

METADATA OF GEI MALAYSIA

Code (a)	Indicators proposed by OECD/UNSD (b)	Amended Indicators (c)	Concept/Definitions		Data sources			Policy direction/ Strategies/ Project/Initiatives/ Program/ Declaration related to the GEI (i)
			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
1 Economic, demographic and social context for sustainable development								
1.1 Demographic patterns and trends								
1.1.1	Total population, both sexes combined	v	De facto population in a country, area or region as of 1 July of the year indicated (i.e. mid-year population), or, alternatively the population with a reference date. Refer to UN Population Division: http://esa.un.org/unpd/wpp/Excel-Data/population.htm	De jure population in a country, area or region as of 1 July of the year indicated (i.e. mid-year population). Population data are presented in thousands.	DOSM	i. Manual I - Methods of Estimating Total Population for Current Dates, UN ii. Current Population Estimates, Malaysia iii. Annually iv. Sex, Age and Ethnic group v. - vi. Thousand ('000) people	Available at national, state and strata level only	<u>Eleventh (11th) Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 4: To enhance the wellbeing of the rakyat) i. Demand for Health facilities ii. Demand for Education iii. Waste management and sanitation iv. Housing and land use v. New Jobs vi. Demand on food provision
1.1.2	Population growth rate	v	Population growth (annual %) is the exponential rate of growth of midyear population from year t-1 to t, expressed as a percentage. Derived from total population. (Source: The World Bank Indicators: http://data.worldbank.org/indicator/SP.POP.GROW ; additional reference: Demopaedia: http://en-ii.demopaedia.org/wiki/70#702)	Same as UNSD	DOSM	i. Manual I - Methods of Estimating Total Population for Current Dates, UN ii. Current Population Estimates, Malaysia iii. Annually iv. Total population v. $\frac{1}{n} \ln \frac{P_{t+n}}{P_t} \times 100$ vi. %	Available at national, state and strata level only	<u>Eleventh Malaysia Plan (RMKe-11)</u> Indicator for socio-economic development planning (Chapter 4: To enhance the wellbeing of the rakyat) i. Demand for Health facilities ii. Demand for Education iii. Waste management and sanitation iv. Housing and land use v. New Jobs vi. Demand on food provision
1.1.3	Percentage of urban population	v	Urban population refers to people living in urban areas as defined by national statistical offices. Source and the list of definitions by countries is available at: http://unstats.un.org/unsd/demographic/products/dyb/dyb2012/notes/notes06.pdf	Estimated population living in urban areas at mid-year as a percentage of the total mid-year population in a country. Urban areas are defined according to the criteria based on classification using in Population and Housing Census, 2010.	DOSM	i. Principles and Recommendations for Population and Housing Censuses Rev. 2 ii. - iii. Annually iv. Sex, Age, Ethnic group v. <u>Urban population</u> X 100 vi. %	Available at national and state level only	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 4: To enhance the wellbeing of the rakyat) i. Demand for Health facilities ii. Demand for Education iii. Waste management and sanitation iv. Housing and land use v. New Jobs vi. Demand on food provision
1.1.4	Growth rate of urban population	v	Apply 1.1.2 to the definitions of 1.1.3.	Same as UNSD	DOSM	i. Manual I - Methods of Estimating Total Population for Current Dates, UN ii. - iii. Annually iv. Total population v. $\frac{1}{n} \ln \frac{P_{t+n}}{P_t} \times 100$ vi. %	Available at national and state level only	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 4: To enhance the wellbeing of the rakyat) i. Demand for Health facilities ii. Demand for Education iii. Waste management and sanitation iv. Housing and land use v. New Jobs vi. Demand on food provision???

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1.1.5	Population (age 65 and above), total, both sexes	v	De facto population as of 1 July of the year indicated and in the age group indicated and the percentage it represents with respect to the total population. Population data are presented in thousands. http://esa.un.org/unpd/wpp/General/GlossaryDemographicTerms.aspx	Estimated midyear population aged 65 years and above indicated as percentage of the total population. Population data are presented in thousands.	DOSM	i. Manual I - Methods of Estimating Total Population for Current Dates, UN ii. Current Population Estimates, Malaysia iii. Yearly iv. Sex, Ethnic group v. - vi. Thousand ('000) people	Available at national, state and strata level only	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 4: To enhance the wellbeing of the rakyat) i. Demand for Health facilities? ii. Demand for Education iii. Waste management and sanitation iv. Housing and land use v. New Jobs vi. Demand on food provision???
1.1.6	Population density, inhabitant per km ²	v	Population density is the number of inhabitants per square kilometre. Refer to UN Population Division: http://esa.un.org/unpd/wpp/Excel-Data/population.htm	Same as UNSD	DOSM	i. - ii. - iii. Annually iv. Total population, Area (sqkm) v. <u>Total population</u> Area (sqkm) vi. Number of person	Available at national and state level only	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 4: To enhance the wellbeing of the rakyat) i. Demand for Health facilities ii. Demand for Education iii. Waste management and sanitation iv. Housing and land use v. New Jobs vi. Demand on food provision
1.1.7	Life expectancy at birth, both sexes combined	v	Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. Derived from male and female life expectancy at birth. Source: The World Bank Indicators: http://data.worldbank.org/indicator/SP.DYN.LE00.IN . Reference: UN Population Division: http://esa.un.org/unpd/wpp/Documentation/glossary.htm .	Life expectancy at birth is an estimate of the average number of years a newborn baby is expected to live, if he or she were to experience the age-specific mortality rates of the reference period throughout his or her life.	DOSM	i. Model Life Tables for Developing Countries, United Nations (1982); Regional Model Life Tables and Stable Populations, Princeton University (1966) ii. Abridged Life Tables, Malaysia iii. Annually iv. Msia - Age group, Sex and Ethnic; State - Age group and Sex v. ex = Tx/ lx vi. Age	Available at national and state level only	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 4: To enhance the wellbeing of the rakyat) i. Demand for Health facilities ii. Demand for Education iii. Waste management and sanitation iv. Housing and land use v. New Jobs vi. Demand on food provision
1.2 Economic growth, structure of economy and productivity								
1.2.1	Real GDP	v	Constant prices are obtained by directly factoring changes over time in the values of flows of goods and services into two components reflecting changes in the prices of the goods and services concerned and changes in their volumes (i.e. changes in "constant price terms").	Same as UNSD	DOSM	i. System of National Account 2008 (SNA 2008); Malaysian Standard Industrial Classification (MSIC) 2008 ii. Annual GDP Publication, Quarterly GDP Publication iii. Quarterly, Yearly iv. Production: Agriculture, Mining & Quarrying, Manufacturing, Construction, Services, Duty import Expenditure: Private Final Consumption (C), Government Final Consumption (G), Gross Fixed Capital Formation (I), Export & Import (X-M) v. Production Approach: Value Added = output - intermediate consumption Expenditure Approach: = C + G + I + (X-M) vi. RM	n.a.	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 2: Strengthening macroeconomic resilience for sustained growth b. Chapter 8: Re-engineering economic growth for greater prosperity b. Chapter 10: Malaysia beyond 2020 i. High income country Vision 2020 ii. GTP and ETP?

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1.2.2	GDP per capita	v	Levels of GDP per capita are obtained by dividing GDP at current market prices by the population. A variation of the indicator could be the growth in real GDP per capita, which is derived as the percentage change in real GDP divided by the population.	Same as UNSD	DOSM	i. System of National Account 2008 (SNA 2008), Malaysian Standard Industrial Classification (MSIC) 2008 ii. Annual GDP Publication, Quarterly GDP Publication iii. Quarterly, Yearly iv. GDP & Population v. RM	n.a.	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a.Chapter 2: Strengthening macroeconomic resilience for sustained growth b.Chapter 8: Re-engineering economic growth for greater prosperity b.Chapter 10: Malaysia beyond 2020 i. High income country Vision 2020 ii. GTP and ETP
1.2.3	Net Disposable Income [or Net National Income]	Gross National Disposable Income	Refer to the System of National Accounts (SNA) 2008 at: http://unstats.un.org/unsd/nationalaccount/sna2008.asp	GNDI is equal to GNI less current transfers (other than taxes, less subsidies, on production and imports) payable to non-resident units, plus the corresponding transfers receivable by resident units from the rest of the world.	DOSM	i. System of National Account 2008 (SNA 2008), MSIC 2008 ii. Annual GDP Publication, Quarterly GDP Publication iii. Quarterly, Yearly iv. GDP & Net primary income from abroad v. GDP + Net primary income from abroad vi. RM	GNDI	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 8: Re-engineering economic growth for greater prosperity) i. High income country Vision 2020 ii. GTP and ETP
1.2.4	Share of agriculture in GDP	v	(SNA 2008):The growth and regeneration of crops, trees, livestock or fish which are controlled by, managed by and under the responsibility of institutional units constitute a process of production in an economic sense. Growth is not to be construed as a purely natural process that lies outside the production boundary.	Constant 2010 Prices - Percentage Share to GDP	DOSM	i. System of National Account 2008 (SNA 2008), Malaysian Standard Industrial Classification (MSIC) 2008 ii. Annual and Quarterly GDP Publication iii. Quarterly & Yearly iv. Total of Agriculture & Total GDP v. (Value of Agriculture / Value of GDP)*100 vi. RM	n.a.	<u>Eleventh Malaysia Plan (RMKe-11)</u> Indicator for socio-economic development planning a.Chapter 2: Strengthening macroeconomic resilience for sustained growth b.Chapter 8: Re-engineering economic growth for greater prosperity i. High income country Vision 2020 ii. GTP and ETP?
1.2.5	Share of industry/manufacturing in GDP	v	(SNA 2008):An industry consists of a group of establishments engaged in the same, or similar, kinds of activity.	Same as UNSD	DOSM	i. System of National Account 2008 (SNA 2008), Malaysian Standard Industrial Classification (MSIC) 2008 ii. Annual and Quarterly GDP Publication iii. Quarterly & Yearly iv. Total of Manufacturing & total GDP v. (Value of Manufacturing/ Value of GDP)*100 vi. RM	n.a.	<u>Eleventh Malaysia Plan (RMKe-11)</u> Indicator for socio-economic development planning a.Chapter 2: Strengthening macroeconomic resilience for sustained growth b.Chapter 8: Re-engineering economic growth for greater prosperity i. High income country Vision 2020 ii. GTP and ETP?
1.2.6	Share of services in GDP	v	(SNA 2008): Fundamental to the SNA is the identity that goods and services produced in the economy must be consumed, used for capital formation or exported while all goods and services used within the economy must be produced in the economy or imported. From this, once suitable allowance is made for the effect on prices of taxes and subsidies on products, the goods and services account is derived and thence GDP. Services are the result of a production activity that changes the conditions of the consuming units, or facilitates the exchange of products or financial assets.	Same as UNSD	DOSM	i. System of National Account 2008 (SNA 2008), Malaysian Standard Industrial Classification (MSIC) 2008 ii. Annual and Quarterly GDP Publication iii. Quarterly & Yearly iv. Total of Services & total GDP v. (Value of Services/ Value of GDP)*100 vi. RM	n.a.	<u>Eleventh Malaysia Plan (RMKe-11)</u> Indicator for socio-economic development planning a.Chapter 2: Strengthening macroeconomic resilience for sustained growth b.Chapter 8: Re-engineering economic growth for greater prosperity i. High income country Vision 2020 ii. GTP and ETP?

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1.2.7	Proportion of cellular subscribers to total population	v	Mobile-cellular telephone subscriptions refers to the number of subscriptions to a public mobile-telephone service that provide access to the PSTN using cellular technology. The indicator includes the number of postpaid subscriptions and the number of active prepaid accounts (i.e. that have been used during the last three months). The indicator applies to all mobile-cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging and telemetry services. Calculated as a ratio to total population. (Source: MDG Indicator 8.15: http://mdgs.un.org/unsd/mdg/Metadata.aspx)	Same as UNSD	DOSM	i. - ii. Household Income and Basic Amenities Survey and ICT Use and Access by Individuals and Households Survey Report iii. Twice in 5 years / Once in every 2 years iv. number of individuals using mobile phone, Total household population v. number of individuals using mobile phone/ Total household population*100 vi. %	n.a.	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 8: Re-engineering economic growth for greater prosperity)
1.2.8	Proportion of internet users of total population	v	This is the proportion of individuals who used the internet from any location in the last three months. (Source: Manual for Measuring ICT Access and Use by Households and Individuals, Indicator HH7: http://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-ITCMEAS-2014-PDF-E.pdf)	Same as UNSD	DOSM	i. - ii. ICT Use and Access by Individuals and Households Survey Report iii. Once in 2 years iv. number of individuals using Internet, Total population v. number of individuals using Internet/ Total population*100 vi. %	n.a.	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning (Chapter 8: Re-engineering economic growth for greater prosperity) i. paperless program ii.e-commerce iii.e-government iv. Program rural wireless
1.3	Labour							
1.3.1	Labour force participation	v	The labour force participation rate is the labour force as a percent of the working age population.	Labour force participation rate is defined as the ratio of the labour force to the working age population (15 to 64 years), expressed as percentage.	DOSM	i. Surveys of economically active population, employment, unemployment and under employment: An ILO manual on concepts and methods by International Labour Office (ILO) ii. Labour Force Survey Report iii. Monthly, Quarterly, Yearly iv. Labour force, Working age population v. (Number of persons in the labour force in the specified category) / (Number of persons in the working age (15 to 64 years) in the same category) *100 vi. %	Aged 15-64 years old	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 2: Strengthening macroeconomic resilience for sustained growth b. Chapter 5: Accelerating human capital development for an advanced nation

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1.3.2	Proportion of employment by relevant economic activities	v	The employed comprise all persons of working age who, during a specified brief period, were in the following categories: a) paid employment (whether at work or with a job but not at work); or b) self-employment (whether at work or with an enterprise but not at work). Data are disaggregated by economic activity according to the latest version of the International Standard Industrial Classification of All Economic Activities (ISIC) available for that year. Economic activity refers to the main activity of the establishment in which a person worked during the reference period and does not depend on the specific duties or functions of the person's job, but on the characteristics of the economic unit in which this person works. [Source: ILO:	Employed All persons who, at any time during the reference week worked at least one hour for pay, profit or family gain (as an employer, employee, own-account worker or unpaid family worker). They are also considered as employed if: • Did not work during the reference week because of illness, injury, disability, bad weather, leave, labour dispute and social or religious reasons but had a job, farm, enterprise or other family enterprise to return to. • Temporary laid-off with pay and would definitely be called back to work. • Employed less than 30 hours during the reference week because of the nature of their work or due to insufficient work and are able and willing to accept additional hours of work. This group is underemployed. Economic activity is classified based on Malaysia Standard Industrial Classification (MSIC) available for that year. MSIC is developed based on ISIC.	DOSM	i. Surveys of economically active population, employment, unemployment and underemployment: An ILO manual on concepts and methods by International Labour Office (ILO) ii. Labour Force Survey Report iii. Monthly, Quarterly, Yearly iv. Employed v. (Number of employed person in the specified industry) / (Total number of employed person) * 100 vi. Number of person	Aged 15-64 years old	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 2: Strengthening macroeconomic resilience for sustained growth b. Chapter 5: Accelerating human capital development for an advanced nation
1.3.3	Unemployment rate	v	The unemployment rate is the number of persons who are unemployed as a percent of the total number of employed and unemployed persons (i.e., the labour force). Detailed definition of unemployment from ILO is accessible here: http://laborsta.ilo.org/applv8/data/c3e.html . Note: this refers to the ILO definition, national definitions used (and data availability) might differ.	Unemployment rate is the proportion of unemployed population to the total population in labour force. This rate measures the percentage of unemployed population in labour force.	DOSM	i. Surveys of economically active population, employment, unemployment and underemployment: An ILO manual on concepts and methods by International Labour Office (ILO) ii. Labour Force Survey Report iii. Monthly, Quarterly, Yearly iv. Unemployed, Labour force v. (Number of unemployed persons in the specified category) / (Number of persons in the labour force in the same category) * 100 vi. %	Aged 15-64 years old	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 5: Accelerating human capital development for an advanced nation b. Chapter 8: Re-engineering economic growth for greater prosperity
1.3.4	Labour productivity [GDP per person employed]	v	Calculated as GDP per person employed. Detailed definition of employment from ILO is accessible here: http://laborsta.ilo.org/applv8/data/c2e.html .	Labour productivity is the relationship between the amount of output produced and amount of input used to produce the output. Higher productivity means achieving more with the same or lesser amount of input resources. An increase in productivity will lead to benefits such as higher standard of living, enhanced competitiveness and better quality of life.	MPC	i. Annual Productivity Report ii. Productivity Report iii. Quarterly, Annually iv. GDP, Constant Prices 2005, (RM Million) [Sources: Labour Force Survey, DOSM]; Employment [Sources: Labour Force Survey, DOSM] v. $p_t = \frac{O_t}{I_t}$ P, O and I to indicate productivity, output and inputs respectively, and including a subscript t for time-periods vi. RM	n.a.	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 2: Strengthening macroeconomic resilience for sustained growth. (Malaysia labour productivity is targeted to reach RM92,300 in 2020 or annual average growth of 3.7%). b. Chapter 5: Accelerating human capital development for an advanced nation c. Chapter 8: Re-engineering economic growth for greater prosperity <u>MPC</u> Malaysia Productivity Corporation (Incorporation)) (Amendment) Act 1991

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1.4	Poverty, income distribution and other social issues							
1.4.1	Income inequality: GINI coefficient	v	Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. (Source: The World Bank Indicators: http://data.worldbank.org/indicator/SI.POV.GINI)	The Gini Coefficient (G) is a measure of income concentration derived from the Lorenz Curve. The curve is obtained by plotting the cumulative per cent of households on the X axis against the cumulative per cent of the aggregate income received by these households on the Y axis. [The value of the Gini Coefficient ranges from 0 to 1 where 0 denotes complete equality of income share and 1 represents total inequality of income share].	DOSM	i. - ii. Household Income and Basic Amenities Survey iii. Twice in 5 years iv. household gross income, Total household v. based on lorenz curve vi. n.a	Calculating the Gini Coefficient based on the household income data. Thus, comparing to other countries should be based on same methodologies/approaches.	<u>11th Malaysia Plan</u> -Indicator for socio-economic development planning a. Enhancing inclusiveness towards an equitable society b. Chapter 10: Malaysia beyond 2020 -Provide inputs to the Economy Planning Unit for policies formulation -Economic Transformation Programme - NKEA
1.4.2	Percentage of population living in poverty and extreme poverty [measured by National/Regional poverty lines]	v	The national poverty rate is the percentage of the total population living below the national poverty line. (Reference: MDG indicator 1.1: http://mdgs.un.org/unsd/mdg/Metadata.aspx)	Same as UNSD	DOSM	i. - ii. Household Income and Basic Amenities Survey iii. Twice in 5 years iv. household gross income v. Methodology used are based on Cost of basic need approach	n.a.	<u>11th Malaysia Plan</u> -Indicator for socio-economic development planning (Chapter 3: Enhancing inclusiveness towards an equitable society)
1.4.3	Proportion of population below \$1.25 (PPP) per day	Poverty Line Income (PLI)	Population below \$1.25 a day is the percentage of the population living on less than \$1.25 a day at 2005 international prices. Source: The World Bank Indicators: http://data.worldbank.org/indicator/SI.POV.DDAY	Using Poverty Line Income (PLI). The concept of poverty used takes into account food PLI and non-food PLI for each household. A household is considered poor if their income is below the PLI needed. This means that it lacks the resources to meet the basic needs of food and non-food for each of its members. A household is considered hard-core poor if its income is below the food PLI.	DOSM	i. The model of PLI measurement used in Malaysia has been intensively studied in 2005 by the Economic Planning Unit, Prime Minister's Department and DOSM in collaboration with the United Nations Development Programme (UNDP). The Cost of Basic Needs method that takes into consideration of three basic components, namely the need for food, non-food and the characteristics of households has been used. This PLI measurement was published in the report of Malaysia Measuring and Monitoring Poverty and Inequality by UNDP (2007). ii. Household Income Survey (HIS) Report iii. Twice in every 5 year iv. Food PLI, Non-Food PLI, CPI, Household Size Demographic Composition, Household Location (urban/rural) v. - vi. Incidence of Poverty (%)	n.a.	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 3: Enhancing inclusiveness towards an equitable society b. Chapter 4: Improving wellbeing for all

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1.4.4	Proportion of urban population living in slums	Number of families living in squatter settlements	The Proportion of urban population living in slums is the proportion of urban population living in slum households. A slum household is defined as a group of individuals living under the same roof lacking one or more of the following conditions: Access to improved water Access to improved sanitation Sufficient-living area Durability of housing Security of tenure However, since information on secure tenure is not available for most of the countries, only the first four indicators are used to define slum household, and then to estimate the proportion of urban population living in slums. Source and reference: MDG Indicator 7.10: http://mdgs.un.org/unsd/mdg/Metadata.aspx .	Squatting is defined as the activities of exploration, occupation or construction of buildings on lands belonging to other parties either on government land, government reserve land, the land of government agencies, community land, or private land illegally.	National Housing Department, KPKT and State/Local Governments. Data sources: i. State Secretary Office (Housing Affairs Division) for states in Peninsular Malaysia ii. Ministry of Housing, Sarawak iii. Ministry of Local Government and Housing, Sabah iv. Labuan Corporation (for the Federal Territory of Labuan) v. Kuala Lumpur City Hall (for the Federal Territory of Kuala Lumpur)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	The State/Local Governments face problems in collecting information of squatters through census or registration of squatters. For that, the calculation of squatters is not based on head count but based on the formula of: The number of head of household times 3 or 4 (depends on State/Local Governments' estimation policy) The State/Local Governments also have difficulty to provide information on time.	<u>11th Malaysia Plan</u> - Chapter 3: Enhancing inclusiveness towards an equitable society (focus on Iskandar Malaysia Area) <u>National Urbanization Policy</u> <u>National Housing Policy</u> -Various efforts have been and are being taken to address this issue. This includes creating an action plan of policy, strategy and guidelines on supervision and resettlement of squatters. Parts of the strategies are the implementation and construction of low cost housing, affordable housing and People's Housing Programme (PHP).
1.4.5	Educational attainment: at least completed lower secondary (ISCED 2 or higher), population 25+ years (%)	v	The proportion of the population over age 25 with completed at least lower secondary (ISCED 2 or higher) level of education. Source and reference: UNESCO Institute for Statistics: http://www.uis.unesco.org/Pages/Glossary.aspx	educational attainment is classified based on ISCED-97.	DOSM	i. Surveys of economically active population, employment, unemployment and underemployment: An ILO manual on concepts and methods by International Labour Office (ILO) ii. Labour Force Survey Report iii. - iv. - v. - vi. %	25 years and above	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 3: Enhancing inclusiveness towards an equitable society <u>NKEA</u> - Education
1.4.6	Total net enrolment ratio in primary education [both sexes]	Total Gross Enrolment Ratio in primary education [both sexes]	Net primary enrolment rate in primary education is the number of children of official primary school age (according to ISCED971) who are enrolled in primary education as a percentage of the total children of the official school age population. Total net primary enrolment rate also includes children of primary school age enrolled in secondary education. Where more than one system of primary education exists within the country the most widespread or common structure is used for determining the official school age group. Source: MDG Indicator 2.1: http://www.uis.unesco.org/Pages/Glossary.aspx	The GER is the total enrolment for a particular education level (primary or secondary), regardless of age, expressed as a percentage of the eligible official school age population for that particular education level in a given school-year. It is widely used to show the general level of participation in, and the capacity of the primary education system.	MOE, Private Education Division, JAKIM	i. Malaysia Education Blueprint 2013-2025 ii. Malaysia Educational Statistics 2014 (BPPM 2014) and Malaysia Education For All (EFA) iii. Yearly iv. enrolment at primary level; population (live birth) age 7-12 years old v. Gross Enrolment Ratio = $\frac{\text{Total Enrolment Ages at primary level}}{\text{Population (Live Birth) Ages 7 -12}}$ x 100% vi. %	Data coverage still remain as a challenge to MOE because currently enrolment at primary level covers only registered school	<u>11th Malaysia Plan</u> indicator for socio-economic development planning a. Chapter 3: Enhancing inclusiveness towards an equitable society b. Chapter 5: Accelerating human capital development for an advanced nation <u>NKEA</u> - Education Indicator for socio-economic development planning <u>MOE</u> to ensure universal access and 100% enrolment across all level from preschool to upper secondary level by year 2020

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
1.4.7	Total public expenditure on education as a percentage of GDP	Percentage of total public expenditure on education to GDP	Public expenditure on education as % of GDP is the total public expenditure (current and capital) on education expressed as a percentage of the Gross Domestic Product (GDP) in a given year. Public expenditure on education includes government spending on educational institutions (both public and private), education administration, and transfers/subsidies for private entities (students/households and other private entities). Source: The World Bank Indicators: http://data.worldbank.org/indicator/SE.XPD.TOTL.GD.Z S. Reference: UNESCO Institute for Statistics: http://www.uis.unesco.org/Pages/Glossary.aspx	Same as UNSD	DOSM	i. System of National Account 2008 (SNA 2008), Classification of the Functions of Government (COFOG) ii. Annual GDP Publication iii. Yearly iv. Total public expenditure on education, Total GDP v. (Value of public expenditure on education/ value of GDP) *100 vi. %	n.a.	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 5: Accelerating human capital development for an advanced nation b. Chapter 6: Pursuing green growth for sustainability and resilience
1.4.8	Total expenditure on health per capita (PPP)	Total expenditure on health to GDP	Per capita general government expenditure on health (GGHE) expressed in PPP international dollar. Reference: WHO: http://apps.who.int/gho/indicatorregistry/APP_Main/vi_ew_indicator.aspx?iid=108 .	(SNA 2008): Total expenditure on health measures the final use by resident units of health care goods and services plus gross capital formation in health care provider industries (institutions where health care is the predominant activity).	DOSM	i. System of National Account 2008 (SNA 2008), Classification of Individual Consumption by Purposes (COICOP) ii. Annual GDP Publication iii. Yearly iv. Total expenditure on health, Total GDP v. - vi. RM	n.a.	<u>11th Malaysia Plan</u> Indicator for socio-economic development planning a. Chapter 8: Re-engineering economic growth for greater prosperity
1.5 Inflation and commodity prices								
1.5.1	Consumer price index	v	Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used. Where available and if relevant, include the following: Food and non-alcoholic beverages (COICOP 01), Housing, water, electricity, gas and other fuels (COICOP 04) and Health (COICOP 06). Source: The World Bank Indicators: http://data.worldbank.org/indicator/FP.CPI.TOTL.ZG . Reference: IMF - International Financial Statistics: http://www.imf.org/external/data.htm .	Same as UNSD	DOSM	i. Consumer Price Index Manual, Theory and Practice, International Labour Organization (ILO) Classification of Individual Consumption According to Purpose (COICOP) ii. Malaysia Consumer Price Index (2010 = 100) iii. Monthly iv. Index Numbers for Main groups, Sub-groups and Expenditures Class (COICOP) for Malaysia and States (urban and rural) v. Laspeyres vi. Index	n.a.	<u>Eleventh Malaysia Plan (RMKe-11)</u> Indicator for socio-economic development planning a. Chapter 2: Strengthening macroeconomic resilience for sustained growth i. High income country Vision 2020 ii. GTP and ETP?
1.5.2	Export prices of three major commodity groups [as determined by the reporting country]	Export average unit value of three major commodity groups [palm oil, crude petroleum & LNG]	When identifying commodities, please make reference to the (inter)national classification or list being used (e.g. The Standard International Trade Classification Rev.4 (http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=28), the Central Product Classification Ver.2 (http://unstats.un.org/unsd/cr/registry/cpc-2.asp), the UN List of Industrial Products (http://unstats.un.org/unsd/industry/commoditylist2.asp), or other).	The classification of products are based on Standard International Trade Classification, Revision 4. The products are major in the external trade for Malaysia.	DOSM	i. International Merchandise Trade Statistics: Concepts and Definitions 2010 (IMTS 2010)/Standard International Trade Classification, Revision 4 (S.I.T.C. Rev. 4) ii. Monthly External Trade Statistics, Final External Trade Statistics iii. Monthly, yearly iv. total value and total quantity v. average unit value =total value/total quantity vi. RM/tonne	Source data is from secondary data (main source is customs declaration from customs department)	<u>Eleventh Malaysia Plan (RMKe-11)</u> Indicator for socio-economic development planning a. Chapter 2: Strengthening macroeconomic resilience for sustained growth <u>NKEA</u> -Palm oil and rubber

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
1.6	International trade and tourism							
1.6.1	Relative importance of trade: (exports + imports)/GDP	v	Total value of imports and exports, calculated over GDP. Also known as Total trade to GDP, %: Total trade (the sum of exports and imports) as a share of GDP measures the dependence on foreign markets and intermediate inputs and, on the other hand, the importance of international trade in the country. It may give indications of the degree to which an economy is open to trade, but should be interpreted with care. This indicator may be called a trade dependence or openness indicator. $[(\text{exports} + \text{imports}) / \text{GDP}] \times 100$.	Same as UNSD	DOSM	i. International Merchandise Trade Statistics: Concepts and Definitions 2010 (IMTS 2010); System of National Account 2008 (SNA 2008); Standard International Trade Classification (SITC) Rev. 4; Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6) ii. Annual and Quarterly GDP Publication; Monthly External Trade Statistics, Final External Trade Statistics iii. Quarterly & Yearly; Monthly, yearly iv. Exports, Imports & GDP v. (Exports + Imports)/ GDP*100	Source data is from secondary data (main source is customs declaration from customs department)	Eleventh Malaysia Plan (RMKe-11) indicator for socio-economic development planning a. Chapter 2: Strengthening macroeconomic resilience for sustained growth b. Chapter 5: Accelerating human capital development for an advanced nation c. Chapter 7: Strengthening infrastructure to support economic expansion i. High income country Vision 2020 ii. GTP and ETP?
1.6.2	Terms of trade index [base year as determined by the reporting country]	v	Net barter terms of trade index is calculated as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to the base year of selection. Unit value indexes are based on data reported by countries that demonstrate consistency under UNCTAD quality controls, supplemented by UNCTAD's estimates using the previous year's trade values at the Standard International Trade Classification three-digit level as weights. To improve data coverage, especially for the latest periods, UNCTAD constructs a set of average prices indexes at the three-digit product classification of the Standard International Trade Classification revision 3 using UNCTAD's Commodity Price Statistics, international and national sources, and UNCTAD secretariat estimates and calculates unit value indexes at the country level using the current year's trade values as weights.	Term of trade index is calculated based on the ratio of unit value index of exports to the unit value index of imports. Current time series is 2005=100 and new base year of 2010 = 100 will be implemented on Mac 2010.	DOSM	i. International Merchandise Trade Statistics: Concepts and Definitions 2010 (IMTS 2010) ii. Monthly External Trade Indices iii. Monthly iv. Import Unit value Indices, Export Unit value Indices iii. $\frac{\text{Export Unit value indices}}{\text{Import Unit Value Indices}} \times 100$ iv. index	Source data is from secondary data (main source is customs declaration from customs department)	Eleventh Malaysia Plan (RMKe-11) indicator for socio-economic development planning a. Chapter 2: Strengthening macroeconomic resilience for sustained growth b. Chapter 5: Accelerating human capital development for an advanced nation c. Chapter 7: Strengthening infrastructure to support economic expansion i. High income country Vision 2020 ii. GTP and ETP
1.6.3	International tourist arrivals in % to population	v	International inbound tourists (overnight visitors) are the number of tourists who travel to a country other than that in which they have their usual residence, but outside their usual environment, for a period not exceeding 12 months and whose main purpose in visiting is other than an activity remunerated from within the country visited. When data on numbers of tourists are not available, the number of visitors, which includes tourists, same-day visitors, cruise passengers, and crew members, is shown instead. Sources and collection methods for arrivals differ across countries. In some cases data are from border statistics (police, immigration, and the like) and supplemented by border surveys. In other cases data are from tourism accommodation establishments. For some countries number of arrivals is limited to arrivals by air and for others to arrivals staying in hotels. Some countries include arrivals of nationals residing abroad while others do not. Caution should thus be used in comparing arrivals across countries. The data on inbound tourists refer to the number of arrivals, not to the number of people traveling. Thus a person who makes several trips to a country during a given period is counted each time as a new arrival. Indicator is calculated as a percentage of the population. Source: The World Bank Indicators: http://data.worldbank.org/indicator/ST.INT.ARVL . Reference: WTO - Yearbook of Tourism Statistics: http://statistics.unwto.org/publication/yearbook-tourism-statistics-2014-edition .	International inbound tourists (overnight visitors) are the number of tourists who travel to a country other than that in which they have their usual residence, but outside their usual environment, for a period not exceeding 12 months and whose main purpose in visiting is other than an activity remunerated from within the country visited. Sources and collection methods for arrivals differ across countries. As for Malaysia, data from Immigration Department of Malaysia is the source of international arrival statistics. Caution should thus be used in comparing arrivals across countries. The data on inbound tourists refer to the number of arrivals, not to the number of people traveling. Thus a person who makes several trips to a country during a given period is counted each time as a new arrival. Indicator is calculated as a percentage of the Malaysia's population.	MOTAC & Tourism Malaysia	i. - ii. Malaysia Tourism Key Performance Indicators, Tourism Satellite Account iii. Yearly iv. Number of tourist, Total population v. Number of tourist arrivals/ total population vi. %	Dependant on data provided by Immigration Dept.	Eleventh Malaysia Plan (RMKe-11) indicator for socio-economic development planning a. Chapter 8: Re-engineering economic growth for greater prosperity <u>NKEA</u> -Tourism

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			UNSD (d)	Malaysia (e)		i. Manual/ Classification/ Handbook (International/ National) (g)	Indicate any Issues/Limitations related to the data collection (h)	
1.6.4	International tourism receipts	tourism, Inbound Tourism Expenditure	International tourism receipts are expenditures by international inbound visitors, including payments to national carriers for international transport. These receipts include any other prepayment made for goods or services received in the destination country. They also may include receipts from same-day visitors, except when these are important enough to justify separate classification. For some countries they do not include receipts for passenger transport items. Data are in current U.S. dollars. Source: The World Bank Indicators: http://data.worldbank.org/indicator/ST.INT.RCPT.CD . Reference: WTO - Yearbook of Tourism Statistics: http://statistics.unwto.org/publication/yearbook-tourism-statistics-2014-edition .	<i>Tourism expenditure</i> refers the amount paid for the acquisition of consumption goods and services, as well as valuables, for own use or to give away, for and during the trip. It includes expenditures by visitors themselves as well as expenses that are paid for or reimbursed by others. The acquisition of all goods and services during a tourism trip is in principal, part of tourism expenditure. All the services delivered before the trip that are intended to be used on the trip (specific clothes, medicines, etc. to be used on the trip) or brought along as a gifts, should also be included. <i>Inbound tourism</i> : Comprises the activities of a non-resident visitor within Malaysia on an inbound trip.	MOTAC & DOSM	i. - ii. Malaysia Tourists Profile, Tourism Satellite Account iii. Yearly iv. Number of tourist arrival v. Tourist Receipts = Tourists Arrivals x Average Per Capita vi. RM	n.a.	<u>Eleventh Malaysia Plan (RMKe-11)</u> Indicator for socio-economic development planning a. Chapter 8: Re-engineering economic growth for greater prosperity <u>NKEA</u> -Tourism
2.1	Carbon emissions							
2.1.1	Carbon dioxide emissions (CO ₂), thousand metric tons of CO ₂	GHG emissions (million tons CO₂ equivalent per year);	FDES 311a1. CO2 emission sources include emissions from energy industry, from transport, from fuel combustion in industry, services, households, etc. and industrial processes, such as the production of cement. Changes in how land is used can also result in the emission of CO ₂ , or in the removal of CO ₂ from the atmosphere. However, as there is not yet an agreed method for estimating this, it is not included in the figures for CO ₂ emissions. Burning of biomass such as wood and straw also emits CO ₂ ; however, unless there has been a change in land use, it is considered that CO ₂ emitted from biomass is removed from the air by new growth, and therefore it should not be included in the total for CO ₂ . Source: UNSD Environmental Indicators: http://unstats.un.org/unsd/environment/air_co2_emissions.htm	Concept: Anthropogenic greenhouse gas (GHG) emissions have been identified as causing climate change. Because carbon dioxide is only one of many greenhouse gases, reporting only carbon dioxide emissions does not reflect what the atmosphere sees in terms of addition of GHGs to the atmosphere. The IPCC guidelines (1996 and 2006) therefore report GHG emissions in carbon dioxide equivalents. Definition: GHG emissions can be defined as the net total of all GHG emissions by sources minus carbon dioxide removals by sinks.	NRE NRE and indicate from the KETTHA, MOSTI, MOA, MOT, MPIC, SEDA, SPAD, MARDI, FRIM, JAS, JPSM <u>KeTTHA</u> KeTTHA, MGTC, SEDA, Energy Commission	i. Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories; 2006 IPCC Guidelines for National Greenhouse Gas Inventories ii. Pelan Strategik NRE, Projek Biennial Update Report (BUR), Projek The Third National Communication (NC3) iii. Dilaporkan setiap dua (2) tahun sekali iv. Multiple - Reference: Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories; 2006 IPCC Guidelines for National Greenhouse Gas Inventories v. - vi. million tons CO ₂ equivalent per year	The process of preparing a complete GHG inventory data for developing countries will take into account of the period of four (4) years lag.	<u>NRE</u> - National Climate Change Policy - Strategic Plan of NRE - Declaration: Reduction of emissions intensity of GDP by up to 40% compared to year 2005 levels by year 2020. - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> Green Technology Master Plan a. Transport b. Building
2.1.2	Carbon dioxide emissions (CO ₂), metric tons of CO ₂ per capita	GHG emissions per capita (tons CO₂ equivalent per capita per year);	FDES 311a1. CO2 emission sources include emissions from energy industry, from transport, from fuel combustion in industry, services, households, etc. and industrial processes, such as the production of cement. Changes in how land is used can also result in the emission of CO ₂ , or in the removal of CO ₂ from the atmosphere. However, as there is not yet an agreed method for estimating this, it is not included in the figures for CO ₂ emissions. Burning of biomass such as wood and straw also emits CO ₂ ; however, unless there has been a change in land use, it is considered that CO ₂ emitted from biomass is removed from the air by new growth, and therefore it should not be included in the total for CO ₂ . Source: UNSD Environmental Indicators: http://unstats.un.org/unsd/environment/air_co2_emissions.htm	Concept: Because countries vary in size and population, comparing total emissions is not always useful. Dividing total emissions by population is a useful method for normalizing the emissions for purposes of comparison. Definition: GHG emission per capita can be defined as net GHG emissions per person	NRE, KETTHA, MOSTI, MOA, MOT, MPIC, SEDA, SPAD, MARDI, FRIM, JAS, JPSM,	i. Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories; 2006 IPCC Guidelines for National Greenhouse Gas Inventories ii. Pelan Strategik NRE, Projek Biennial Update Report (BUR), Projek The Third National Communication (NC3) iii. Dilaporkan setiap dua (2) tahun sekali iv. Multiple - Reference: Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories; 2006 IPCC Guidelines for National Greenhouse Gas Inventories v. - vi. tons CO ₂ equivalent per capita per year	The process of preparing a complete GHG inventory data for developing countries will take into account of the period of four (4) years lag.	<u>NRE</u> - National Climate Change Policy - Strategic Plan of NRE - Declaration: Reduction of emissions intensity of GDP by up to 40% compared to year 2005 levels by year 2020. - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> Green Technology Master Plan a. Transport b. Building

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
2.1.3	Carbon dioxide emissions (CO ₂), kg CO ₂ per \$1 GDP (PPP)	GHG emissions intensity of GDP (tons CO₂ equivalent/thousand RM)	FDES 311a1. CO2 emission sources include emissions from energy industry, from transport, from fuel combustion in industry, services, households, etc. and industrial processes, such as the production of cement. Changes in how land is used can also result in the emission of CO2, or in the removal of CO2 from the atmosphere. However, as there is not yet an agreed method for estimating this, it is not included in the figures for CO2 emissions. Burning of biomass such as wood and straw also emits CO2; however, unless there has been a change in land use, it is considered that CO2 emitted from biomass is removed from the air by new growth, and therefore it should not be included in the total for CO2. Source: UNSD Environmental Indicators: http://unstats.un.org/unsd/environment/air_co2_emissions.htm . When possible, include CO2 emissions by source i.e. energy, transport, deforestation etc.	Concept: Traditional modes of development show a strong coupling between economic activity and total GHG emissions. Dividing total emissions by Gross Domestic Product (GDP) provides a measure of emissions per unit of economic activity for purposes of comparison. Definition: GHG emission intensity of GDP can be defined as net GHG emissions per RM1000.00 of Gross Domestic Product (GDP).	NRE, KETTHA, MOSTI, MOA, MOT, MPIC, SEDA, SPAD, MARDI, FRIM, JAS, JPSM	i. Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories; 2006 IPCC Guidelines for National Greenhouse Gas Inventories ii. Pelan Strategik NRE, Projek Biennial Update Report (BUR), Projek The Third National Communication (NC3) iii. Dilaporkan setiap dua (2) tahun sekali iv. Multiple - Reference: Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories; 2006 IPCC Guidelines for National Greenhouse Gas Inventories v. - vi. tons CO2 equivalent per thousand RM	The process of preparing a complete GHG inventory data for developing countries will take into account of the period of four (4) years lag.	<u>NRE</u> - National Climate Change Policy - Strategic Plan of NRE - Declaration: Reduction of emissions intensity of GDP by up to 40% compared to year 2005 levels by year 2020. - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> Green Technology Master Plan a. Transport b. Building
2.2	Energy							
2.2.1	Energy productivity [US\$ per ktoe]	Energy Intensity [toe per GDP]	Energy productivity, expressed as GDP per unit of total primary energy supply (TPES) in ktoe (kilotonne of oil equivalent), may reflect, at least partly, efforts to improve energy efficiency and to reduce carbon and other atmospheric emissions. Combined with the energy intensity indicator, they also reflect structural and climatic factors. Source: OECD Green Growth Indicators: http://stats.oecd.org/index.aspx?DataSetCode=GREEN_GROWTH .	Based on International Energy Agency (IEA), there are two types of Energy Intensity; Primary Energy Intensity and Final Energy Intensity. In this indicator, we are using which type of GDP; constant or current? Now we are using constant 2005.	Energy Commission	i. International Energy Agency (Energy indicators) ii. National Energy Balance iii. Report published annually iv. Primary Energy Intensity / Final Energy Intensity v. toe / GDP vi. toe	n.a.	<u>ST</u> - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> -Green Technology Master Plan (Energy) -National Energy Policy 1979 - NKEA, EPP9 Improving Energy Efficiency
2.2.2	Energy consumption per capita [total or final]	v	Data on consumption refer to "apparent consumption" and are derived from the formula "production + imports - exports - bunkers +/- stock changes." Accordingly, the series on apparent consumption may occasionally represent only an indication of the magnitude of actual (i.e., "measured") gross inland availability. Source: UNSD Energy Statistics Yearbook: http://unstats.un.org/unsd/energy/yearbook/default.htm .	Gross inland availability refer to Primary Energy Supply, based on the data template, this indicator is broken into type of region, we only have final energy data based on region	Energy Commission	i. International Energy Agency (Energy indicators) ii. National Energy Balance iii. Report published annually iv. Final Energy Consumption, Total population v. Final energy consumption / population vi. toe, Number of population	n.a.	<u>ST</u> - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> -Green Technology Master Plan (Energy) -National Energy Policy 1979 - NKEA, EPP9 Improving Energy Efficiency

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
2.2.3	Energy intensity by sector [manufacturing, transport, households, services]	Energy Intensity by sector (Industry and Commercial)		Using final energy demand for industry and commercial sector and divide by GDP of industry and commercial sector. Malaysia using a constant price of GDP 2005.	Energy Commission	i. International Energy Agency (Energy indicators) ii. National Energy Balance iii. Report published annually iv. Final Industry / Commercial Intensity v. ktOE / GDP vi. -	No GDP data for household and transport	<u>ST</u> - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> -Green Technology Master Plan (Energy) -National Energy Policy 1979 - NKEA, EPP9 Improving Energy Efficiency
2.2.4	Renewable energy supply [% total energy supply ,TES]	RE Share from TPES	Renewable energy is defined as the contribution of renewables to total primary energy supply (TPES). Renewables include the primary energy equivalent of hydro (excluding pumped storage), geothermal, solar, wind, tide and wave sources. Energy derived from solid biofuels, biogasoline, biodiesels, other liquid biofuels, biogases and the renewable fraction of municipal waste are also included. Biofuels are defined as fuels derived directly or indirectly from biomass (material obtained from living or recently living organisms). This includes wood, vegetal waste (including wood waste and crops used for energy production), ethanol, animal materials/wastes and sulphite lyes. Municipal waste comprises wastes produced by the residential, commercial and public service sectors that are collected by local authorities for disposal in a central location for the production of heat and/or power. This indicator is measured in gigawatt hours and in percentage of total energy supply. Source: OECD Green Growth Indicators: http://stats.oecd.org/Index.aspx?DataSetCode=GREEN_GROWTH .	Renewable energy is defined as the contribution of renewables to total primary energy supply (TPES). Renewables include the primary energy equivalent of large hydro (excluding pumped storage), geothermal, solar, wind, tide and wave sources. Energy derived from solid biofuels, biogasoline, biodiesels, other liquid biofuels, biogases and the renewable fraction of municipal waste are also included. Biofuels are defined as fuels derived directly or indirectly from biomass (material obtained from living or recently living organisms). This includes wood, vegetal waste (including wood waste and crops used for energy production), ethanol, animal materials/wastes and sulphite lyes. Municipal waste comprises wastes produced by the residential, commercial and public service sectors that are collected by local authorities for disposal in a central location for the production of heat and/or power. This indicator is measured in gigawatt hours and in percentage of total energy supply	Energy Commission	i. International Energy Agency (Energy indicators) ii. National Energy Balance iii. Report published annually iv. RE Share from TPES v. [PES of RE / TPES] * 100 vi. %	n.a.	<u>ST</u> - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> -Green Technology Master Plan (Energy) -National Renewable Energy Policy and Action Plan 2008 -National Biofuel Policy 2006 - NKEA, Oil, Gas & Energy (EPP10 Building Up Renewable Energy and Solar Power Capacity)
2.2.5	Renewable electricity [% total electricity generation]	RE Share from Generation Mix	Renewable energy is defined as the contribution of renewables to total primary energy supply (TPES). Renewables include the primary energy equivalent of hydro (excluding pumped storage), geothermal, solar, wind, tide and wave sources. Energy derived from solid biofuels, biogasoline, biodiesels, other liquid biofuels, biogases and the renewable fraction of municipal waste are also included. Biofuels are defined as fuels derived directly or indirectly from biomass (material obtained from living or recently living organisms). This includes wood, vegetal waste (including wood waste and crops used for energy production), ethanol, animal materials/wastes and sulphite lyes. Municipal waste comprises wastes produced by the residential, commercial and public service sectors that are collected by local authorities for disposal in a central location for the production of heat and/or power. This indicator is measured in gigawatt hours and in percentage of total energy supply. Source: OECD Green Growth Indicators: http://stats.oecd.org/Index.aspx?DataSetCode=GREEN_GROWTH .	The energy mix, i.e. the structure of energy supply, in terms of primary energy source as a % of TPES or of total electricity generation is closely related to consumption and production patterns and to environmental effects. Renewables are also used in heat generation. Main sources of renewable energy are: • Geothermal is the energy available as heat emitted from within the earth's crust, usually in the form of hot water or steam. It can be used directly as heat for district heating, agriculture, etc., or to produce electricity. Unless the actual efficiency of the geothermal process is known, the quantity of geothermal energy entering electricity generation is inferred from the electricity production at geothermal plants assuming an average thermal efficiency of 10%. • Solar includes solar thermal and solar photovoltaic (PV). The quantities of solar PV entering electricity generation are equal to the electrical energy generated. Direct use of solar thermal heat is also included. • Tide, wave and ocean represents the mechanical energy deriving from tidal movement, wave motion or ocean current and exploited for electricity generation. The quantities entering electricity generation are equal to the electrical energy generated. • Wind represents the kinetic energy of wind exploited for electricity generation in wind turbines. The quantities entering electricity generation are equal to the electrical energy generated. • Combustible renewables and waste comprises solid biomass, liquid	Energy Commission	i. International Energy Agency (Energy indicators) ii. National Energy Balance iii. Quarterly / Yearly iv. RE Share from Generation Mix v. [Electricity Generation from RE / Total Electricity Generation] * 100 vi. %	n.a.	<u>ST</u> - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> -Green Technology Master Plan (Energy) -National Renewable Energy Policy and Action Plan 2008 -National Biofuel Policy 2006 - NKEA, Oil, Gas & Energy (EPP10 Building Up Renewable Energy and Solar Power Capacity)

Code (a)	Indicators proposed by OECD/UNSD (b)	Amended Indicators (c)	Concept/Definitions		Data sources			Policy direction/ Strategies/ Project/Initiatives/ Program/ Declaration related to the GEI (i)
			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
				biomass, biogas, industrial waste and municipal waste. Biomass is defined as any plant matter used directly as fuel or converted into fuels (e.g. charcoal) or electricity and/or heat. Included here are wood, vegetal waste (including wood waste and crops used for energy production), ethanol, animal materials and/or wastes, and sulfite lyes (i.e. black liquor). Municipal waste comprises wastes produced by the residential and commercial and public service sectors (which are collected by local authorities for disposal in a central location for the production of heat and/or power). • Including large hydro power				
2.2.7	Proportion of bioenergy in total renewable energy production	Bioenergy Share from Total Energy Production	Bioenergy is energy from biofuels, which are fuels produced directly or indirectly from biomass, which in turn is material of biological origin excluding material embedded in geological formations and transformed to fossil. Bioenergy refers to energy derived from the biological carbon fixation of plants or from biological tissues. Examples are biodiesel, derived from vegetable oils and animal fats, and bioethanol, produced by the fermentation of carbohydrates of crops like corn. Share of bioenergy on renewable energy prod. = (Biofuels prod/Total renewable production)*100. Source: FAO(2004) - UBET: http://www.fao.org/docrep/007/j4504e/j4504e00.htm ; http://ftp.fao.org/docrep/fao/007/j4504e/j4504e00.pdf ; FAO Stat: http://faostat3.fao.org/mes/methodology_list/E .	Bioenergy is energy from biofuels, which are fuels produced directly or indirectly from biomass, which in turn is material of biological origin excluding material embedded in geological formations and transformed to fossil. Bioenergy refers to energy derived from the biological carbon fixation of plants or from biological tissues. Examples are biodiesel, derived from vegetable oils and animal fats, and bioethanol, produced by the fermentation of carbohydrates of crops like corn. Share of bioenergy on renewable energy prod. It is also including large hydro.	Energy Commission	i. International Energy Agency (Energy indicators) ii. National Energy Balance iii. Quarterly / Yearly iv. Bioenergy Share from Total Energy Production v. [Production of Bioenergy / Total Energy Production] * 100 vi. %	n.a.	<u>ST</u> - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> -Green Technology Master Plan (Energy) -National Renewable Energy Policy and Action Plan 2008 -National Biofuel Policy 2006 - NKEA, Oil, Gas & Energy (EPP10 Building Up Renewable Energy and Solar Power Capacity)
3 The natural asset base								
3.1 Renewable resources								
3.1.2	Total freshwater abstraction [thousand m3 per capita]	v	FDES 262a. Water removed from any water source (surface water sources, such as rivers, lakes, reservoirs or rainwater; and groundwater sources) either permanently or temporarily. Includes abstraction by the water supply industry for distribution and direct abstraction by other activities for own use. When possible the indicator should be broken down by economic sector (manufacturing, agriculture, residential, etc.). Source: UNSD&UNEP Questionnaire 2013 on Environment Statistics - Water: http://unstats.un.org/unsd/environment/questionnaire_2013.html .	Water extracted from river, storage dams and groundwater for water treatment purposes.	SPAN	i. - ii. Malaysia Water Industry Guide iii. Data published annually iv. Extracted water from river, storage dams and groundwater v. Total=water extracted from river+extracted from storage dams + extracted from groundwater vi. Mld	Unavailability of flow meter at some WTPs to record accurate volume.	<u>Eleventh Malaysia Plan (RMKe-11)</u> a. Chapter 6: Pursuing green growth for sustainability and resilience <u>KeTTHA</u> - Goal achievement of Key Performance Indicator (KPI) based on the Outcome Based Budgeting (OBB) System is as much as 80% (water and sewerage) -Green Technology Master Plan (Water) <u>NRE</u> -National Water Resources Policy 2012 i. Water Resources Security ii. Water Resources Sustainability

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
3.1.4	Forest area	v	FDES124a1. Forest includes natural forests and forest plantations. It is used to refer to land with a tree canopy cover of more than 10 per cent and area of more than 0.5 ha. Forests are determined both by the presence of trees and the absence of other predominant land uses. The trees should be able to reach a minimum height of 5 m. Young stands that have not yet but are expected to reach a crown density of 10 percent and tree height of 5 m are included under forest, as are temporarily unstocked areas. The term includes forests used for purposes of production, protection, multiple-use or conservation (i.e. forest in national parks, nature reserves and other protected areas), as well as forests stands on agricultural lands (e.g. windbreaks and shelterbelts of trees with a width of more than 20 m), and rubberwood plantations and cork oak stands. The term specifically excludes stands of trees established primarily for agricultural production, for example fruit tree plantations. It also excludes trees planted in agroforestry systems. Source: UNSD Environmental Indicators: http://unstats.un.org/unsd/environment/forestarea.htm .	Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use. - Source: Forestry Department of Peninsular Malaysia (NRE web site) and also used by the Forests Department Sarawak and Sabah Forestry Department.	NRE and data indicate from Jabatan Perhutanan Semenanjung Malaysia (JPSM) Jabatan Hutan Sarawak and Sabah Perhutanan Sabah	i. National Forestry Act 1984, Food & Agriculture Organisation of the United Nations (FAO) ii. Annual Report JPSM Forestry Statistics Peninsular Malaysia iii. Quarterly and data published annually iv. Permanent Reserve Forest (PRF), Wildlife Reserve (WR), State Land Forest (SLF), Other Forest Reserve (FR) v. (PRF + WR + SLF + FR) vi. Hectare	Data collected using the GIS. The previous data will be used if the GIS readings show significant differences /unstable.	<u>NRE</u> - National Forestry Act 1984 - National Policy on Climate Change - To ensure at least 50 percent of the country's land area remains under forests and tree cover in accordance with our commitment made at the Earth Summit in Rio de Janeiro, Brazil, in 1992. <u>EPU</u> - 11th Malaysia Plan a. Chapter 6: Pursuing green growth for sustainability and resilience: Conserving natural resources for present and future generations - Natural Resources Inventory - National pledge at the Rio Summit - National reporting to Food & Agriculture Organisation of the United Nations (FAO)
3.1.5	Proportion of land area covered by forest [percentage]	v	The indicator is defined as the proportion of forest area to total land area and expressed as a percentage. Reference: MGD Indicator 7.1: http://mdgs.un.org/unsd/mdg/Metadata.aspx .	Same as UNSD	JPSM, Swk FD, Sabah FD	i. National Forestry Act 1984, Food & Agriculture Organisation of the United Nations (FAO) ii. Annual Report JPSM Forestry Statistics Peninsular Malaysia iii. quarterly, yearly iv. Permanent Reserve Forest (PRF), Wildlife Reserve (WR), State Land Forest (SLF), Other Forest Reserve (FR), land area v. (PRF + WR + SLF + FR)/land area x 100 vi. %	data GIS old data	<u>NRE</u> - Land Code - National Policy on Climate Change <u>EPU</u> - 11th Malaysia Plan a. Chapter 6: Pursuing green growth for sustainability and resilience: Conserving natural resources for present and future generations - Natural Resources Inventory - National pledge at the Rio Summit - National reporting to Food & Agriculture Organisation of the United Nations (FAO)
3.1.6	Natural forest as % of total forest area	v	FDES124a2. Forests composed of indigenous trees regenerated naturally. This can include both spontaneous and assisted natural regeneration. Source: FAO (2003) - Definitions Related to Planted Forests: ftp://ftp.fao.org/docrep/fao/007/ae347e/ae347e00.pdf .	Same as UNSD	JPSM, Swk FD, Sabah FD	i. National Forestry Act 1984, Food & Agriculture Organisation of the United Nations (FAO) ii. Annual Report JPSM Forestry Statistics Peninsular Malaysia iii. quarterly, yearly iv. Permanent Reserve Forest (PRF), Wildlife Reserve (WR), State Land Forest (SLF), Forest area v. (PRF + WR + SLF)/forest area x 100 vi. %	data GIS old data	<u>NRE</u> - Land Code - National Forestry Act 1984 - National Policy on Climate Change <u>EPU</u> - 11th Malaysia Plan (Pursuing green growth for sustainability and resilience: Conserving natural resources for present and future generations - Natural Resources Inventory - National pledge at the Rio Summit - National reporting to Food & Agriculture Organisation of the United Nations (FAO)

Code (a)	Indicators proposed by OECD/UNSD (b)	Amended Indicators (c)	Concept/Definitions		Data sources			Policy direction/ Strategies/ Project/initiatives/ Program/ Declaration related to the GEI (i)
			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
3.1.7	Planted forest as % of total forest area	v	FDES124a3. Forest predominantly composed of trees established through planting and/or deliberate seeding, by human intervention. They include semi-natural forests with indigenous species and plantation forests with exotic species. Source: FAO (2010) - Global Forest Resource Assessment, Terms and Definitions: http://www.fao.org/docrep/014/am665e/am665e00.pdf .	Same as UNSD	JPSM, Swk FD, Sabah FD	i. National Forestry Act 1984, Food & Agriculture Organisation of the United Nations (FAO) ii. Annual Report JPSM Forestry Statistics Peninsular Malaysia iii. quarterly, yearly iv. Plantation area in PRF, Plantation area outside PRF, Forest area v. ((Plantation area in PRF + Plantation area outside PRF)/Forest area) x 100 vi. %	data GIS old data	<u>NRE</u> - Land Code - National Forestry Act 1984 - National Policy on Climate Change <u>EPLU</u> - 11th Malaysia Plan (Pursuing green growth for sustainability and resilience: Conserving natural resources for present and future generations - Natural Resources Inventory - National pledge at the Rio Summit - National reporting to Food & Agriculture Organisation of the United Nations (FAO)
3.1.9	Fish catch, total [marine and freshwater]	v	FDES 252a. The total number (or weight) of fish caught by fishing operations. Catch should include all fish killed by the act of fishing, not just those landed. Source: FAO Fisheries Glossary: http://www.fao.org/fi/glossary/default.asp .	Same as UNSD	DOF	i. - ii. Annual Fisheries Statistics iii. Monthly iv. Landing and production fish in tonnes, Values in RM v. By sampling vi. Tonnes	Lack of budget and man power	<u>MOA</u> - Fisheries Act 1985 [317] i. To manage the national fishery resources in an efficient, innovative and environmental friendly manner based on scientific information and good governance. ii. To realize the production of 2.6 million tonnes of food fish through an optimum contribution of 1.8 million tonnes from capture fisheries and 0.8 million tonnes from aquaculture - National Agrofood Policy (2011-2020)
3.1.10	Aquaculture production, by main species, as determined by the reporting country	v	FDES 252b. The farming of aquatic organisms including fish, molluscs, crustaceans and aquatic plants with some sort of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated. Source: FAO Fisheries Glossary: http://www.fao.org/fi/glossary/default.asp .	Same as UNSD	DOF	i. - ii. Annual Fisheries Statistics iii. Monthly iv. Landing and production fish in tonnes, Values in RM v. By sampling vi. Tonnes	Lack of budget and man power	<u>MOA</u> - Fisheries Act 1985 [Act 317] i. To manage the national fishery resources in an efficient, innovative and environmental friendly manner based on scientific information and good governance. ii. To realize the production of 2.6 million tonnes of food fish through an optimum contribution of 1.8 million tonnes from capture fisheries and 0.8 million tonnes from aquaculture - National Agrofood Policy (2011-2020)

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
3.2 Non-renewable resources								
3.2.1	Mineral resources: stocks or reserves of selected minerals, including fossil fuels and critical raw materials, as determined by the reporting country	Mineral resources: stocks or reserves of selected minerals, including fossil fuels and raw materials (iron ore)	FDES 211a1+ 221a1. Stocks of mineral resources are defined as the amount of known deposits of non-metallic and metallic mineral resources. Source: FDES 2013 Methodological Manual on the Basic and Core Sets of Environment Statistics, forthcoming.		Cawangan Ekonomi Mineral, Jabatan Mineral dan Geosains Malaysia (JMG)	i. United Nation Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 ii. Compiling data iii. Resources data were monthly update. Annually iv. - v. - vi. Tonnes and Value (RM)	Compilation and updating from JMG state offices technical report	<u>EPU</u> - 11th Malaysia Plan - Natural resources Inventory <u>JMG</u> - National Mineral Policy 2 2009
3.2.2	Extraction rates of selected minerals, including fossil fuels and critical raw materials, as determined by the reporting country	Extraction rates of selected minerals, including fossil fuels and raw materials (iron ore)	FDES 211a5 + 221a5. Mineral resources are extracted from the environment through mining and quarrying activities (ISIC Rev 4. Section B - Mining and Quarrying, Divisions 07, 08 and 09 (Group 099)). Extraction can be achieved by different methods such as underground or surface mining. Extraction of mineral resources reflects the quantity of the resource physically removed from the deposit during a period of time, usually one year. Source: FDES 2013 Methodological Manual on the Basic and Core Sets of Environment Statistics, forthcoming.		Cawangan Ekonomi Mineral, Jabatan Mineral dan Geosains Malaysia (JMG)	i. United Nation Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 ii. Malaysian Mineral Yearbook, Malaysian Mining Industry, Industrial Mineral Production Statistic and Directory of Producers iii. Annual report iv. - v. - vi. Tonnes and Value (RM)	Compilation from JMG state offices statistical report on minerals production and mineral-based industries	<u>EPU</u> - 11th Malaysia Plan - Natural resources Inventory <u>JMG</u> - National Mineral Policy 2 2009
3.3 Land and agriculture								
3.3.1	Proportion of agricultural area to total land area	v	FDES 231a. Agricultural area refers to the sum of area under arable land, permanent crops, and permanent pastures. Arable land refers to land under temporary crops (double-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. Data for "Arable land" are not meant to indicate the amount of land that is potentially cultivable. Land under permanent crops refers to land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee and rubber; this category includes land under flowering shrubs, fruit trees, nut trees and vines, but excludes land under trees grown for wood or timber. Land under permanent pastures refers to land used permanently (five years or more) for herbaceous forage crops, either cultivated or growing wild (wild prairie or grazing land).	Some as UNSD	DOA	Annually	Estimates based on spatial data	<u>MOA</u> -National Agrofood Policy (2011-2020)

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
3.3.2	Changes in agricultural area [% per year]	v	FDES 231a + 231i3	Same as UNSD	DOA	Biennially	Estimates based on spatial data	MOA -National Agrofood Policy (2011-2020)
3.3.3	Area equipped for irrigation as % of agricultural area	Area equipped for irrigation (paddy)	Area equipped for irrigation is an area equipped to provide water (via irrigation) to the crops. It includes areas equipped for full and partial control irrigation, equipped lowland areas, pastures, and areas equipped for spate irrigation. The indicator is expressed as a % of agricultural area. Source: FAOSTAT - Glossary: http://faostat3.fao.org/mes/glossary/E .	Same as UNSD	DOA	Annually	n.a.	MOA -National Agrofood Policy (2011-2020)
3.3.4	Arable land, % total land area	v	Arable land is the land under temporary agricultural crops (multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. Data for "Arable land" are not meant to indicate the amount of land that is potentially cultivable. Source: FAOSTAT - Glossary: http://faostat3.fao.org/mes/glossary/E .	Same as UNSD	DOA	Annually	Estimates based on spatial data	
3.3.5	Pasture, % total land area	v	Permanent meadows and pastures is the land used permanently (five years or more) to grow herbaceous forage crops, either cultivated or growing wild (wild prairie or grazing land). Source: FAOSTAT - Glossary: http://faostat3.fao.org/mes/glossary/E .	Same as UNSD	DOA	Annually	Estimates based on spatial data	
3.3.8	Pesticides used on crop areas [kg / ha]	Pesticide used	FDES 253b3. Pesticides include insecticides, herbicides, fungicides and others (such as growth regulators). The active ingredient is the chemical element or the micro-organism that kills or eliminates the pest, fungus or weed. Values of this indicator are reported in terms of active ingredient and they do not include the other components of the final preparation. Crop area is a surface of land on which a crop is grown. In general, the area measured for cadastral purposes includes, in addition to the area cultivated, headlands, ditches and other non-cultivated areas. Source: FAOSTAT - Glossary: http://faostat3.fao.org/mes/glossary/E .	Same as UNSD	DOA	Annually	Estimated information based on the area and type of crops planted	Pesticide Act, 1974
3.3.9	Chemical fertilizers used, kilogram per hectare of crop land	v	FDES 253b2. Fertilizers use refers to the consumption of the three main types of nutrients used: Nitrogen (N), Phosphate (P2O5) and Potash (K2O). Source: UNSD Environmental Indicators: http://unstats.un.org/unsd/environment/fertilizers.htm .	Same as UNSD	FAOSTATS	Annually	Estimated information based on the area and type of crops planted	

Code (a)	Indicators proposed by OECD/UNSD (b)	Amended Indicators (c)	Concept/Definitions		Data sources			Policy direction/ Strategies/ Project/Initiatives/ Program/ Declaration related to the GEI (i)
			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
3.4 Biodiversity and ecosystems								
3.4.1	Number of known flora and fauna species by status category	v	FDES 123a1 + 123b1; Definition: Species assessed as Critically Endangered (CR), Endangered (EN), or Vulnerable (VU) are referred to as "threatened" species. Reporting the proportion of threatened species on The IUCN Red List is complicated by the fact that not all species groups have been fully evaluated, and also by the fact that some species have so little information available that they can only be assessed as Data Deficient (DD). Source: OECD Green Growth Indicators: http://stats.oecd.org/Index.aspx?DataSetCode=GREEN_GROWTH .	i. Fauna: Assessment and data analyse by using data collected from wildlife ; joint research with research institute, agency and university; DWNP Respiratory Collection ii. Flora: A comprehensive listing of the flora and fauna in the country that have been identified and scientifically named. The species is the basic unit of biological diversity. Evaluation at the species and genetic levels has been widely used to reflect observable diversity in nature.	JPSM, Swk FD, Sabah FD, FRIM	i. Manual Inventory Biodiversiti ii. National Forest Inventory; Journal Parks and Wildlife; Proceeding of Seminar Biodiversiti; Wildlife Inventory Report; Specimen Catalogue of IBD iii. Yearly iv. Number of flora and fauna v. n.a. vi. Number	cost expertise	<u>NRE</u> -CITES Act Prosidng -National Policy on Biological Diversity 2016-2025 (Goal 2: We have significantly reduced the direct and indirect pressures on biodiversity) <u>EPLU</u> - 11th Malaysia Plan a. Pursuing green growth for sustainability and resilience: Conserving natural resources for present and future generations) - Natural resources Inventory
3.4.2	Number of endemic flora and fauna species by class (mammals, reptiles, etc)	v	FDES 123a1 + 123b1; Definition: Species assessed as Critically Endangered (CR), Endangered (EN), or Vulnerable (VU) are referred to as "threatened" species. Reporting the proportion of threatened species on The IUCN Red List is complicated by the fact that not all species groups have been fully evaluated, and also by the fact that some species have so little information available that they can only be assessed as Data Deficient (DD). Source: OECD Green Growth Indicators: http://stats.oecd.org/Index.aspx?DataSetCode=GREEN_GROWTH .	i. Fauna: Assessment and data analyse by using data collected from wildlife inventory; joint research with research institute, agency and university; DWNP Respiratory Collection ii. Flora: A species is regarded as endemic to some defined area if it is confined entirely to that area and nowhere else. Endemic species are increasingly being recognised as important foci for conservation attention as the threats to narrow ranging species become more apparent. In addition, endemic species are also a major component of hotspots of diversity and form a basis for selecting priority conservation area.	JPSM, PERHILITAN, Swk FD, Sabah FD, FRIM	i. Manual Inventory Biodiversiti ii. National Forest Inventory; Journal Parks and Wildlife; Proceeding of Seminar Biodiversiti; Wildlife Inventory Report; Specimen Catalogue of IBD iii. Yearly iv. Number of flora and fauna v. n.a. vi. Number	cost expertise	<u>NRE</u> CITES Act Prosidng - National Policy on Biological Diversity 2016-2025 (Goal 5: We have improved the capacity, knowledge and skills of all stakeholders to conserve biodiversity) <u>EPLU</u> - 11th Malaysia Plan: a. Pursuing green growth for sustainability and resilience: Conserving natural resources for present and future generations - Natural resources Inventory
3.4.3	% of threatened flora and fauna species by class (mammals, reptiles, etc.)	v	FDES 123a1 + 123b1; Definition: Species assessed as Critically Endangered (CR), Endangered (EN), or Vulnerable (VU) are referred to as "threatened" species. Reporting the proportion of threatened species on The IUCN Red List is complicated by the fact that not all species groups have been fully evaluated, and also by the fact that some species have so little information available that they can only be assessed as Data Deficient (DD). Source: OECD Green Growth Indicators: http://stats.oecd.org/Index.aspx?DataSetCode=GREEN_GROWTH .	IUCN Red List Categories and Criteria ver.3.1	PERHILITAN	i. IUCN Red List Categories and Criteria ver.3.1 ii. Mammal Redlist of Peninsular Malaysia iii. every 5 years iv. Number of species v. - vi. %	n.a.	<u>EPLU</u> - 11th Malaysia Plan a. Pursuing green growth for sustainability and resilience: Conserving natural resources for present and future generations - Natural resources Inventory <u>NRE</u> CITES Act Prosidng - National Policy on Biological Diversity 2016-2025 (Goal 3: We have safeguarded all our key ecosystems, species and genetic diversity)

Code (a)	Indicators proposed by OECD/UNSD (b)	Amended Indicators (c)	Concept/Definitions		Data sources			Policy direction/ Strategies/ Project/initiatives/ Program/ Declaration related to the GEI (i)
			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
3.4.4	Proportion of marine protected areas to territorial waters, %	v	The units of measure in this indicator are marine protected areas in territorial waters (up to 12 nautical miles from the coast). The International Union for Conservation of Nature (IUCN) defines a protected area as 'a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values' (Dudley, 2008). The total area of a country's/territory's marine protected areas in territorial waters is divided by the total area of its territorial waters to obtain the relative coverage (percentage) of protected areas. Source: MDG Indicator 7.6: http://mdgs.un.org/unsd/mdg/Metadata.aspx .	The total area of a marine protected areas in territorial waters is divided by Malaysian waters to obtain the relative coverage (percentage) of protected areas.	JTLM, Sabah Parks, DoF, Sarawak forestry Corporation.	i. Fisheries Act 1985, Parks Enactment, 1984 Wildlife Conservation Enactment, 1997, National Park and Reserve Ordinance, 1998 ii. Annual Report of JTLM, Compendium of JTLM, Strategic Plan of JTLM iii. Data published annually iv. Marine Park Area (MPA) + Sabah Parks (SP) + Fisheries Prohibited Area (FPA), Sarawak National Park (SNP) v. (MPA + SP + FPA + SNP) / x 45,318,600 (Malaysian Water) x 100 % vi. ha	Data need to be updated from relevant agencies as listed in variable column. The calculation of the area is very technical and need support from JUPEM. Broad estimation using GIS map might be misleading.	<u>EPU</u> - 11th Malaysia Plan (Pursuing green growth for sustainability and resilience:Conserving natural resources for present and future generations) - Natural resources Inventory - Aichi Targets - National Biodiversity policy <u>NRE</u> CITES Act Prosiding - National Policy on Biological Diversity 2016-2025 (Goal 3: We have safeguarded all our key ecosystems, species and genetic diversity) Aichi target: Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity. -By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
3.4.5	Proportion of terrestrial protected areas to total surface area, %	Area of terrestrial protected areas	The units of measure in this indicator are terrestrial protected areas. The International Union for Conservation of Nature (IUCN) defines a protected area as 'a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values' (Dudley, 2008). The total area of a country's/territory's terrestrial protected areas is divided by the total area of its land areas (including inland waters) to obtain the relative coverage (percentage) of protected areas. Source: MDG Indicator 7.6: http://mdgs.un.org/unsd/mdg/Metadata.aspx .		NRE/JUEPM	%		<u>EPU</u> - 11th Malaysia Plan (Chapter 6: Pursuing green growth for sustainability and resilience: Conserving natural resources for present and future generations) - Natural resources Inventory <u>NRE</u> - National Policy on Biological Diversity 2016-2025 (Goal 3: We have safeguarded all our key ecosystems, species and genetic diversity)
3.4.6	Domestic Water Consumption Per Capita Per Day			Volume of treated water consumed by each household in Malaysia on daily basis.	SPAN	i. - ii. Malaysia Water Industry Guide iii. Annually iv. Domestic Consumption (m3). Population Served (Nos) v. Domestic Consumption/Population Served/365 Days vi. Litre per capita per day		<u>KeTTHA</u> -Green Technology Master Plan (Water) -Based on KPI OBB target KPI is 180 (Liter)
3.4.7	Non-Revenue Water			Non-revenue water is the difference between the volume of water put into a water distribution system and the volume that is billed to customers.	SPAN	i. - ii. Malaysia Water Industry Guide iii. Annually iv. System Input Volume (m3), Total Metered Consumption (m3) v. (1-(Water Consumption/Production))*100% vi. Percentage		<u>KeTTHA</u> -Green Technology Master Plan (Water) -NRW target at 25% rate by 2020 <u>EPU</u> -11th Malaysia Plan a. Chapter 7: Strengthening infrastructure to support economic expansion
4 The environmental dimension of quality of life								
4.1 Environmental health and risks								
4.1.1	Concentration of particulate matter (PM ₁₀) in urban air [main cities]	Concentration of particulate matter (PM ₁₀) in urban air	FDES 131a1. The major components of PM are sulfate, nitrates, ammonia, sodium chloride, black carbon, mineral dust and water. It consists of a complex mixture of solid and liquid particles of organic and inorganic substances suspended in the air. Air quality measurements are typically reported in terms of daily or annual mean concentrations of PM10 particles per cubic meter of air volume (m3). Routine air quality measurements typically describe such PM concentrations in terms of micrograms per cubic meter (µg/m3). When sufficiently sensitive measurement tools are available, concentrations of fine particles (PM2.5 or smaller), are also reported. Source: WHO - Ambient (outdoor) air quality and health: http://www.who.int/mediacentre/factsheets/fs313/en/ .	Same as UNSD	Department of Environment (Air Division)	i. - ii. Clean Air Action Plan, Compendium of Environment Statistics iii. annually/monthly iv. - v. - vi. µg/m3	n.a.	<u>DOE</u> Clean Air Action Plan established and strategised actions that include enhancement of air quality monitoring programme with increase of monitoring stations on PM10 nationwide in order to detect any changes in the ambient air quality which may cause harm to human health and the environment <u>NRE</u> -National Policy on Climate Change Key actions (KA1 - ST1) <u>EPU</u> - 11th Malaysia Plan (Chapter 7: Strengthening infrastructure to support economic expansion)

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
4.2 Environmental services and amenities								
4.2.1	Proportion of total population using an improved drinking water source	v	FDES 512a. The proportion of the population using an improved drinking water source, total, urban, and rural, is the percentage of the population who use any of the following types of water supply for drinking: piped water into dwelling, plot or yard; public tap/standpipe; borehole/tube well; protected dug well; protected spring; rainwater collection and bottled water (if a secondary available source is also improved). It does not include unprotected well, unprotected spring, water provided by carts with small tanks/drums, tanker truck-provided water and bottled water (if secondary source is not an improved source) or surface water taken directly from rivers, ponds, streams, lakes, dams, or irrigation channels. Definitions and a detailed description of these facilities can be found at the website of the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation at www.wssinfo.org . Source: MDG Indicator 7.8: http://mdgs.un.org/unsd/mdg/Metadata.aspx .	The proportion of the population with access to the public treated water supply system.	SPAN	i. - ii. Malaysia Water Industry Guide iii. Quarterly, Annually iv. Population Served % v. Population Served/Total Population vi. %	- Data limited to public treated water supply system only.	<u>KeTTHA</u> -11th Malaysia Plan a. Chapter 8: Re-engineering economic growth for greater prosperity Government aims to have 99% of the population served by clean and treated water by 2020.
4.2.2	Proportion of urban population using an improved drinking water source	v	MDG7.8, FDES 512a.	The proportion of the urban population with access to the public treated water supply system.	SPAN	i. - ii. Malaysia Water Industry Guide iii. Quarterly, Annually iv. Urban Population Served % v. Urban Population Served/Total Urban Population vi. %	- Data limited to public treated water supply system only.	<u>KeTTHA</u> -11th Malaysia Plan a. Chapter 8: Re-engineering economic growth for greater prosperity b. Chapter 7: Strengthening infrastructure to support economic expansion Government aims to have 99% of the population served by clean and treated water by 2020.
4.2.3	Proportion of rural population using an improved drinking water source	v	MDG7.8, FDES 512a.	The proportion of the rural population with access to the public treated water supply system.	SPAN	i. - ii. Malaysia Water Industry Guide iii. Quarterly, Annually iv. Rural Population Served % v. Rural Population Served/Total rural Population vi. %	- Data limited to public treated water supply system only.	<u>KeTTHA</u> -11th Malaysia Plan a. Chapter 8: Re-engineering economic growth for greater prosperity b. Chapter 7: Strengthening infrastructure to support economic expansion
4.2.4	Proportion of total population using an improved sanitation facility	v	FDES 512b. The proportion of the population using an improved sanitation facility, total, urban, rural, is the percentage of the population with access to facilities that hygienically separate human excreta from human contact. Improved facilities include flush/pour flush toilets or latrines connected to a sewer, -septic tank, or -pit, ventilated improved pit latrines, pit latrines with a slab or platform of any material which covers the pit entirely, except for the drop hole and composting toilets/latrines. Unimproved facilities include public or shared facilities of an otherwise acceptable type, flush/pour flush toilets or latrines which discharge directly into an open sewer or ditch, pit latrines without a slab, bucket latrines, hanging toilets or latrines which directly discharge in water bodies or in the open and the practice of open defecation in the bush, field or bodies or water. Definitions and a detailed description of these facilities can be found at the website of the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation at www.wssinfo.org . Source: MDG Indicator 7.9: http://mdgs.un.org/unsd/mdg/Metadata.aspx .		BPHPP	i. Household Income and Basic Amenities Survey ii. Twice in 5 years iii. Drinking water supply facility iv. Numbers of household involved / Total numbers of household		<u>KeTTHA</u> -11th Malaysia Plan a. Chapter 8: Re-engineering economic growth for greater prosperity b. Chapter 7: Strengthening infrastructure to support economic expansion Connected sewerage services will be extended to rural areas through solutions tailored for population agglomerations of less than 5000 people.

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
4.2.5	Proportion of urban population using an improved sanitation facility	v	MDG 7.9, FDES 512b.		BPHPP	i. Household Income and Basic Amenities Survey ii. Twice in 5 years iii. Type of toilet iv. Numbers of urban household involved / Total numbers of household		<u>KeTTHA</u> - 11th Malaysia Plan a. Chapter 7: Strengthening infrastructure to support economic expansion Connected sewerage services will be extended to rural areas through solutions tailored for population agglomerations of less than 5000 people.
4.2.6	Proportion of rural population using an improved sanitation facility	v	MDG 7.9, FDES 512b.		BPHPP	i. Household Income and Basic Amenities Survey ii. Twice in 5 years iii. Type of toilet iv. Numbers of rural household involved / Total numbers of household		<u>KeTTHA</u> - 11th Malaysia Plan a. Chapter 7: Strengthening infrastructure to support economic expansion Connected sewerage services will be extended to rural areas through solutions tailored for population agglomerations of less than 5000 people.
4.2.7	Municipal waste collected [total]	Solid waste collected [total]	FDES 332a1; Definition: Municipal waste is defined as waste collected and treated by or for municipalities. It covers waste from households, including bulky waste, similar waste from commerce and trade, office buildings, institutions and small businesses, as well as yard and garden waste, street sweepings, the contents of litter containers, and market cleansing waste if managed as household waste. The definition excludes waste from municipal sewage networks and treatment, as well as waste from construction and demolition activities. This indicator is measured in thousand tonnes. Source: OECD Green Growth Indicators: http://stats.oecd.org/Index.aspx?DataSetCode=GREEN_GROWTH .		JPSPN	i. - ii. - iii. Yearly iv. - v. Waste generation/capita X population vi. Tonnes	Data from consessionnaires only cover municipal solid waste generated from states adopting Act 672.	<u>EPU</u> - 11th Malaysia Plan a. Chapter 8: Re-engineering economic growth for greater prosperity - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>JPSPN</u> - National Solid Waste Management Policy, 2005 (Revised 2016) <u>KeTTHA</u> - Green Technology Master Plan (Waste)
4.2.8	Municipal waste collected [per capita]	Solid waste collected [per capita]	FDES 332b1+332b2. Hazardous waste is waste that owing to its toxic, infectious, radioactive or flammable properties poses an actual or potential hazard to the health of humans, other living organisms, or the environment. Hazardous waste here refers to categories of waste to be controlled according to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Article 1 and Annex I). If data are not available according to the Basel Convention, amounts can be given according to national definitions. Source: UNSD Environmental Indicators: http://unstats.un.org/unsd/environment/hazardous.htm .		JPSPN	i. - ii. - iii. Yearly iv. - v. Waste generation/capita X population vi. Tonnes	Data from consessionnaires only cover municipal solid waste generated from states adopting Act 672.	<u>EPU</u> - 11th Malaysia Plan a. Chapter 8: Re-engineering economic growth for greater prosperity - National greenhouse gas inventory - National reporting to the United Nations Framework Convention on Climate Change <u>JPSPN</u> - National Solid Waste Management Policy, 2005 (Revised 2016) <u>KeTTHA</u> - Green Technology Master Plan (Waste)

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
4.2.10	Hazardous waste collected, total and by type of treatment	Scheduled Waste collected, total and by type of treatment	FDES 332b1+332b2. Hazardous waste is waste that owing to its toxic, infectious, radioactive or flammable properties poses an actual or potential hazard to the health of humans, other living organisms, or the environment. Hazardous waste here refers to categories of waste to be controlled according to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Article 1 and Annex I). If data are not available according to the Basel Convention, amounts can be given according to national definitions. Source: UNSD Environmental Indicators: http://unstats.un.org/unsd/environment/hazardous.htm .	"scheduled wastes" means any waste falling within the categories of waste listed in the First Schedule, Environmental Quality (Scheduled Waste) Regulation 2005.	Department of Environment	i. Environmental Quality Act, 1974; Environmental Quality (Scheduled Waste) Regulation 2005 ii. Environmental Quality Report, Annual report iii. Annually iv. - v. - vi. Tonnes	Data collected using online system, e-SWIS. However, scheduled waste data in terms of its generation, treatment and disposal that not reported to the Department either online or offline is not captured.	<u>EPU</u> - 11th Malaysia Plan a. Chapter 6: Pursuing green growth for sustainability and resilience <u>DOE</u> -Environmental Quality Act (1974) -Environmental Quality (Scheduled Waste) Regulations 2005. <u>KeTTHA</u> -Green Technology Master Plan (Waste)
4.2.11	Proportion of sewage generated by household being treated by public sewage treatment plant			Estimation of sewage generated by household being treated by public sewage treatment plant	SPAN	i. - ii. - iii. Annually iv. Total Sewage Generated by Household, Total Domestic Consumption v. (Total Sewage Generated by Household/ Total Domestic Consumption)*100% vi. Percentage	i. Data confined to Peninsular Malaysia and FT Labuan only ii. Total Sewage generated by Household is based on total domestic (residential) accounts that are connected to the Public Sewage Treatment System iii. Public sewage treatment systems are mechanized system operated by government appointed company. iv. Total Domestic Consumption is based on metered treated water consumption by domestic (residential) accounts that are connected to the Public Water Supply System.	<u>EPU</u> - 11th Malaysia Plan a. Chapter 7: Strengthening infrastructure to support economic expansion Connected sewerage services will be extended to rural areas through solutions tailored for population agglomerations of less than 5000 people. <u>KeTTHA</u> -Green Technology Master Plan (Water)
5 Policy responses and economic opportunities								
5.1 Regulations and management								
5.1.1	Annual government environment protection expenditure [as % of government expenditure and/ or as % of GDP]	Percentage of Environment Protection expenditure to GDP	FDES 611a1. The data relate to the general government sector of the economy, expenditures by COFOG Division 05 - environmental protection: 05.1 - Waste management 05.2 - Waste water management 05.3 - Pollution abatement 05.4 - Protection of biodiversity and landscape 05.5 - R&D Environmental protection 05.6 - Environmental protection n.e.c. Source: Eurostat: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Government_expenditure_by_function_-_COFOG , and UNSD - COFOG: http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4&lg=1		DOSM	i. System of National Account 2008 (SNA 2008), Classification of the Functions of Government (COFOG) ii. Annual GDP Publication iii. Yearly iv. Total of Environment Protection expenditure & Total of GDP v. A= (Value of public expenditure on Environment Protection/ value of GDP) *100 B= (Value of public expenditure on Environment Protection/ Government Final Consumption) *100 vi. %	n.a.	<u>EPU</u> -11th Malaysia Plan a. Chapter 6: Enhancing conservation of the nations ecological asset; Climate adaptation:protecting the nation from the impact of climate change b. Chapter 7: Upgrading physical infrastructure to enhance access and connectivity

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			UNSD (d)	Malaysia (e)	Agency (division) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
5.1.2	Participation in multilateral environmental agreements [list and number of MEAs]	v	FDES 623a1. Participation, means the country or area has become party to the agreements under the treaty or convention, which is achieved through a variety of means depending on country circumstances, namely: accession, acceptance, approval, formal confirmation, ratification, and succession. Countries or areas who have signed but not become party to the agreements under a given convention or treaty are thus indicated as non-participants. Participation can have special or country-specific provisions depending on the nature of the agreement and national circumstances. For more detailed country-specific information on participation under each agreement please visit the website of the secretariat for the convention/treaty. Below are the complete titles and secretariat websites for each of the selected environmental agreements: -Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (www.basel.int/index.html) - Convention on Biological Diversity (CBD) (www.cbd.int/) - Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (www.cites.org/index.html) - Convention on the Conservation of Migratory Species of Wild Animals (CMS) (www.cms.int/index.html) - Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO World Heritage Convention) (http://whc.unesco.org/en/conventiontext/) - Montreal Protocol on Substances that Deplete the Ozone Layer (http://ozone.unep.org/)	Same as UNSD	Department of Environment (Air Division), DOE, Environmental Management and Climate Change Division (BPASPI), NRE	i. - ii. - Environmental Annual Report, Environmental Quality Report iii. Annually iv. - v. - vi. Number	n.a.	<u>KeTTHA</u> -Green Technology Master Plan (Introduction) <u>EPU</u> -11th Malaysia Plan a. Chapter 8: Re-engineering economic growth for greater prosperity
			- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) (http://www.ramsar.org/) - Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (http://www.pic.int/home.php?type=t&id=5&sid=16) - Stockholm Convention on Persistent Organic Pollutants (http://chm.pops.int/) - United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (UNCCD) (http://www.unccd.int/main.php) - United Nations Convention on the Law of the Sea (www.un.org/Depts/los/convention_agreements/convention_overview_convention.htm)					
5.1.3	Number of regulated pollutants by media [water, air, soil, etc]	v	FDES 6221. Regulated pollutants are those for which the national or competent authority has established norms or standards setting the maximum allowable levels that are acceptable, according to the scientific knowledge and the local policy regulations within the environmental framework of the country or zone. Source: FDES 2013 Methodological Manual on the Basic and Core Sets of Environment Statistics, forthcoming.	Same as UNSD	Department of Environment (Enforcement Division)	i. - ii. - Environmental Quality Act 1974 iii. - iv. - v. - vi. -	Number of pollutants control under Regulation	<u>DOE</u> - Environmental Quality (Clean Air) Regulation, 2014 - Environmental Quality (Industrial Effluent) Regulations, 2009 <u>EPU</u> - 11th Malaysia Plan a. Chapter 8: Re-engineering economic growth for greater prosperity

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			UNSD (d)	Malaysia (e)	Agency (division involved) (f)	i. Manual/ Classification/ Handbook (International/ National) ii. Publication iii. Frequency iv. Variable/s v. Formula vi. Unit of Measurement (g)	Indicate any Issues/Limitations related to the data collection (h)	
5.2 Environmental goods and services								
5.2.1	Production of environmental goods and services (EGS), total output	The number of products under MyHIAU Programme	<p>The EGS sector does not yet have an exact statistical definition. SEEA Central Framework 2013 (http://unstats.un.org/unsd/envaccounting/seeaRev/SEEA_CF_Final_en.pdf) defines EGSS as: EGSS consists of producers of all environmental goods and services, including environmental-specific services, environmental sale-purpose products, adapted goods and environmental technologies. UNEP Working Paper on measuring the EGSS 2014 (http://www.unep.org/greenconomy/portals/88/documents/WorkingPaperEGSSWorkshop.pdf) refers to the EGSS according to the classification of environmental protection activities (CEPA) and the classification of resource management activities (CReMA), whereas OECD's 2014 Green Growth Indicators (http://www.keepeek.com/Digital-Asset-Management/occd/environment/green-growth-indicators-2013_9789264202030-en/page137) define EGSS as: the sectors covered include water supply; sewerage, waste management and remediation activities (ISIC Rev.4, 36-39). ESCAP Working paper for the EGM on Strategies for Improving Environment Statistics in Asia and the Pacific (http://www.unep.org/greenconomy/portals/88/documents/EGSS/ESCAPnote.pdf) states: Since the measurement approaches are likely to vary considerably across countries, the potential for international comparison may be limited at this stage.</p>	Number of products obtained green recognition from Certification Bodies/Scheme Owner registered under MyHIAU Programme.	PEMANDU-SRI CSL, MOSTI, KeTTHA, MGTC, Certification Bodies/Scheme Owner	i. - ii. Laporan Tahunan KeTTHA 2015, SCP Monthly Progress Report (EPU) iii. Annually, Half-yearly iv. Based on no. of Certification Bodies/Scheme Owner registered under MyHIAU Programme v. - vi. -	Based on reports/data given by respective CB/SO. Compilation of data done at MGTC.	<p><u>KeTTHA</u> - National Green Technology Policy 2009 - Green Technology Master Plan (Manufacturing)</p> <p><u>EPU</u> - 11th Malaysia Plan a. Sustainable Consumption and Production - Economic Transformation Programme (ETP) (PEMANDU)</p>