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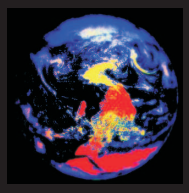
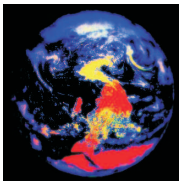


DSI's Global Environmental Database 2018



DSI’s Global Environmental Database 2018

DSI’s Globlal Environmental Database edition 2018 has been updated and presents 1200+ up-to-date statistical time series indicators across up to 280 countries and regions worldwide.

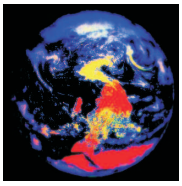
DSI's Global Environmental Database brings together hard-to-find statistics on the environmental issues affecting our climate, our resources, our social communities:

- detailed data on energy consumption and emissions from fuel combustion,
- water resources, land use, agriculture, farming, forestry and fishery,
- human resources (population, education, skills),
- social conditions (health, sanitation, poverty, natural disasters),
- economic core indicators (GDP, production, trade, exchange rates).

DSI's Global Environmental Database is an indispensible source to

- identify trends across different countries,
- compare one country's environmental situation and policies with another,
- find out which countries are making efforts to protect their environment.

CD-RoM archive available: DSI's Global Environmental Database (GED) on CD-RoM comes along with a powerful retrieval engine and includes online access to the corresponding GED internet services without surcharge.



DSI’s Global Environmental Database 2018

Harmonised Data

Updated on a regular basis, DSI's Global Environmental Database covers the years from 1980 onwards (if available). Most time series have been harmonised and finally merged into a single database for easy access and more comfortable research.

Sources

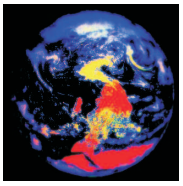
The primary statistics have been researched from official information sources worldwide, especially international organisations, e.g.:

the World Health organisation, the United Nations and its specialised agencies, Eurostat and the European Environment Agency, the Energy Information Administration, International Monetary Fund, Centre for Research on the Epidemiology of Disasters, Intergovernmental Panel on Climate Change, International Union for the Conservation of Nature and Natural Resources, or the World Database on Protected Areas - WDPA Consortium.

Data Access

IP controlled internet access (or variable access by user ID/password) allows data retrieval by keyword search, tree-view or via hierarchical breakdown supported by some powerful online tools for ad hoc analysis:

- calculations
- statistical operations (mean, standard deviation, moving average, growth rate, lag)
- forecasts
- reports
- graphics/tables
- data downloading for external analysis, e.g.
    - to identify trends between countries and regions or
    - to create individual environmental performance indices and rankings



DSI's Global Environmental Database 2018

Data Coverage

DSI's Global Environmental Database allows to enhance broad national, regional and global environmental analyses.

I. Elementary Resources
- atmosphere: air quality, climate
- water: quality/pollution, reserves
- terrestrial/soil: land use, fertilization, salinization

II. Natural Resources
- food
- agriculture
- farming
- fishery
- forestry
- biodiversity

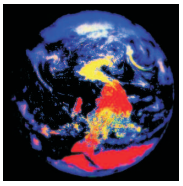
III. Mineral Resources
- coal
- oil
- natural gas
- uranium

IV. Energy Consumption
total
by sector
- coal
- natural gas
- oil
- charcoal
- biomass, wood, waste

V. Human Resources
- population
- education
- skills

VI. Social Conditions
- health
- sanitation
- poverty
- disasters (natural)

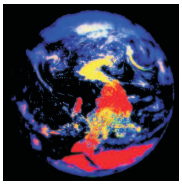
VII. Economic Core Indicators
- GDP
- production
- trade
- exchange rates



DSI's Global Environmental Database 2018

Country Coverage

Afghanistan, Albania, Algeria, American Samoa, Andorra, Angola, Anguilla, Antarctic, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Baker Island, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Bouvet Island, Brazil, British Indian ocean Territory, British Virgin Islands, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Cayman Islands, Central African Republic, Chad, Chile, China, Christmas Island, Cocos (Keeling) Islands, Colombia, Comoros, Congo, Cook Islands, Costa Rica, Cote d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Democratic People's Republic of Korea, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Falkland Islands (Malvinas), Faroe Islands, Fiji, Finland, France, French Guiana, French Polynesia, French Southern and Antarctic Territories, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Glorioso Islands, Greece, Greenland, Grenada, Guadeloupe, Guam, Guatemala, Guernsey, Guinea, Guinea-Bissau, Guyana, Haiti, Heard Island & McDonald Islands, Holy See, Honduras, Howland Island, Hungary, Iceland, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Isle of Man, Israel, Italy, Jamaica, Japan, Jarvis Island, Jersey, Johnston Atoll, Jordan, Juan De Nova Island, Kazakhstan, Kenya, Kiribati, Kosovo, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya , Liechtenstein , Lithuania, Luxembourg, Macau, China, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Martinique, Mauritania, Mauritius, Mayotte, Mexico, Micronesia (Federated States of), Midway Islands, Moldova, Republic of, Monaco, Mongolia, Montenegro, Montserrat, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Netherlands, Netherlands Antilles, New Caledonia, New Zealand, Nicaragua, Niger, Nigeria, Niue, Norfolk Island, Northern Mariana Islands, Norway, occupied Palestinian Territory, oman, Pakistan, Palau, Panama, Papua New Guinea, Paracel Islands, Paraguay, Peru, Philippines, Pitcairn Island, Poland, Portugal, Puerto Rico, Qatar, Republic of Korea, Reunion, Romania, Russian Federation, Rwanda, Saint Helena, Saint Kitts and Nevis, Saint Lucia, Saint Pierre and Miquelon, Saint Vincent and the Grenadines, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, South Georgia and the South Sandwich Islands, Spain, Spratly Islands, Sri Lanka, Sudan, Suriname, Svalbard and Jan Mayen Islands, Swaziland, Sweden, Switzerland, Syrian Arab Republic, Taiwan, Tajikistan, Thailand, The former Yugoslav Republic of Macedonia, Togo, Tokelau, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Turks and Caicos Islands, Tuvalu, Uganda, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, United States Virgin Islands, Uruguay, Uzbekistan, Vanuatu, Venezuela, Viet Nam, Wake Island, Wallis and Futuna, Western Sahara, Yemen, Serbia, Zambia, Zimbabwe.



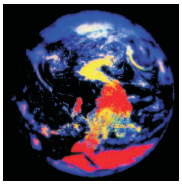
DSI's Global Environmental Database 2018

Regions Coverage

World

Africa, Asia + Pacific, Europe, Latin America + Caribbean, North America, Polar, West Asia.

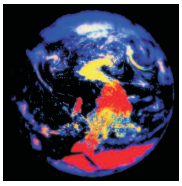
Central Africa, Eastern Africa, Northern Africa, Southern Africa, Western Africa, Western Indian ocean, Australia + New Zealand, Central Asia, NW Pacific + East Asia, South Asia, South East Asia, South Pacific, Central Europe, Eastern Europe, Western Europe, Caribbean, Meso America, South America, North America, Antarctic, Arctic, Arabian Peninsula, Mashriq.



DSI's Global Environmental Database 2017

List of indicators
Contents may vary according to the publication policy of the various sources.

I. Elementary Resources
- atmosphere
  - climate: average temperature
  - climate: average Co2 concentration ("Keeling Curve")
  - quality: emissions of ozone-depleting substances
  - quality: PM 10
  - quality: emissions from fuel combustion
    (->Methodologies for calculation of energy consumption by sector)
    - coal
      - carbon dioxide, Co2
      - methan, CH4
      - nitrous oxide, N2o
      - nitrogen oxide, NoX
      - carbon monoxide, Co
      - non-methane volatile organic compounds, NMVoC
      - sulphur dioxide, So2
    - natural gas
      - carbon dioxide, Co2
      - methan, CH4
      - nitrous oxide, N2o
      - nitrogen oxide, NoX
      - carbon monoxide, Co
      - non-methane volatile organic compounds, NMVoC
      - sulphur dioxide, So2
    - oil
      - carbon dioxide, Co2
      - methan, CH4
      - nitrous oxide, N2o
      - nitrogen oxide, NoX
      - carbon monoxide, Co
      - non-methane volatile organic compounds, NMVoC
      - sulphur dioxide, So2
    - charcoal
      - carbon dioxide, Co2
      - methan, CH4
      - nitrous oxide, N2o
      - nitrogen oxide, NoX
      - carbon monoxide, Co
      - non-methane volatile organic compounds, NMVoC

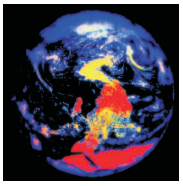


DSI's Global Environmental Database 2018

- sulphur dioxide, So2
- biomass/ wood/ waste
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC
  - sulphur dioxide, So2

quality: emissions from fossil fuel combustion by sectors

- total emissions from energy sector
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC
  - sulphur dioxide, So2
- total emissions from manufacturing sector
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC
  - sulphur dioxide, So2
- total emissions from transport sector
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC
  - sulphur dioxide, So2
- total emissions from other sectors
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC



DSI's Global Environmental Database 2018

- sulphur dioxide, So2
- total emissions from fuel
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC
  - sulphur dioxide, So2

quality: emissions from total fuel combustion by sectors

- total emissions from energy sector
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC
  - sulphur dioxide, So2
- total emissions from manufacturing sector
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC
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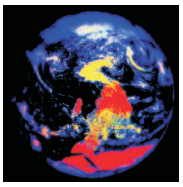
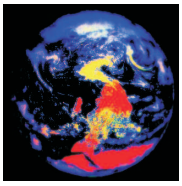


DSI's Global Environmental Database 2018

- sulphur dioxide, So2
- total emissions from fuel
  - carbon dioxide, Co2
  - methan, CH4
  - nitrous oxide, N2o
  - nitrogen oxide, NoX
  - carbon monoxide, Co
  - non-methane volatile organic compounds, NMVoC
  - sulphur dioxide, So2

- water
  - fresh water
    - resource
      - precipitation
      - exploitable
      - fossil
        - abstraction of fossil groundwater
        - expected time that fossil groundwater will last
      - harvesting
      - renewable
        - water resources: total renewable per capita (actual)
        - groundwater
        - surface water
        - freshwater
        - total internal renewable
        - total internal per capita
        - total external renewable (actual)
        - total renewable (actual)
    - withdrawal
      - by sector
        - agricultural water
        - domestic water
        - industrial water
        - total water (summed by sector)
        - agricultural water withdrawal as part of total
        - domestic water withdrawal as part of total
        - industrial water withdrawal as part of total
        - surface water
        - groundwater
        - freshwater
      - water stress
    - irrigation/ drainage
      - drained area
        - total
        - area equipped for irrigation

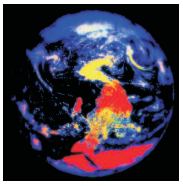


DSI's Global Environmental Database 2018

- non-irrigated area
- area equipped for irrigation
  - total
  - actual irrigated
  - irrigation potential
  - full control - surface
  - full control - sprinkler
  - full control - localized
  - full control - total
  - lowlands
  - power irrigated area
  - power irrigated area as percentage
  - spate irrigation
  - part of area actually irrigated
  - percentage of water managed area
  - percentage of irrigation potential
  - percentage of cultivated land
  - by groundwater
  - by surface water
  - by other sources
- flood recession cropping area
- cultivated wetlands and inland valley bottoms
- agricultural water managed area
- grain production irrigated
- desalinated

waste water

- produced
- organic pollution
  - total industry
  - chemical industry
  - clay and glass industry
  - food industry
  - metal industry
  - paper & pulp industry
  - textile industry
  - wood industry
  - other industry
- treated



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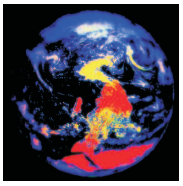
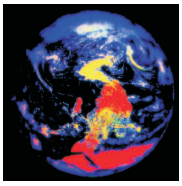
pesticides
- amides
- anticoagulants
- benzimidazoles
- benzimidazoles-seedTrF
- bipiridils
- botanic prod&biologSdTrF
- botanic. produc & biologic.
- carbamates herbicides
- carbamates insecticides
- carbamates-insect-SdTr
- chlorinated hydrocarbons
- cyanide generators
- diazines, morpholines
- dinitroanilines
- disinfectants
- disinfectants + (total)
- dithiocarbamates
- dithiocarbamates-seedTrF
- fungicides & bactericides + (total)
- herbicides + (total)
- hypercalcaemics
- inorganics
- insecticides + (total)
- mineral oils
- mineral oils + (total)
- narcotics
- organo-phospates-SdTr In
- organo-phosphates
- other fungicides
- other herbicides
- other insecticides
- other pesticides nes
- other pesticides nes + (total)
- other rodenticides
- others-seedtreat ins
- others-seedtreatfung
- phenoxy hormone products
- plant growth regulators
- plant growth regulators + (total)
- pyrethroids
- pyrethroids-seedTr Ins
- rodenticides + (total)



DSI's Global Environmental Database 2018

- terrestrial/soil
  - land use
    - total area
    - parks and protected areas - terrestric and marine
    - agricultural area
    - agricultural area certified organic
    - agricultural area in conversion to organic
    - agricultural area irrigated
    - agricultural area organic, total
    - arable land
    - arable land and permanent crops
    - arable land area certified organic
    - arable land area in conversion to organic
    - arable land organic, total
    - country area
    - fallow land
    - forest area
    - inland water
    - land area
    - other land
    - perm. meadows & pastures - cultivated
    - perm. meadows & pastures - nat. grown
    - permanent crops
    - permanent crops area certified organic
    - permanent crops area in conversion to organic
    - permanent crops organic, total
    - permanent meadows and pastures
    - permanent meadows and pastures area certified organic
    - permanent meadows and pastures area in conversion to organic
    - permanent meadows and pastures organic, total
    - temporary crops
    - temporary meadows and pastures
    - total area equipped for irrigation
  - fertilization
    - total - consumption
    - total - production
    - ammonia, anhydrous - consumption
    - ammonia, anhydrous - production
    - ammonium nitrate - consumption
    - ammonium nitrate - production
    - ammonium sulphate - consumption
    - ammonium sulphate - production



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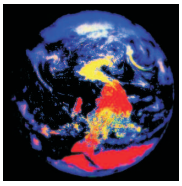
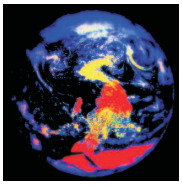
calcium ammonium nitrate - consumption
calcium ammonium nitrate - production
diammonium phosphate - consumption
diammonium phosphate - production
monoammonium phosphate - consumption
monoammonium phosphate - production
nitrogen fertilizers - consumption
nitrogen fertilizers - production
NPK blends - consumption
NPK complex - consumption
NPK complex - production
NPK complex <=10kg - consumption
NPK complex <=10kg - production
NPK complex >10kg - consumption
NPK complex >10kg - production
other nitrogen & phosphates compounds - consumption
other nitrogen & phosphates compounds - production
other nitrogen & phosphorus compounds - consumption
other nitrogen & phosphorus compounds - production
other NP compounds - consumption
other NP compounds - production
phosphate fertilizers - consumption
phosphate fertilizers - production
phosphate rock - consumption
phosphate rock - production
PK compounds - consumption
PK compounds - production
potash fertilizers - consumption
potash fertilizers - production
potassium chloride (muriate of potash);consumption
potassium chloride (muriate of potash);production
potassium nitrate - consumption
potassium nitrate - production
potassium sulphate - consumption
potassium sulphate - production
superphosphate - consumption
superphosphate - production
superphosphate above 35%;consumption
superphosphate above 35%;production
superphosphate other - consumption
superphosphate other - production
urea - consumption
urea - production
urea and ammonium nitrate solutions - consumption
urea and ammonium nitrate solutions - production



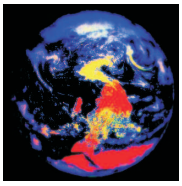
seed treatm fungicides + (total)
seed treatment insecticides + (total)
sulfonyl ureas
triazines
triazoles diazoles-SdTrF
triazoles, diazoles
uracil
urea derivates
salinisation

II. Natural Resources
- food production
- food supply
  - livestock, fish ...
    animal fats
    animal products
    quatic animals, others
    aquatic plants
    aquatic products, other
    bovine meat
    butter, ghee
    cephalopods
    cheese
    crustaceans
    demersal fish
    eggs
    fats, animals, raw
    fish, body oil
    fish, liver oil
    fish, seafood
    freshwater fish
    grand total
    honey
    marine fish, other
    meat
    meat meal
    meat, aquatic mammals
    meat, other
    milk - excluding butter
    milk, whole
    molluscs, other



- mutton & goat meat
- offals
- offals, edible
- pelagic fish
- pigmeat
- poultry meat
- whey

- crops, fruits ...
  - alcoholic beverages
  - apples and products
  - bananas
  - barley and products
  - beans
  - beer
  - beverages, alcoholic
  - beverages, fermented
  - cassava and products
  - cereals - excluding beer
  - cereals, other
  - citrus, other
  - cloves
  - cocoa beans and products
  - coconut oil
  - coconuts - incl copra
  - coffee and products
  - cottonseed oil
  - dates
  - fruits - excluding wine
  - fruits, other
  - grapefruit and products
  - grapes and products (excl wine)
  - groundnut oil
  - groundnuts (in shell eq)
  - infant food
  - lemons, limes and products
  - maize and products
  - maize germ oil
  - millet and products
  - miscellaneous
  - molasses
  - nuts and products



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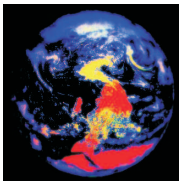
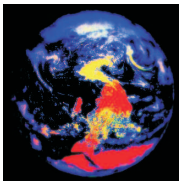
oats
oilcrops
oilcrops oil, other
oilcrops, other
olive oil
olives (including preserved)
onions
oranges, mandarines
palm oil
palmkernel oil
peas
pepper
pimento
pineapples and products
plantains
potatoes and products
pulses
pulses, other and products
rape and mustard oil
rice (milled equivalent)
rice (paddy equivalent)
ricebran oil
roots & tuber dry equiv
roots, other
rye and products
sesame seed
sesameseed oil
sorghum and products
soyabean oil
soyabeans
spices
spices, other
starchy roots
stimulants
sugar & sweeteners
sugar (raw equivalent)
sugar beet
sugar cane
sugar crops



sugar non-centrifugal
sugar, raw equivalent
sugar, refined equiv
sunflower seed
sunflowerseed oil
sweet potatoes
sweeteners, other
tea (including mate)
tomatoes and products
treenuts
vegetable oils
vegetables
vegetables, other
vegetal products
wheat and products
wine
yams

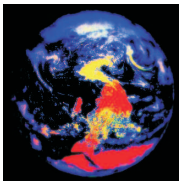
- agriculture
  - production indices
    - gross per capita production index number
      - meat indigenous, total
      - milk, total
      - oilcrops primary
      - roots and tubers, total
      - sugar, raw
      - vegetables and fruit primary
      - agriculture
      - cereals, total
      - crops
      - food
      - livestock
      - non food
    - gross production index number
      - meat indigenous, total
      - milk, total
      - oilcrops primary
      - roots and tubers, total
      - sugar, raw



- vegetables and fruit primary
- agriculture
- cereals, total
- crops
- food
- livestock
- non food
- net per capita production index number
  - meat indigenous, total
  - milk, total
  - oilcrops primary
  - roots and tubers, total
  - sugar, raw
  - vegetables and fruit primary
  - agriculture
  - cereals, total
  - crops
  - food
  - livestock
  - non food
- net production index number
  - meat indigenous, total
  - milk, total
  - oilcrops primary
  - roots and tubers, total
  - sugar, raw
  - vegetables and fruit primary
  - agriculture
  - cereals, total
  - crops
  - food
  - livestock
  - non food

production

- oil crops production in oil equivalent
- agave fibres nes - land use
- agave fibres nes - yield
- agave fibres nes - production
- almonds, with shell - land use



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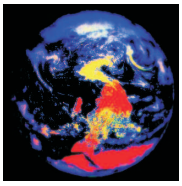
almonds, with shell - yield
almonds, with shell - production
anise, badian, fennel, corian. - land use
anise, badian, fennel, corian. - yield
anise, badian, fennel, corian. - production
apples - land use
apples - yield
apples - production
apricots - land use
apricots - yield
apricots - production
arecanuts - land use
arecanuts - yield
arecanuts - production
artichokes - land use
artichokes - yield
artichokes - production
asparagus - land use
asparagus - yield
asparagus - production
avocados - land use
avocados - yield
avocados - production
bambara beans - seed
bambara beans - land use
bambara beans - yield
bambara beans - production
bananas - land use
bananas - yield
bananas - production
barley - seed
barley - land use
barley - yield
barley - production
beans, dry - seed
beans, dry - land use
beans, dry - yield
beans, dry - production
beans, green - land use



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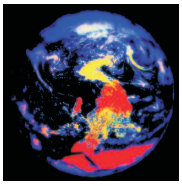
beans, green - yield
beans, green - production
berries nes - land use
berries nes - yield
berries nes - production
blueberries - land use
blueberries - yield
blueberries - production
brazil nuts, with shell - production
brazil nuts, with shell - land use
brazil nuts, with shell - yield
broad beans, horse beans, dry - land use
broad beans, horse beans, dry - yield
broad beans, horse beans, dry - production
broad beans, horse beans, dry - seed
buckwheat - land use
buckwheat - yield
buckwheat - production
buckwheat - seed
cabbages and other brassicas - land use
cabbages and other brassicas - yield
cabbages and other brassicas - production
cabbages and other brassicas - seed
canary seed - seed
canary seed - land use
canary seed - yield
canary seed - production
carobs - land use
carobs - yield
carobs - production
carrots and turnips - land use
carrots and turnips - yield
carrots and turnips - production
carrots and turnips - seed
cashew nuts, with shell - land use
cashew nuts, with shell - yield
cashew nuts, with shell - production
cashewapple - land use
cashewapple - yield



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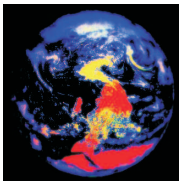
cashewapple - production
cassava - land use
cassava - yield
cassava - production
cassava - seed
cassava leaves - land use
cassava leaves - yield
cassava leaves - production
castor oil seed - seed
castor oil seed - land use
castor oil seed - yield
castor oil seed - production
cauliflowers and broccoli - land use
cauliflowers and broccoli - yield
cauliflowers and broccoli - production
cauliflowers and broccoli - yield
cereals (rice milled) - seed
cereals (rice milled) - land use
cereals (rice milled) - yield
cereals (rice milled) - production
cereals, not identified separately - seed
cereals, not identified separately - land use
cereals, not identified separately - yield
cereals, not identified separately - production
cereals, total - seed
cereals, total - land use
cereals, total - yield
cereals, total - production
cherries - land use
cherries - production
chestnuts - land use
chestnuts - yield
chestnuts - production
chick peas - seed
chick peas - land use
chick peas - yield
chick peas - production
chicory roots - land use
chicory roots - yield



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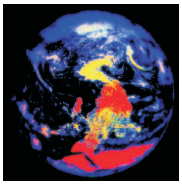
chicory roots - production
chillies and peppers, dry - land use
chillies and peppers, dry - yield
chillies and peppers, dry - production
chillies and peppers, green - land use
chillies and peppers, green - yield
chillies and peppers, green - production
cinnamon (canella) - production
cinnamon (canella) - land use
cinnamon (canella) - yield
citrus fruit, not identified separately - land use
citrus fruit, not identified separately - production
citrus fruit, total - land use
citrus fruit, total - yield
citrus fruit, total - production
cloves - land use
cloves - yield
cloves - production
coarse grain, total - seed
coarse grain, total - land use
coarse grain, total - yield
coarse grain, total - production
cocoa beans - land use
cocoa beans - yield
cocoa beans - production
coconuts - land use
coconuts - yield
coconuts - production
coconuts - seed
coffee, green - land use
coffee, green - yield
coffee, green - production
coir - production
cotton lint - production
cottonseed - seed
cottonseed - production
cow peas, dry - seed
cow peas, dry - land use
cow peas, dry - yield



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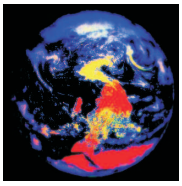
cow peas, dry - production
cranberries - land use
cranberries - yield
cranberries - production
cucumbers and gherkins - land use
cucumbers and gherkins - yield
cucumbers and gherkins - production
currants - land use
currants - yield
currants - production
dates - land use
dates - yield
dates - production
eggplants (aubergines) - land use
eggplants (aubergines) - yield
eggplants (aubergines) - production
fibre crops nes - land use
fibre crops nes - yield
fibre crops nes - production
fibre crops primary - land use
fibre crops primary - yield
fibre crops primary - production
fibre crops primary - seed
figs - land use
figs - yield
figs - production
flax fibre and tow - land use
flax fibre and tow - yield
flax fibre and tow - production
fonio - seed
fonio - land use
fonio - yield
fonio - production
fruit excl. melons, total - land use
fruit excl. melons, total - yield
fruit excl. melons, total - production
fruit fresh nes - land use
fruit fresh nes - yield
fruit fresh nes - production



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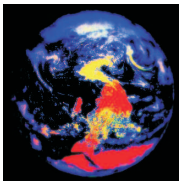
fruit, tropical fresh nes - production
fruit, tropical fresh nes - land use
fruit, tropical fresh nes - yield
garlic - land use
garlic - yield
garlic - production
garlic - seed
ginger - land use
ginger - yield
ginger - production
gooseberries - land use
gooseberries - yield
gooseberries - production
grapefruit (inc. pomelos) - land use
grapefruit (inc. pomelos) - yield
grapefruit (inc. pomelos) - production
grapes - land use
grapes - yield
grapes - production
groundnuts, with shell - land use
groundnuts, with shell - yield
groundnuts, with shell - production
groundnuts, with shell - seed
ums natural - production
hazelnuts, with shell - land use
hazelnuts, with shell - yield
hazelnuts, with shell - production
hemp tow waste - land use
hemp tow waste - yield
hemp tow waste - production
hempseed - seed
hempseed - land use
hempseed - yield
hempseed - production
hops - land use
hops - yield
hops - production
jojoba seeds - land use
jojoba seeds - yield



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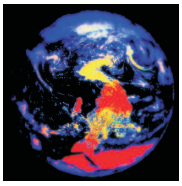
jojoba seeds - production
jute - land use
jute - yield
jute - production
jute & jute-like fibres - land use
jute & jute-like fibres - yield
jute & jute-like fibres - production
kapok fibre - production
kapok fibre - land use
kapok fibre - yield
kapok fibre - production
kapokseed in shell - production
karite nuts (sheanuts) - land use
karite nuts (sheanuts) - yield
karite nuts (sheanuts) - production
kiwi fruit - land use
kiwi fruit - yield
kiwi fruit - production
kolanuts - land use
kolanuts - yield
kolanuts - production
leeks, other alliaceous veg - land use
leeks, other alliaceous veg - yield
leeks, other alliaceous veg - production
leguminous vegetables, not identified separately - land use
leguminous vegetables, not identified separately - yield
leguminous vegetables, not identified separately - production
lemons and limes - land use
lemons and limes - yield
lemons and limes - production
lentils - seed
lentils - land use
lentils - yield
lentils - production
lettuce and chicory - land use
lettuce and chicory - yield
lettuce and chicory - production
linseed - seed
linseed - land use



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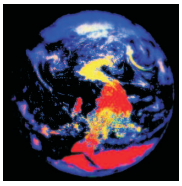
linseed - yield
linseed - production
lupins - land use
lupins - yield
lupins - production
lupins - seed
maize - seed
maize - land use
maize - yield
maize - production
maize, green - land use
maize, green - yield
maize, green - production
maize, green - seed
mangoes, mangosteens, guavas - land use
mangoes, mangosteens, guavas - yield
mangoes, mangosteens, guavas - production
manila fibre (abaca) - land use
manila fibre (abaca) - yield
manila fibre (abaca) - production
maté - land use
maté - yield
maté - production
melonseed - production
melonseed - seed
melonseed - land use
melonseed - yield
millet - seed
millet - land use
millet - yield
millet - production
mixed grain - seed
mixed grain - land use
mixed grain - yield
mixed grain - production
mushrooms and truffles - production
mushrooms and truffles - land use
mushrooms and truffles - yield
mustard seed - land use



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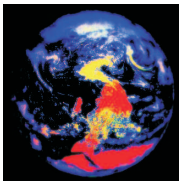
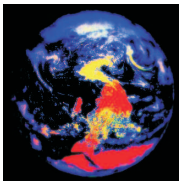
mustard seed - yield
mustard seed - production
mustard seed - seed
natural rubber - land use
natural rubber - yield
natural rubber - production
nutmeg, mace and cardamoms - land use
nutmeg, mace and cardamoms - yield
nutmeg, mace and cardamoms - production
nuts, not identified separately - land use
nuts, not identified separately - yield
nuts, not identified separately - production
nuts, not identified separately - seed
oats - seed
oats - land use
oats - yield
oats - production
oil palm fruit - land use
oil palm fruit - yield
oil palm fruit - production
oilcakes equivalent - seed
oilcakes equivalent - land use
oilcakes equivalent - yield
oilcakes equivalent - production
oilcrops primary - seed
oilcrops primary - land use
oilcrops primary - yield
oilcrops primary - production
oilseeds, not identified separately - production
oilseeds, not identified separately - land use
oilseeds, not identified separately - yield
oilseeds, not identified separately - seed
okra - land use
okra - yield
okra - production
okra - seed
lives - land use
lives - yield
olives - production



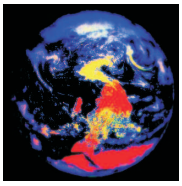
DSI's Global Environmental Database 2018

onions (incl. shallots), green - land use
onions (incl. shallots), green - yield
onions (incl. shallots), green - production
onions (incl. shallots), green - seed
onions, dry - land use
onions, dry - yield
onions, dry - production
onions, dry - seed
oranges - land use
oranges - yield
oranges - production
other bastfibres - land use
other bastfibres - yield
other bastfibres - production
other melons (incl. cantaloupes) - land use
other melons (incl. cantaloupes) - yield
other melons (incl. cantaloupes) - production
palm kernels - production
palm oil - production
papayas - land use
papayas - yield
papayas - production
peaches and nectarines - land use
peaches and nectarines - yield
peaches and nectarines - production
pears - land use
pears - yield
pears - production
peas, dry - seed
peas, dry - land use
peas, dry - yield
peas, dry - production
peas, green - land use
peas, green - yield
peas, green - production
pepper (piper spp.) - land use
pepper (piper spp.) - yield
pepper (piper spp.) - production
peppermint - production



DSI's Global Environmental Database 2018

peppermint - land use
peppermint - yield
persimmons - land use
persimmons - yield
persimmons - production
pigeon peas - seed
pigeon peas - land use
pigeon peas - yield
pigeon peas - production
pineapples - land use
pineapples - yield
pineapples - production
pistachios - land use
pistachios - yield
pistachios - production
plantains - land use
plantains - yield
plantains - production
plums and sloes - land use
plums and sloes - yield
plums and sloes - production
pome fruit, not identified separately - land use
pome fruit, not identified separately - yield
pome fruit, not identified separately - production
popcorn - land use
popcorn - yield
popcorn - production
poppy seed - seed
poppy seed - land use
poppy seed - yield
poppy seed - production
potatoes - seed
potatoes - land use
potatoes - yield
potatoes - production
pulses, not identified separately - seed
pulses, not identified separately - land use
pulses, not identified separately - yield
pulses, not identified separately - production



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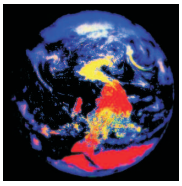
pulses, total - seed
pulses, total - land use
pulses, total - yield
pulses, total - production
pumpkins, squash and gourds - land use
pumpkins, squash and gourds - yield
pumpkins, squash and gourds - production
pyrethrum, dried - production
pyrethrum, dried - land use
pyrethrum, dried - yield
quinces - land use
quinces - yield
quinces - production
quinoa - seed
quinoa - land use
quinoa - yield
quinoa - production
ramie - land use
ramie - yield
ramie - production
rapeseed - land use
rapeseed - yield
rapeseed - production
rapeseed - seed
raspberries - land use
raspberries - yield
raspberries - production
rice, paddy - seed
rice, paddy - land use
rice, paddy - yield
rice, paddy - production
roots and tubers, not identified separately - land use
roots and tubers, not identified separately - yield
roots and tubers, not identified separately - production
roots and tubers, not identified separately - seed
roots and tubers, total - seed
roots and tubers, total - land use
roots and tubers, total - yield
roots and tubers, total - production



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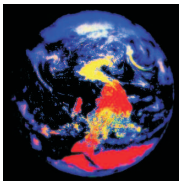
rye - seed
rye - land use
rye - yield
rye - production
safflower seed - seed
safflower seed - land use
safflower seed - yield
safflower seed - production
sangerines, mandarins, clem. - land use
sangerines, mandarins, clem. - yield
sangerines, mandarins, clem. - production
seed cotton - land use
seed cotton - yield
seed cotton - production
seed cotton - seed
sesame seed - seed
sesame seed - land use
sesame seed - yield
sesame seed - production
sisal - land use
sisal - yield
sisal - production
sorghum - seed
sorghum - land use
sorghum - yield
sorghum - production
sour cherries - land use
sour cherries - yield
sour cherries - production
soybeans - seed
soybeans - yield
soybeans - production
spices, not identified separately - land use
spices, not identified separately - yield
spices, not identified separately - production
spinach - land use
spinach - yield
spinach - production
stone fruit, not identified separately - land use



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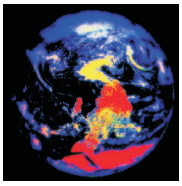
stone fruit, not identified separately - yield
stone fruit, not identified separately - production
strawberries - production
strawberries - land use
strawberries - yield
string beans - land use
string beans - yield
string beans - production
sugar beet - land use
sugar beet - yield
sugar beet - production
sugar cane - land use
sugar cane - yield
sugar cane - production
sugar cane - seed
sugar crops, not identified separately - land use
sugar crops, not identified separately - yield
sugar crops, not identified separately - production
sunflower seed - seed
sunflower seed - land use
sunflower seed - yield
sunflower seed - production
sweet potatoes - land use
sweet potatoes - yield
sweet potatoes - production
sweet potatoes - seed
taro (cocoyam) - land use
taro (cocoyam) - yield
taro (cocoyam) - production
taro (cocoyam) - seed
tea - land use
tea - yield
tea - production
tobacco, unmanufactured - land use
tobacco, unmanufactured - yield
tobacco, unmanufactured - production
tomatoes - land use
tomatoes - yield
tomatoes - production



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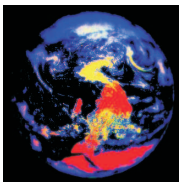
treenuts, total - land use
treenuts, total - yield
treenuts, total - production
treenuts, total - seed
triticale - land use
triticale - yield
triticale - production
triticale - seed
tung Nuts - land use
tung Nuts - yield
tung Nuts - production
vanilla - land use
vanilla - yield
vanilla - production
vegetables & melons, total - land use
vegetables & melons, total - yield
vegetables & melons, total - production
vegetables & melons, total - seed
vegetables fresh nes - production
vegetables fresh nes - seed
vegetables primary - land use
vegetables primary - yield
vegetables primary - production
vegetables primary - seed
vetches - seed
vetches - land use
vetches - yield
vetches - production
walnuts, with shell - land use
walnuts, with shell - yield
walnuts, with shell - production
watermelons - land use
watermelons - production
watermelons - seed
wheat - seed
wheat - land use
wheat - yield
wheat - production
yams - land use



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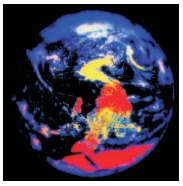
- yams - yield
- yams - production
- yams - seed
- yautia (cocoyam) - land use
- yautia (cocoyam) - yield
- yautia (cocoyam) - production
- yautia (cocoyam) - seed

- farming
  - asses stocks
  - camels stocks
  - cattle stocks
  - cattle and buffaloes stocks
  - chickens stocks
  - goats stocks
  - horses stocks
  - mules stocks
  - poultry stocks
  - sheep stocks
  - sheep and goats stocks
  - beehives stocks
  - buffaloes stocks
  - ducks stocks
  - geese and guinea fowls stocks
  - pigs stocks
  - turkeys stocks
  - rabbits and hares stocks
  - other camelids stocks
  - other rodents stocks
  - pigeons stocks

- fishery
  - global production (catches)
    - fishery products
      - total all fishing regions
      - inland waters total
  - aquaculture production
    - fishery products
      - total
      - freshwater



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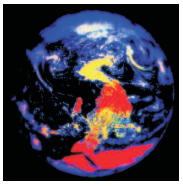
brackish water
seawater
- forestry
roundwood production - total
- biodiversity
animal species - threatened
plant species - threatened
total species - threatened

III. Mineral Resources
estimated recoverable coal
crude oil reserves
natural gas reserves
uranium reserves
uranium reserves - speculative

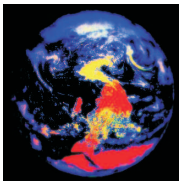
IV. Energy Consumption
- by sector
coal
energy industries
manufacturing industries and construction
transport
other (includes agriculture, commercial and public services, residential, and non-specific other)
total
gas
energy industries
manufacturing industries and construction
transport
other (includes agriculture, commercial and public services, residential, and non-specific other)
total
oil
energy industries
manufacturing industries and construction
transport
other (includes agriculture, commercial and public services, residential, and non-specific other)



total
charcoal
energy industries
manufacturing industries and construction
transport
other (includes agriculture, commercial and public services, residential, and non-specific other)
total
biomass, wood, waste
manufacturing industries and construction
other (includes agriculture, commercial and public services, residential, and non-specific other)
total
all fuels incl. biomass
fossile fuels total
sectoral aggregation
total and total fossil
energy industries
manufacturing industries and construction
transport
other (includes agriculture, commercial and public services, residential, and non-specific other)

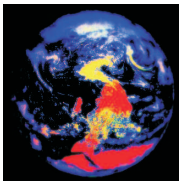
V. Human Resources

- population
  - total population
  - urban population
  - rural population
  - population in urban areas
  - annual population growth rate
  - percentage of population aged 60+ years
  - total fertility rate
  - population density
  - female economically active population in agriculture
  - male economically active population in agriculture
  - total economically active population in agriculture
- education
  - net primary school enrollment - males



net primary school enrollment - females
- skills
adult literacy rate
illiterate population

VI. Social Conditions
- health
diseases
population affected by water related disease
HIV prevalence aged 15 to 49
tuberculosis - incidence
healthy life expectancy at birth
healthy life expectancy at birth - total population
healthy life expectancy at birth - males
healthy life expectancy at birth - females
life expectancy at birth
life expectancy at birth - total population
life expectancy at birth - males
life expectancy at birth - females
mortality
children neonatale rate
children birth up to age 1
children < 5
adult (males, females, total)
maternal mortality
expenditure on health
private expenditure on health
general government expenditure on health
external resources for health
social security expenditure on health
out-of-pocket expenditure on health
prepaid plans
total expenditure on health
per capita government expenditure on health
- sanitation
- poverty
total population
rural population



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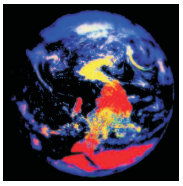
urban population
- losses/natural disasters *)
affected people
killed people

*) natural disasters : = drought, earthquake/seismic activity, epidemic, extreme temperature, flood, insect infestation, mass movement: dry and wet, volcanos, wild fire, storm

VII. Economic Core Indicators

GDP
production
trade
exchange rates



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Methodologies for the calculation of energy consumption

Introduction

The calculation of energy consumption is based on a sectoral view by using the Tier 1 Sectoral Approach from the Revised 1996 IPCC (Intergovernmental Panel on Climate Change) Guidelines for National Greenhouse Gas Inventories.

Sectors:

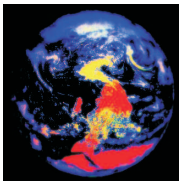
- Energy Sector (IPCC Source/Sink Category 1A1)
- Manufacturing and Construction Sector (IPCC Source/Sink Category 1A2)
- Transport Sector (IPCC Source/Sink Category 1A3)
- Other Sectors (IPCC Source/Sink Category 1A4)

Fuel categories:

- Fossile Fuels
  - Coal
  - Natural Gas
  - Oil
- Charcoal
- Biomass and Wastes

Recalculations

To make data more comparable all energy statistics are recalculated and expressed in Terra Joule (TJ) units. The underlying Net Calorific Values (NCV) are estimated by Kainou Kazunari (Kazunari, Kainou 2005: Revision of default Net Calorific Value, Carbon Content Factor and Carbon Oxidization Factor for various fuels in 2006 IPCC GHG Inventory Guideline) and might differ from the default values as listed in the 1996 IPCC guidelines.



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Methodologies for the calculation of greenhouse gas emissions

Introduction

Based on the sectoral energy statistics, as calculated in this publication, the greenhouse gas emissions (CO2, CH4, N2O, NOX, CO, NOVOC) and the emission of sulphur dioxide (SO2) are also determined by the Tier 1 Sectoral Approach from the Revised 1996 IPCC (Intergovernmental Panel on Climate Change) Guidelines for National Greenhouse Gas Inventories.

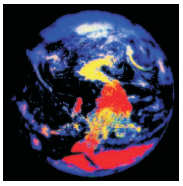
CO2 Emissions

The Carbon Emission Factors (CEF) used here are estimated by Kainou Kazunari (Kazunari, Kainou 2005: Revision of default Net Calorific Value, Carbon Content Factor and Carbon Oxidization Factor for various fuels in 2006 IPCC GHG Inventory Guideline) and might differ from the default values as listed in the 1996 IPCC guidelines.

To harmonise the statistical results the CEF values shown there are used for all countries. Stored carbon is not specially calculated.

CH4, N2O, NOX, CO, NOVOC, SO2 Emissions

The emission factors could vary from the default values as shown in the Revised 1996 IPCC Guidelines: the sectors "Transport" and "Other Sectors" are calculated on one aggregated level with one emission factor per fuel category only.



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Abbreviations

multiplication factors

10^15	1 000 000 000 000 000	peta
10^12	1 000 000 000 000	tera
10^9	1 000 000 000	giga
10^6	1 000 000	mega
10^3	1 000	kilo
10^-6	0,000001	microgram

units

	t	metric tonne
	k	kilogram
	TJ	tera joule (1 TJ = 2,388*10^-5 Mtoe)
	TJ - net	tera joule - net calorific value
info note	Mtoe	million tonnes of oil equivalent
	m^3	cubic metre
	ha	hectar
	hg	hectogram
	°C	degree Celsius
	yr	year
	mm	millimetre
	mio	million
	%	percent
	ODP	ozone depleting potential
	ppm	parts per million
	ug	microgram
	kcal	kilocalorie

chemical compounds

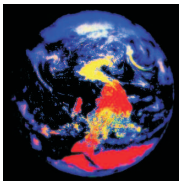
	CFCs	chlorofluorocarbons
	CH4	methane
	CO	carbon monoxide
	CO2	carbon dioxide
	HCFCs	hydrochlorofluorocarbons
	N2O	nitrous oxide
	NMVOC	non-methane volatile organic compound
	NOX	nitrogen oxides
	SO2	sulphur dioxide

standard equivalents

1 TJ	23.885 tonnes of oil equivalent (toe)
1 t	1.1023 short tons
1 ha	10 000 m^2 (square metres)
1 hg	0,1 kg

other

BOD	biochemical oxygene demand
PM 10	particular matter < 10ug



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sources of the underlying data material or methods

CRED	Centre for Research on the Epidemiology of Desasters
DSI	DSI Data Service & Information
EEA	European Environment Agency
EIA	Energy Information Administration
Eurostat	Statistical Office of the European Communities
FAO	Food and Agriculture Organization of the United Nations
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for the Conservation of Nature and Natural Resources
OECD	Organisation for Economic Co-operation and Development
UN	United Nations and its specialized agencies
WB	World Bank
WDCGG	World Data Centre for Greenhouse Gases
WDPA	World Database on Protected Areas - WDPA Consortium
WHO	World Health Organization