanha	799	0
111	2010	4	12	Shell Lubrificantes	4019	Massas para autom	ES	Espanha	5 040	0
111	2010	4	12	Shell Lubrificantes	4020	Massas industriais	DE	Alemanha	640	0
111	2010	4	12	Shell Lubrificantes	4020	Massas industriais	ES	Espanha	4 560	0

ENERGY BILL

- **ENERGY BILL** are received monthly.
- Received up to 20th of each month.
- File structure (xls or csv):

Year; Month; CompCod; MovCod; ProdCod; CountryCod; Amount; Qty

Year	**Year referred to**
Month	**Month referred to**
CompCod	**Company code**
MovCod	**Movement code**
ProdCod	**Oil product code**
CountryCod	**Origin / Destination Country**
Amount	**Amount in Euros**
Qty	**Quantity**

FACTURA

Form to collect data from energy bill

Importações e Exportações

Ramas

Período — Ano: 2010 — Aberto: ☑

Companhia e Movimento — Companhia: 7 Petrogal - Petróleos de Portugal, SA — Imp/Exp: 111 - Recebido do Estrangeiro

Unidade para quantidades: kg

Unidade para preço unitário: $ ou € / ton

Mov	Ano	Mês	Companhia	Cód.	Produto	Cod.	País	Qtd	PCi	USD/uni	Valor (USD)	USD/EUR	EUR/uni	Valor (EUR)
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	NO	Noruega	83 575 000		577.68	48 279 958.00	1.4272	404.76	33 828 209.52
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	SA	Arábia Saudit	84 203 651		552.06	46 485 159.00	1.4272	386.81	32 570 651.74
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	DZ	Argélia	131 803 955		589.45	77 691 948.00	1.4272	413.01	54 436 242.36
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	AO	Angola	136 062 872		526.33	71 613 613.00	1.4272	368.78	50 177 349.05
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	LY	Líbia	78 220 100		576.52	45 095 709.00	1.4272	403.95	31 597 108.93
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	GQ	Guiné Equator	65 335 878		663.60	43 356 909.00	1.4272	464.96	30 378 787.85
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	DZ	Argélia	79 973 838		590.66	47 237 267.00	1.4272	413.86	33 097 629.56
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	BR	Brasil	135 082 660		546.51	73 823 797.00	1.4272	382.92	51 725 953.70
111	2010	1	Petrogal - Pe	100	Petróleo Bruto	LY	Líbia	88 094 400		591.52	52 109 673.00	1.4272	414.46	36 511 567.31
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	NO	Noruega	83 140 000		564.83	46 959 843.96	1.3686	412.70	34 311 662.86
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	SA	Arábia Saudit	83 994 241		536.63	45 073 985.10	1.3686	392.10	32 933 741.90
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	KZ	Cazaquistão	135 259 215		594.12	80 359 864.64	1.3686	434.10	58 715 710.07
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	AO	Angola	130 080 712		532.38	69 252 732.81	1.3686	388.99	50 600 177.09
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	GQ	Guiné Equator	65 112 155		612.46	39 878 563.63	1.3686	447.50	29 137 657.10
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	MX	México	136 383 802		466.61	63 638 215.90	1.3686	340.93	46 497 876.16
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	AO	Angola	136 619 055		508.58	69 481 990.20	1.3686	371.60	50 767 686.21
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	KZ	Cazaquistão	135 251 344		585.53	79 193 918.72	1.3686	427.82	57 863 800.44
111	2010	2	Petrogal - Pe	100	Petróleo Bruto	LY	Líbia	81 353 000		571.07	46 457 864.76	1.3686	417.25	33 944 886.92
111	2010	3	Petrogal - Pe	100	Petróleo Bruto	LY	Líbia	77 177 819		599.16	46 242 038.47	1.3569	441.58	34 080 380.84
111	2010	3	Petrogal - Pe	100	Petróleo Bruto	KZ	Cazaquistão	86 825 250		597.70	51 895 125.05	1.3569	440.50	38 246 705.46
111	2010	3	Petrogal - Pe	100	Petróleo Bruto	NO	Noruega	114 412 000		616.21	70 501 989.28	1.3569	454.15	51 959 963.79
111	2010	3	Petrogal - Pe	100	Petróleo Bruto	SA	Arábia Saudit	84 306 424		573.77	48 372 639.70	1.3569	422.87	35 650 633.87
111	2010	3	Petrogal - Pe	100	Petróleo Bruto	GB	Reino Unido	83 203 225		603.26	50 193 503.01	1.3569	444.61	36 992 610.07
111	2010	3	Petrogal - Pe	100	Petróleo Bruto	BR	Brasil	138 753 480		502.53	69 728 333.25	1.3569	370.37	51 389 779.32
111	2010	3	Petrogal - Pe	100	Petróleo Bruto	NG	Nigéria	121 700 000		628.38	76 473 611.80	1.3569	463.11	56 361 049.39
111	2010	3	Petrogal - Pe	100	Petróleo Bruto	LY	Líbia	83 851 430		591.86	49 628 516.06	1.3569	436.20	36 576 214.71

Registo: 1 de 107

INTERNAL MARKET

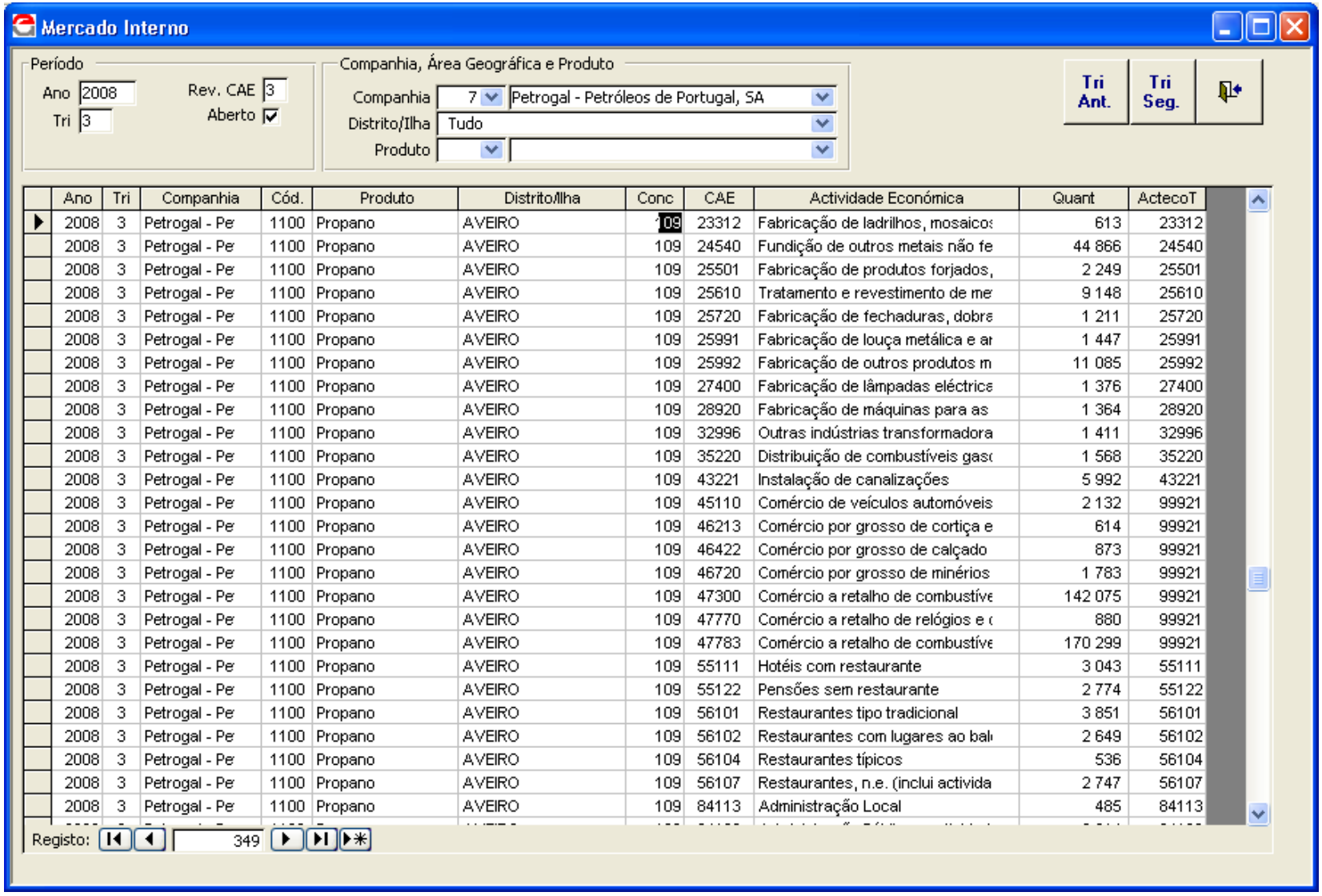
- **INTERNAL MARKET** supplies are received Quarterly.
- Detail of movement code 233 from Balance.
- Received up to 20th of next month, after closing quartertly.
- File structure (xls or csv):

Year; Qtr; CompCod; ProdCod; LocalCod; NACE; Qty

Year	**Year referred to**
Qtr	**Quarterly referred to**
CompCod	**Company code**
ProdCod	**Oil product code**
LocalCod	**County code (geographical)**
NACE	**Economic activity sector code**
Qty	**Quantity**

INTERNAL MARKET

Form to collect data from internal market



Ano	Tri	Companhia	Cód.	Produto	Distrito/Ilha	Conc	CAE	Actividade Económica	Quant	ActecoT
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	23312	Fabricação de ladrilhos, mosaicos	613	23312
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	24540	Fundição de outros metais não fe	44 866	24540
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	25501	Fabricação de produtos forjados,	2 249	25501
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	25610	Tratamento e revestimento de me	9 148	25610
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	25720	Fabricação de fechaduras, dobra	1 211	25720
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	25991	Fabricação de louça metálica e ar	1 447	25991
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	25992	Fabricação de outros produtos m	11 085	25992
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	27400	Fabricação de lâmpadas eléctrica	1 376	27400
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	28920	Fabricação de máquinas para as	1 364	28920
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	32996	Outras indústrias transformadora	1 411	32996
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	35220	Distribuição de combustíveis gas	1 568	35220
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	43221	Instalação de canalizações	5 992	43221
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	45110	Comércio de veículos automóveis	2 132	99921
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	46213	Comércio por grosso de cortiça e	614	99921
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	46422	Comércio por grosso de calçado	873	99921
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	46720	Comércio por grosso de minérios	1 783	99921
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	47300	Comércio a retalho de combustíve	142 075	99921
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	47770	Comércio a retalho de relógios e	880	99921
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	47783	Comércio a retalho de combustíve	170 299	99921
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	55111	Hotéis com restaurante	3 043	55111
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	55122	Pensões sem restaurante	2 774	55122
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	56101	Restaurantes tipo tradicional	3 851	56101
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	56102	Restaurantes com lugares ao bal	2 649	56102
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	56104	Restaurantes típicos	536	56104
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	56107	Restaurantes, n.e. (inclui activida	2 747	56107
2008	3	Petrogal - Pe	1100	Propano	AVEIRO	109	84113	Administração Local	485	84113

MARINE BUNKERS

- **MARINE BUNKERS** reports with supplies are received Quarterly.
- Detail of movement code 231 from Balance.
- Received up to 20th of next month, after closing quartertly.
- File structure (xls or csv):

Year; Qtr; CompCod; ProdCod; PortCod; NatFor; Type; DestContry; Qty

Year	**Year referred to**
Qtr	**Quarterly referred to**
CompCod	**Company code**
ProdCod	**Oil product code**
PortCod	**Seaport code**
NatFor	**National / Foreign boat**
Type	**Boat type**
DestCountry	**Country code for destination port**
Qty	**Quantity**

- Long distance fishing boat
- Navy
- Codefish boat
- Coastal fishing
- Seagoing vessel
- Tank-ships
- Others

MARINE BUNKERS

Form to collect data from marine bunkers

Barcos

Período — Ano: 2008 — Tri: 3 — Aberto: ☑

Companhia e Área Geográfica — Companhia: 7 Petrogal - Petróleos de Portugal, SA — Portos: Todos

Tri Ant. | Tri Seg.

Ano	Tri	Companhia	Cód.	Produto	Porto	NacEst	Tipo	País	Quant
2008	3	Petrogal - Petról	2100	Gasóleo	Aveiro	N	Pesca de Alto Mar		818 146
2008	3	Petrogal - Petról	2100	Gasóleo	Aveiro	N	Pesca do Bacalhau		25 670
2008	3	Petrogal - Petról	2100	Gasóleo	Aveiro	E	Longo Curso		377 184
2008	3	Petrogal - Petról	2100	Gasóleo	Aveiro	N	Longo Curso		852 213
2008	3	Petrogal - Petról	2100	Gasóleo	Aveiro	E	Navios Tanque		447 488
2008	3	Petrogal - Petról	2100	Gasóleo	Aveiro	N	Navios Tanque		16 583
2008	3	Petrogal - Petról	2100	Gasóleo	Aveiro	N	Outros		35 398
2008	3	Petrogal - Petról	2100	Gasóleo	Figueira da Foz	N	Pesca de Alto Mar		334 420
2008	3	Petrogal - Petról	2100	Gasóleo	Figueira da Foz	E	Longo Curso		120 570
2008	3	Petrogal - Petról	2100	Gasóleo	Figueira da Foz	N	Longo Curso		17 150
2008	3	Petrogal - Petról	2100	Gasóleo	Figueira da Foz	E	Outros		19 992
2008	3	Petrogal - Petról	2100	Gasóleo	Figueira da Foz	N	Outros		34 040
2008	3	Petrogal - Petról	2100	Gasóleo	Faro	E	Outros		59 995
2008	3	Petrogal - Petról	2100	Gasóleo	Olhão	N	Pesca de Alto Mar		179 990
2008	3	Petrogal - Petról	2100	Gasóleo	Portimão	E	Outros		30 003
2008	3	Petrogal - Petról	2100	Gasóleo	Portimão	N	Outros		223 988
2008	3	Petrogal - Petról	2100	Gasóleo	Nazaré	N	Pesca de Alto Mar		249 000
2008	3	Petrogal - Petról	2100	Gasóleo	Peniche	N	Pesca de Alto Mar		1 030 303
2008	3	Petrogal - Petról	2100	Gasóleo	Lisboa	N	Pesca de Alto Mar		168 029
2008	3	Petrogal - Petról	2100	Gasóleo	Lisboa	E	Armada		10 447
2008	3	Petrogal - Petról	2100	Gasóleo	Lisboa	N	Armada		225 380
2008	3	Petrogal - Petról	2100	Gasóleo	Lisboa	E	Longo Curso		6 595 911
2008	3	Petrogal - Petról	2100	Gasóleo	Lisboa	N	Longo Curso		1 616 923
2008	3	Petrogal - Petról	2100	Gasóleo	Lisboa	E	Navios Tanque		351 919
2008	3	Petrogal - Petról	2100	Gasóleo	Lisboa	N	Navios Tanque		469 608
2008	3	Petrogal - Petról	2100	Gasóleo	Lisboa	E	Outros		1 649 145

Registo: 1

AVIATION

- **AVIATION** supplies are received Quarterly.
- Detail of movement code 232 from Balance.
- Received up to 20th of next month, after closing quartertly.
- File structure (xls or csv):

Year; Qtr; CompCod; ProdCod; DistCod; NatFor; Type; DestContry; Qty

Year	**Year referred to**
Qtr	**Quarterly referred to**
CompCod	**Company code**
ProdCod	**Oil product code**
DistCod	**District code**
NatFor	**National / Foreign plane**
Type	**Plane type**
DestCountry	**Country code for destination airport**
Qty	**Quantity**

- Air Force
- TAP
- Other Civil Aviation

AVIATION

Form to collect data from aviation

Aviões

Período — Ano: 2008 — Tri: 3 — Aberto: ☑

Companhia e Área Geográfica — Companhia: 7 Petrogal - Petróleos de Portugal, SA — Distrito/Ilha: Tudo

Tri Ant. | Tri Seg.

Ano	Tri	Companhia	Cód.	Produto	Distrito	NacEst	Tipo	País	Quant
2008	3	Petrogal - Petról	1700	JP1	BEJA	N	Aviação Militar		1 762 686
2008	3	Petrogal - Petról	1700	JP1	FARO	E	Outra Aviação Civil		31 758 512
2008	3	Petrogal - Petról	1700	JP1	FARO	N	Outra Aviação Civil		34 415
2008	3	Petrogal - Petról	1700	JP1	LEIRIA	N	Aviação Militar		3 130 509
2008	3	Petrogal - Petról	1700	JP1	LISBOA	N	Aviação Militar		164 973
2008	3	Petrogal - Petról	1700	JP1	LISBOA	E	Outra Aviação Civil		28 008 703
2008	3	Petrogal - Petról	1700	JP1	LISBOA	N	Outra Aviação Civil		2 302 175
2008	3	Petrogal - Petról	1700	JP1	LISBOA	N	TAP		95 466 387
2008	3	Petrogal - Petról	1700	JP1	PORTO	N	Aviação Militar		4 000
2008	3	Petrogal - Petról	1700	JP1	PORTO	E	Outra Aviação Civil		3 955 866
2008	3	Petrogal - Petról	1700	JP1	PORTO	N	Outra Aviação Civil		131 938
2008	3	Petrogal - Petról	1700	JP1	PORTO	N	TAP		17 960 544
2008	3	Petrogal - Petról	1700	JP1	SANTARÉM	N	Aviação Militar		7 000
2008	3	Petrogal - Petról	1700	JP1	SETÚBAL	N	Aviação Militar		586 666
2008	3	Petrogal - Petról	1700	JP1	ILHA DA MADEIRA	N	Aviação Militar		12 324
2008	3	Petrogal - Petról	1700	JP1	ILHA DA MADEIRA	E	Outra Aviação Civil		6 767 298
2008	3	Petrogal - Petról	1700	JP1	ILHA DA MADEIRA	N	Outra Aviação Civil		1 345 621
2008	3	Petrogal - Petról	1700	JP1	ILHA DA MADEIRA	N	TAP		3 541 951
2008	3	Petrogal - Petról	1700	JP1	ILHA DE PORTO SA	N	Aviação Militar		68 541
2008	3	Petrogal - Petról	1700	JP1	ILHA DE PORTO SA	E	Outra Aviação Civil		359 316
2008	3	Petrogal - Petról	1700	JP1	ILHA DE PORTO SA	N	Outra Aviação Civil		39 327
2008	3	Petrogal - Petról	1700	JP1	ILHA DE PORTO SA	N	TAP		57 205
2008	3	Petrogal - Petról	1700	JP1	ILHA DE S. MIGUEL	E	Outra Aviação Civil		1 015 202
2008	3	Petrogal - Petról	1700	JP1	ILHA DE S. MIGUEL	N	Outra Aviação Civil		2 487 461
2008	3	Petrogal - Petról	1700	JP1	ILHA DO FAIAL	N	Aviação Militar		9 517
2008	3	Petrogal - Petról	1700	JP1	ILHA DO FAIAL	E	Outra Aviação Civil		7 558

Registo: 1 de 32

DATA VALIDATION

Main Data Validations

- All parameteres are preset in tables. Ex: Country codes; NACE; Local codes; Boat types; etc.
- Each balance sheet must ensure integrity stocks, and must settle.
- Details reports must be consistent with balance sheet.
- Information are received in structured files to avoid manual entry data and mistyping.

DATA VALIDATION

For each product balance conditions must be complied:

- Stocks integrity: Opening Stock from month n = Closing Stock from month n-1
- Balance = 0: Opening Stock + Inputs – Outputs – Closing Stock – Stat.Dif. = 0
- Inputs = Imports
  + Prodution
  + Received from other companies
  + Transfer from other products
  + Transfer from other areas (NutsI)
- Outputs = Exports
  + Return to prodution
  + Supplies to other companies
  + Transfer to other products
  + Transfer to other areas
  + Supplies to Internal Market Mercado Interno
  + Supplies to a Marine Bunkers
  + Supplies to Aviation
- Maximum value allowed in statistical diferences are 1% of total output.

DATA VALIDATION

Exchanges between companies:

- **Intra-company validation:**

  Balance value for code movement 141 = Σ received qty (exchange report)

  Balance value for code movement 241 = Σ supplies qty (exchange report)

- **Inter-companies validation:**

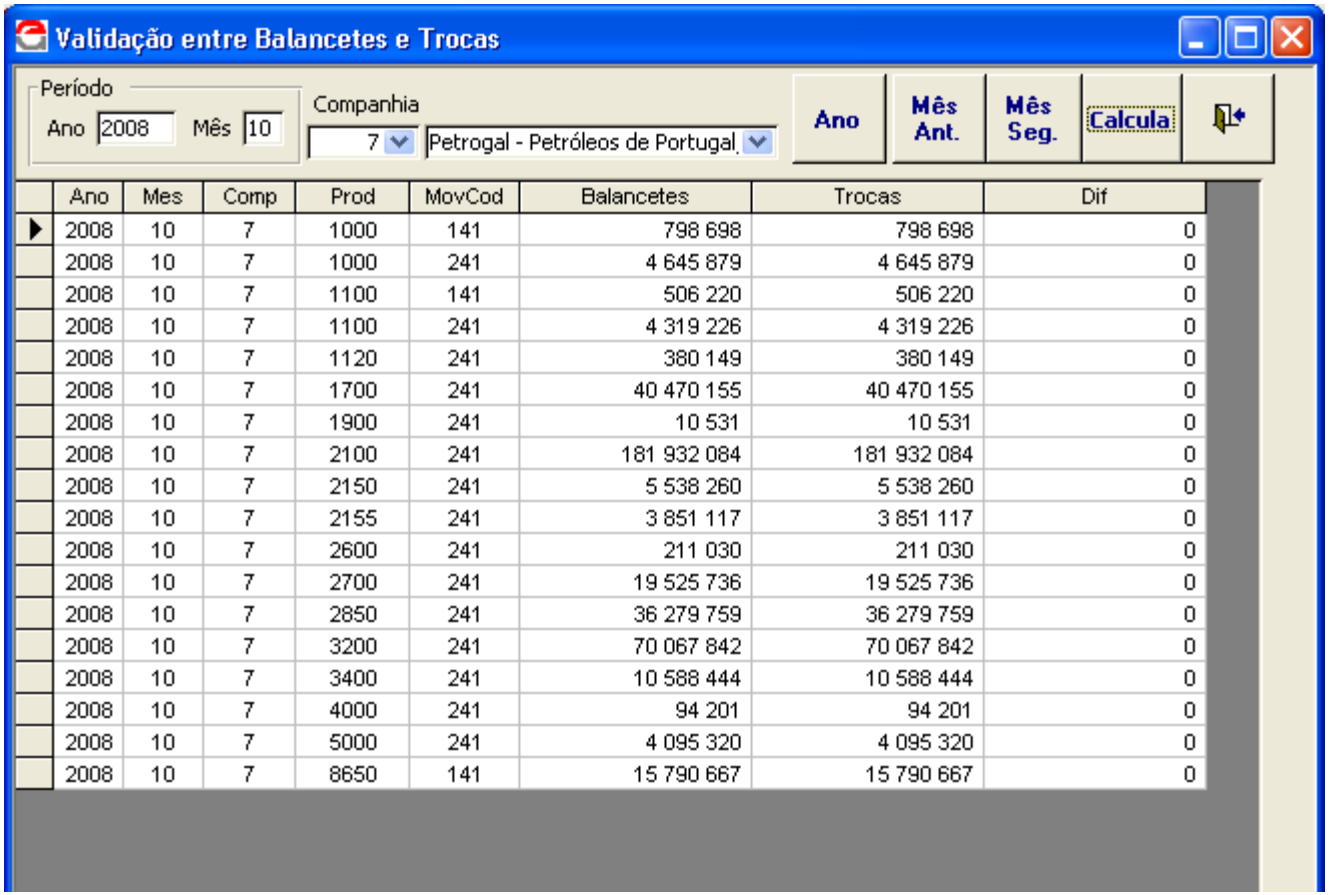
  Σ received qty declared by A related B

  =

  Σ supplied qty declared by B related A

DATA VALIDATION

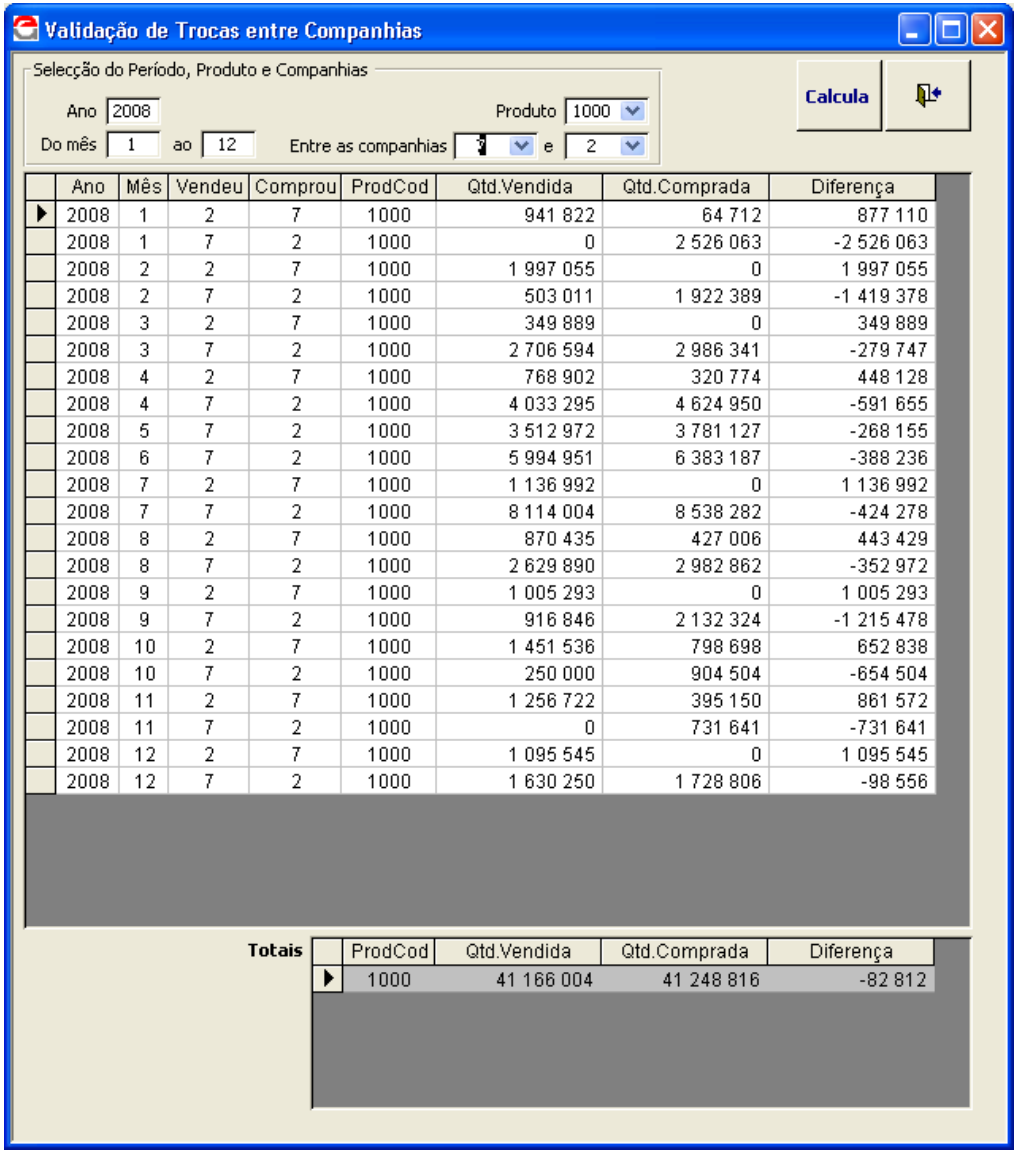
Validation tool: Exchanges versus Balances



Ano	Mes	Comp	Prod	MovCod	Balancetes	Trocas	Dif
2008	10	7	1000	141	798 698	798 698	0
2008	10	7	1000	241	4 645 879	4 645 879	0
2008	10	7	1100	141	506 220	506 220	0
2008	10	7	1100	241	4 319 226	4 319 226	0
2008	10	7	1120	241	380 149	380 149	0
2008	10	7	1700	241	40 470 155	40 470 155	0
2008	10	7	1900	241	10 531	10 531	0
2008	10	7	2100	241	181 932 084	181 932 084	0
2008	10	7	2150	241	5 538 260	5 538 260	0
2008	10	7	2155	241	3 851 117	3 851 117	0
2008	10	7	2600	241	211 030	211 030	0
2008	10	7	2700	241	19 525 736	19 525 736	0
2008	10	7	2850	241	36 279 759	36 279 759	0
2008	10	7	3200	241	70 067 842	70 067 842	0
2008	10	7	3400	241	10 588 444	10 588 444	0
2008	10	7	4000	241	94 201	94 201	0
2008	10	7	5000	241	4 095 320	4 095 320	0
2008	10	7	8650	141	15 790 667	15 790 667	0

DATA VALIDATION

Validation tool for Exchanges between companies



Ano	Mês	Vendeu	Comprou	ProdCod	Qtd.Vendida	Qtd.Comprada	Diferença
2008	1	2	7	1000	941 822	64 712	877 110
2008	1	7	2	1000	0	2 526 063	-2 526 063
2008	2	2	7	1000	1 997 055	0	1 997 055
2008	2	7	2	1000	503 011	1 922 389	-1 419 378
2008	3	2	7	1000	349 889	0	349 889
2008	3	7	2	1000	2 706 594	2 986 341	-279 747
2008	4	2	7	1000	768 902	320 774	448 128
2008	4	7	2	1000	4 033 295	4 624 950	-591 655
2008	5	7	2	1000	3 512 972	3 781 127	-268 155
2008	6	7	2	1000	5 994 951	6 383 187	-388 236
2008	7	2	7	1000	1 136 992	0	1 136 992
2008	7	7	2	1000	8 114 004	8 538 282	-424 278
2008	8	2	7	1000	870 435	427 006	443 429
2008	8	7	2	1000	2 629 890	2 982 862	-352 972
2008	9	2	7	1000	1 005 293	0	1 005 293
2008	9	7	2	1000	916 846	2 132 324	-1 215 478
2008	10	2	7	1000	1 451 536	798 698	652 838
2008	10	7	2	1000	250 000	904 504	-654 504
2008	11	2	7	1000	1 256 722	395 150	861 572
2008	11	7	2	1000	0	731 641	-731 641
2008	12	2	7	1000	1 095 545	0	1 095 545
2008	12	7	2	1000	1 630 250	1 728 806	-98 556

Totais

ProdCod	Qtd.Vendida	Qtd.Comprada	Diferença
1000	41 166 004	41 248 816	-82 812

Detail Reports

All values from detail reports are faced to balance sheets.
For each product:

- **Balance Qty from movement code 111 = Σ Imports Qty**
- **Balance Qty from movement code 211 = Σ Exports Qty**
- **Balance Qty from movement code 231 = Σ Marine Bunkers Qty**
- **Balance Qty from movement code 232 = Σ Aviation Qty**
- **Balance Qty from movement code 233 = Σ Internal Market Qty**

With anual Energy Balance prepared, quantities evolutation are faced over the years for each product and activity sector.

DATA VALIDATION

Tool for global data validation between Balance sheet and detail reports

Validação de Balancetes com Mercado Interno

Validação Global de Combustíveis Ano 2008 Trimestre 1 Companhia Petrogal - Petróleos de Portugal, SA 7 Recalcula

NUTs I Continente

	NutsI	Companhia	CompCod	Ano	Tri	Prod	BalMI	MI	Dif: Bal-MI	BalImp	Importações	Dif: Bal-Imp	BalExp	Exportações	Dif: Bal-Exp	BalAvi
▶	1	Petrogal	7	2008	1	1000	31 071 945	31 071 945	0	0	0	0	3 695 694	3 695 694	0	0
	1	Petrogal	7	2008	1	1100	47 780 039	47 780 039	0	47 978 943	47 978 943	0	11 084 759	11 084 759	0	0
	1	Petrogal	7	2008	1	1120	1 701 226	1 701 226	0	0	0	0	17 300	17 300	0	0
	1	Petrogal	7	2008	1	1130	5 796 817	5 796 817	0	0	0	0	20 122 500	20 122 500	0	0
	1	Petrogal	7	2008	1	1600	174 040 421	174 040 421	0	0	0	0	0	0	0	0
	1	Petrogal	7	2008	1	1700	0	0	0	49 862 192	49 862 192	0	0	0	0	144 816 148
	1	Petrogal	7	2008	1	1900	68 492	68 492	0	0	0	0	0	0	0	0
	1	Petrogal	7	2008	1	2000	146 517	146 517	0	0	0	0	0	0	0	0
	1	Petrogal	7	2008	1	2100	585 803 722	585 803 722	0	24 230 590	24 230 590	0	43 675 050	43 675 050	0	0
	1	Petrogal	7	2008	1	2150	38 369 487	38 369 487	0	0	0	0	0	0	0	0
	1	Petrogal	7	2008	1	2155	21 061 567	21 061 567	0	0	0	0	0	0	0	0
	1	Petrogal	7	2008	1	2200	0	0	0	0	0	0	0	0	0	1 812 035
	1	Petrogal	7	2008	1	2600	751 800	751 800	0	0	0	0	0	0	0	0
	1	Petrogal	7	2008	1	2800	0	0	0	0	0	0	95 529 108	95 529 108	0	0
	1	Petrogal	7	2008	1	2850	114 052 148	114 052 148	0	20 016 938	20 016 938	0	133 445 369	133 445 369	0	0
	1	Petrogal	7	2008	1	3100	104 379 000	104 379 000	0	0	0	0	0	0	0	0
	1	Petrogal	7	2008	1	3200	168 320 343	168 320 343	0	0	0	0	388 748 863	388 748 863	0	0
	1	Petrogal	7	2008	1	3400	22 081 261	22 081 261	0	0	0	0	7 834 111	7 834 111	0	0
	1	Petrogal	7	2008	1	4000	6 476 306	6 476 306	0	1 893 276	1 893 276	0	29 902 724	29 902 724	0	0
	1	Petrogal	7	2008	1	5000	39 424 968	39 424 968	0	0	0	0	21 901 017	21 901 017	0	0
	1	Petrogal	7	2008	1	6000	1 512 815	1 512 815	0	640	640	0	1 224 880	1 224 880	0	0
	1	Petrogal	7	2008	1	7100	1 453 806	1 453 806	0	0	0	0	4 294 440	4 294 440	0	0

DATA VALIDATION

Oil Balance

- Oil Balance Sheets
  Biofuel Balance Sheets
- Refinaries Balance
- Marine Bunkers Supplies
- Aviation Supplies
- Internal Market Supplies

Oil Balance

(Opening Stock +
Crude oil Imports +
Feedstocks Imports +
Additives/Blends Imports +
Final products Imports)

–

(Exports +
Final consumption+
Own consumption refinaries +
Losses +
Closing Stock +
Statistical diferences)

= 0

INFORMATION CONTROL

Information Control

In this Control Panel displays all loaded information in database for each period. This sheet it's automatically filled.

		Ano: 2009																													
		Balancetes - Meses												MI - Trim				Imp - Trim				Exp - Trim				Aviação - Trim				Bancas Trim			
Cód	Companhia	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	BENCOM	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G		G							G	G	G	G
2	BP	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G			G	G
3	GALP COMERCIALIZADORA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G					G	G	G	G	G	G	G	G				
7	PETROGAL	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
11	CEPSA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G									G	G	G	G				G
13	QUIMIGAL (ADP)	G												G																			
14	CNP	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
15	COLEP	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
16	EDP	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G				G												
19	PETRIN	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G												
21	ETC	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
22	TEJO	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G				G												
24	GALP DISTRIBUIÇÃO	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G												
25	CIPOL	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
27	TRANSGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
28	PORTGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
29	SETGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
30	GDL/LISBOAGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
31	LUSITÂNIA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
32	GALP AÇORES	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G													G	G	G	G
33	GALP MADEIRA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
34	ACG	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G												
35	DURIENSE	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
36	BEIRAGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
37	TAGUSGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
38	ENERBEIRA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
39	LUSOFINSA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
40	CIMPOR	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G												
41	SECIL	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G												
43	PRISMA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
44	DIANAGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
45	MEDIGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
47	IMM	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
51	SHELL LUBRIFICANTES	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G								
52	REPSOL Gás de Portugal	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G												
53	DOUROGÁS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
54	REPSOL PORT	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G								G	G	G	G	G	G	G	G
55	REPSOL RYLESA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G												
56	EMPC	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G								
57	IBEROL	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
58	TORREJANA	G	G	G	G	G	G	G	G	G	G	G	G																				
65	DIESELBASE	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
66	SPACE ECO-COMBUST.	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
67	SOCIPOLE	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
68	MULTIRECOLHA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
70	PRIO ENERGY	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
71	PRIO BIOCOMBUSTÍVEIS	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G		G														
72	BIOVEGETAL	G	G	G	G	G	G	G	G	G	G	G	G																				
73	NORGEN	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
74	CARBOL	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
75	SOLVAY	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G														
76	CYC	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G		G														
77	HARDLEVEL	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																
78	SUPERMATÉRIA	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G																

OIL STATISTICAL SYSTEM

March 2012