

COUNTRY PRACTICE IN ENERGY STATISTICS

Topic/Statistics: **Primary Energy Production**
Energy Transformation
Energy Consumption

Institution/Organization: **Ministry of Economic Development**

Country: **New Zealand**

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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 Ministry of Economic Development (MED) collects and publishes the bulk of New Zealand's energy statistics. MED are partners (with Statistics New Zealand) in the Official Statistics System and produce 'Tier one' official statistics. The four tier one official (energy) statistics that MED produces are:

- Primary Energy Production
- Energy transformation
- Energy Consumption
- Oil and gas reserves

These statistics are all collected from the 'supply side' and are a series back to 1974. The collection and publication of these energy statistics started as a result of NZ becoming a member of the International Energy Agency in 1976. The scope of the statistics has broadened over the years; the statistics are now used to inform policy development, to fulfil international reporting obligations (to the IEA, and UNFCCC, among others) and to inform the wider energy debate.

Key elements	
Name of the statistics	<ol style="list-style-type: none"> 1. Primary Energy Production 2. Energy Transformation 3. Energy Consumption 4. Oil and Gas reserves
Background and purpose of the statistics	<ol style="list-style-type: none"> 1. Primary Energy Production: Primary energy production encompasses the production of energy from original sources, which may be fossil fuel (e.g. coal, oil, and gas) or renewable (e.g. geothermal steam, wind, biomass, and hydro). Knowing how much energy is produced in New Zealand is vital information to measure energy security, fulfill statutory reporting obligations and to inform policy. The Energy Information and Modeling Group at MED produces this statistic. 2. Energy Transformation: Transformation of primary energy sources into useful energy products (i.e. oil into refined oil products; or coal, oil, gas and renewables into electricity) is another key (energy) statistical series. These data are used to inform policy, fulfill statutory reporting obligations and to inform the wider energy debate. These data tell us how much refined oil products are produced in New Zealand, how much electricity is

	<p>generated (and from which sources), and how much coal is used (as a feedstock) to make steel.</p> <p>3. Energy Consumption: Consumption of energy completes the core energy statistical series'. Again, these data are used to inform policy, fulfill statutory reporting obligations and to inform the wider energy debate. These data tell us how much energy is consumed in New Zealand for energy purposes (i.e. household consumption of electricity), and non-energy purposes (i.e. conversion of natural gas to methanol, use of lubricants in motor vehicles).</p> <p>4. Oil and Gas (and other minerals) Reserves: Reserve and resource information for petroleum, coal and other minerals is critical to the Crown as owner and manager of the Crown's mineral estate. These data are collected under the Crown Minerals Act (1991), by New Zealand Petroleum and Minerals (part of MED), as part of the permit management process. Ultimate Recoverable and Remain Reserve figures for oil and gas are published in the Energy Data File each year.</p>
<p>Population, sample and data sources</p>	<p><u>Primary Energy Production</u> This statistic is collected via a census of companies operating in this sector:</p> <p>Data Sources Primary Energy Production is compiled from the following censuses:</p> <p>Coal MED-C (15 companies) — Quarterly Coal Production and Sales Survey Oil (and Gas) MED-MOS (10 Companies) — Monthly oil (and gas) submission Renewable Energy MED-EGM (25 companies) — Monthly Electricity Generation Return, and Electricity Statistical Returns (Annual, on a March year basis) — This covers production of hydro, wind, and part of geothermal and biomass production (used for electricity generation). The amounts of geothermal and biomass energy directly used by consumers for energy purposes are derived from administrative data. Other Renewable Energy Production (10 companies) — we collect some other renewable energy production data from individual companies. For example, Solar energy Primary Energy Supply is estimated via supply of the technology into New Zealand; direct use of geothermal energy is collected of various companies / local government authorities. Production of liquid biofuels data are collected from Customs New Zealand, who collect these data when collecting the Petroleum or Engine Fuels Monitoring Levy.</p> <p><u>Energy Transformation:</u> Energy transformation is compiled from the following surveys:</p> <p>Coal and Gas New Zealand Steel — amounts of coal used as a feedstock for steel making are collected directly from New Zealand Steel MED-EGM (25 Companies) — Monthly Electricity Generation, and Electricity Statistical Returns (annual, on a March year basis) — These returns capture the amount of electricity generated by plant, and the fuel input to each plant. Oil Refining New Zealand — Refinery intake and output are collected directly from</p>

	<p>Refining New Zealand (the owner of NZ's only oil refinery) on a monthly basis.</p> <p><u>Energy Consumption:</u> Energy consumption is compiled from the following surveys:</p> <p>Coal MED-C (15 Companies) — Quarterly Coal Production and Sales Survey</p> <p>Gas MED-GS (10 companies) — Quarterly Gas Sales returns</p> <p>Oil MED-DPFI (5 companies) and MED-ALFS (16 companies) — Quarterly Delivery of Petroleum Fuels by Industry (DPFI) return (respondents are BP, Z, Mobil, Chevron and Gull) and the Annual Liquid Fuel Survey (to independent distributors) — Liquid fuel demand is captured primarily from the oil companies; however, since the industry was deregulated in 1988 an increasing number of final deliveries to customers are made by independent distributors (who buy fuel from the oil companies and then re-sell it to their own customers). The Annual Liquid Fuel survey is a survey to the independent distributor companies, and the results of this survey are used to reallocate the fuel sold to resellers in the DPFI to the correct sectors. Although these data are collected annually (to minimize respondent burden) the data are extended to quarterly level evenly, and the quarterly consumption series is considered of Tier one quality.</p> <p>Renewable Energy The amounts of geothermal and biomass energy directly used by consumers for energy purposes are derived from administrative data. Consumption of liquid biofuels data are collected from Customs New Zealand, who collect these data when collecting the Petroleum or Engine Fuels Monitoring Levy. These data are supplemented by biofuel imports data collected from the monthly oil statistics returns from the oil companies (BP, Z, Mobil Chevron and Gull).</p> <p><u>Oil and Gas reserves:</u> These data are collected as part of the mining permit management process from the permit operators (~20 producing oil and gas permits).</p>
Main users	The Statistics listed above are used internally by policy analysts, and externally by other government agencies, Industry consultants, media, researchers / students, and the public.
Important contribution or issue addressed	These statistics allow us to understand how much energy is produced in NZ, and how this energy flows through the sector to the end users.
Other remarks	

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.

1. Primary Energy Production
2. Energy Transformation
3. Energy Consumption
4. Oil and Gas Reserves

1.2. History and purpose

State when the statistics were first published.

These statistics have been published in various forms back to the early 1980s.

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

All these statistics have three main purposes. They are collected to inform policy development, to fulfil international reporting obligations and to inform the wider energy debate.

1.3. Reference period

State the time period the data are collected for.

Data exist back to 1974 for 1, 2 and 3. Data for oil and gas reserves exist (in a consistent basis) back to 1991 (when the Crown Minerals Act was passed), and in a more fragmented sense back to the mid 1980s.

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.

All statistics listed above are published annually in the New Zealand Energy Data File. Quarterly time series' are available for 1, 2 and 3 on the Ministry of Economic Development's website.

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.

Hardcopy publication is in the New Zealand Energy Data File (ISSN 1177-6676 (hardcopy); ISSN 1177-6684 (online PDF)) and a quarterly time series' is available on the MED website (<http://www.med.govt.nz/sectors-industries/energy/energy-modelling>).

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.

National level.

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.

Used within government for policy development. Also used for research purposes and to allow the compilation of other statistical series (e.g. Primary Energy Production flows into the Quarterly Gross Domestic Product calculations made by Statistics NZ).

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).

1–4 are collected and published by the Ministry of Economic Development (by the Energy Information and Modelling Group within the Energy and Communications Branch)

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).

The majority of the statistics are collected under the International Energy Agreement Act (1976). Other parts of these statistics are collected under other pieces of legislation:

1. Electricity generation, transmission distribution and demand statistics are collected under The Electricity (Statistics) Regulations (1996)
2. Gas transmission, distribution and demand data are collected under the Gas (Statistics) Regulations (1997)
3. Oil and gas reserves are collected biannually under the Crown Minerals Act (1991)

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

N/A

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

New Zealand is a member country of the International Energy Agency, so is bound to the obligations under the IEA treaty.

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

1–3 are financed from within 'Vote Energy' of the budget. The Energy Information and Modelling Group also receive funding from a levy on petroleum products, the Petroleum or Engine Fuels Monitoring Levy (NZ0.045 cents per litre on sales of petrol, diesel, or biofuel in NZ).

The oil and gas reserves information collection are financed via royalties on oil and gas production.

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).

The Energy Information and Modelling Group at MED has 7 full time equivalent (FTE) staff. New Zealand Petroleum and Minerals commit about 2 FTE staff to managing the oil and gas reserve information.

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.).

International Energy Agency, Monthly Oil Statistics.
Joint oil data initiative.
United Nations Framework Convention for Climate Change.

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).

Primary Energy Production covers the production of energy within New Zealand’s Extended Economic Zone, by energy type (Coal, Oil, Gas, Renewables and Waste Heat).

Energy transformation covers the transformation of one energy type into another (i.e. Oil into refined oil products, various fuels into electricity etc.)

Energy consumption covers the consumption of energy in New Zealand, by fuel, and by industrial sector (sectors are based on the Australia and New Zealand Standard Industrial Classification 2006 (ANZSIC2006) system, which aligns nicely with ISIC) for energy (combustion) purposes. Consumption for non-energy purposes is also collected (i.e. natural gas as a feedstock to the chemical industry and lubricants in motor vehicles etc.).

Oil and gas reserves covers the Ultimate Recoverable and Remaining Reserve for producing and non-producing oil and gas fields within New Zealand’s Extended Economic Zone. “Proven” reserves (P90) and “Proven and Probable” (P50) reserves are published.

2.2. Definitions of main concepts and variables

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

All statistics are censuses of the companies operating in the supply side of the energy sector in NZ. Data are recorded in natural units and then converted to energy units using gross calorific (higher heating) values.

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 types and variables follow the conventions set out by the International Energy Agency. Economic sector definitions follow the Australia and New Zealand Standard Industrial Classification 2006 system, which aligns well with ISIC.

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.

Oil data are collected in m³ and metric tonnes
Gas data are collected in m³ and gigajoules
Electricity data are collected in megawatt-hours
Coal data are collected in metric tonnes
Renewable energy data are collected in energy units, and in some cases, also metric tonnes

All the statistics are published in the physical units (usually tonnes) and energy units.

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).

ANZSIC2006 - http://www.stats.govt.nz/surveys_and_methods/methods/classifications-and-standards/classification-related-stats-standards/industrial-classification.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.

Oil and gas:
MED-MOS: monthly oil and gas production, exports and stocks survey to oil and gas producers
MED-OSR: monthly oil supply (imports, exports, supply balance) return to the oil suppliers
MED-NZRC: monthly data collection from the oil refinery. Covers feedstock intake, product output and losses
MED-HV, MED-PS, MED-PO, MED-RAP: monthly data collection from New Zealand's oil product stock manager for stocks on ships at month end (HV), stocks at port terminals (PS), offtakes from terminals (PO) and stock held in the refinery to Auckland pipeline (RAP).

MED-DPFI: Quarterly delivery of petroleum fuels by industry survey to oil wholesalers
MED-ALFS: Annual survey of liquid fuel deliveries made by secondary liquid fuel distributors
MED-LPGS: monthly imports, exports and stocks of LPG
MED-GT, MED-GD, MED-GS: Quarterly Transmission (GT), Distribution (GD) and Sales (GS) returns.

A few companies in the petro-chemical industry also provide us data to supplement the data collected in the surveys.

Coal:

MED-C: Quarterly coal production and sales survey

Additional coal imports are collected from Statistics New Zealand's merchandise imports and exports statistics.

Electricity:

MED-EGM and Electricity Statistical Returns: Monthly generation of Electricity, and Annual (March-year end) generation, transmission, distribution and sales of electricity.

Renewables:

Most renewable energy in New Zealand is used for electricity generation (hydro, wind, geothermal etc.). Solar (PV and Thermal) energy calculated based on sales of the technology in NZ, direct use of geothermal energy is estimated by the New Zealand Geothermal Energy Association, biomass data are estimated based on administrative data.

2.6. Population

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

All data are collected via census of the supply-side, supplemented by direct questionnaires to a very small number of major energy consumers.

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.

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.

All census based.

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*.

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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).

Excel based questionnaire templates

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.

Virtually 100% in all surveys

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).

Data are captured in an operational data store, validated, and then pushed through to a data warehouse. This technology is based on the SQL server 2008 R2 family of business intelligence programs.
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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

Return data are automatically validated. The following checks are performed:
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- | |
|---|
| <ol style="list-style-type: none">1. Data type check (are numbers numbers, and are dates dates... etc.)2. Range check (each value in the return is compared to an aggregates table, the system raises an error if the value is more than 10% outside the historical range) |
|---|

Manual checks are then performed over the time series to check for consistency and detect outliers. Any outliers are then confirmed with the data provider.

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*

Imputations are performed when data are not received, usually a naïve forecast method, or an average growth of the other players in the market method is used. When time series data are missing, a simple econometric model is used to fill the gaps (this has only been used in a few cases).

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.

All census based

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.

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.

Data are available in the New Zealand Energy Data File (<http://www.med.govt.nz/sectors-industries/energy/energy-modelling/publications/energy-data-file/new-zealand-energy-data-file-2011>) as a PDF and as a hardcopy (by request). Webtables also exist on MED's website (<http://www.med.govt.nz/sectors-industries/energy/energy-modelling/data>) in Microsoft excel format.

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

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

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.)?

Data are revised occasionally; this normally coincides with quarterly data releases. Data quality and methodology improvements are sometimes incorporated into the online tables at the same time and the Energy Data File is released (mid year)

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

4.3. Microdata

Describe how microdata are stored.

Unit record level data are stored in and operational data store (SQL server 2008 database)

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

These are commercially confidential so are not released.

4.4. Confidentiality

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

Confidentiality clauses are laid out in the legislation that give us authority to collect the statistics.

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

Describe how confidential data are handled.

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

5. Quality

5.1. Relevance

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

5.2. Accuracy

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

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.

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.

Sampling errors

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

Other sources of error

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

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).

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.

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)?

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.

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.

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.

5.6. Coherence and consistency

Discuss the coherence/consistency between preliminary and final figures.

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?

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

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.?

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 placed 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.

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.