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Gr	een Question	naire Data
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University Username University N University L	 r Profile msu.ac.th ame : Mahasarakham University eader : President : Associate professor. Prayook Srivilai, Ph.D 	PIC Profile PIC Name : Mr.jirasak wongphombute PIC Position : Audio-Visual Technical Officer Email : jirasak.w@msu.ac.th @ SI 1025 @ F 900
Submitted D	ate : 04 November 2019 22:59:43	3 wat gos
Setting a	nd Infrastructure 096-3577757	mon man 1226
Question		Answer () shudh (350)
1.1()	Type of higher education institution	Comprehensive Specialized higher education institution
1.2()	Climate	 Tropical Wet Tropical Wet and Dry Semiarid Arid Mediterranean Humid Subtropical Marine west coast / Oceanic Climate Humid Continental Subartic
1.3()	Number of campus site	5
1.4()	Campus setting	 Rural Suburban Urban In city center High rise building
1.5()	Total campus area (m²)	5747696
1.6()	Total campus ground floor area of buildings (m ²)	171068
1.7()	Total campus buildings area (m²)	621143
1.8(SI.1)	The ratio of open space to total area. Formula: ((1.5-1.6/1.5)*100%)	 ○ <= 1% ○ > 1 - 80% ○ > 80 - 90% ○ > 90 - 95% ● > 95%
1.9(SI.2)	Total area on campus covered in forest vegetation (please provide total area in square meters)	 ○ <= 2% ○ > 2 - 9% ○ > 9 - 22% ○ > 22 - 35% ● > 35%: 2427374 m²
1.10(SI.3)	Total area on campus covered in planted vegetation (please provide total area in square meters)	 ○ <= 10% ○ > 10 - 20% ○ > 20 - 30% ○ > 30 - 40% ● > 40%: 2699179 m²
1.11(SI.4)	Total area on campus for water absorption besided forest and planted vegetation (please provide total area in square meters)	$\bigcirc <= 2\%$ $\bigcirc > 2 - 10\%$: 218086 m ² $\bigcirc > 10 - 20\%$ $\bigcirc > 20 - 30\%$ $\bigcirc > 30\%$
1.12()	Total number of regular students (part time and full time)	41141
1.13()	Total number of online students (part time and full time)	0

1.14()	Total number of academic and administrative staff	3827
1.15(SI.5)	The total open space area divided by total campus population. Formula: ((1.5-1.6)/(1.12+1.14))	$ \bigcirc <= 10 \text{ m}^2 \\ \bigcirc > 10 - 20 \text{ m}^2 \\ \bigcirc > 20 - 40 \text{ m}^2 \\ \bigcirc > 40 - 70 \text{ m}^2 \\ \circledcirc > 70 \text{ m}^2 $
1.16()	Total university's budget (in US Dollars)	67532603.59
1.17()	University's budget for sustainability effort (in US Dollars)	4082778.55
1.18(SI.6)	Percentage of University's budget for sustainability effort within a year	 ○ <= 1% ○ > 1 - 3% ● > 3 - 10% ○ > 10 - 12% ○ > 12%
Energy a	nd Climate Change 085007396	6 AJONES LONGENS
Question		Answer /
2.1(EC.1)	Energy efficient appliances usage	 ○ < 1% ○ 1 - 25% ○ > 25 - 50% ● > 50 - 75% ○ > 75%
2.2()	Total campus smart building area (m ²)	93708
2.3(EC.2)	Smart Building implementation (percentage of the total floor area of smart building to the total all floors building area (smart and non-smart buildings area).	 ○ < 1% ○ 1% - 25% ○ > 25% - 50% ● > 50% - 75% ○ > 75%
2.4(EC.3)	Number of renewable energy sources in campus (solar power, bio diesel, wind power, etc)	 ○ None ○ 1 source ● 2 sources ○ 3 sources ○ > 3 sources
2.5()	Please specify renewable energy sources in campus and provide capacity produced in kilowatt hour	 □ Not Applicable □ Bio Diesel □ Clean Biomass ⊠ Solar Power: 1530000 kWh ⊠ Wind Power: 900 kWh □ Geothermal □ Hydropower □ Combine Heat and Power
2.6()	Electricity usage per year (in kilo watt hour)	26793832
2.7(EC.4)	The total electricity usage divided by total campus population (kWh per person). Formula: (2.6) / (1.12+1.14)	 ○ >= 2424 kWh ○ < 2424 - 1535 kWh ○ < 1535 - 633 kWh ● < 633 - 279 kWh ○ < 279 kWh
2.8(EC.5)	The ratio of renewable energy production divided by total energy usage per year	 ● <= 0.5% ○ > 0.5 - 1% ○ > 1 - 2% ○ > 2 - 25% ○ > 25%
2.9(EC.6)	Elements of green building implementation as reflected in all construction and renovation policies	 ○ None ○ 1 element ○ 2 elements ● 3 elements ○ > 3 elements

2.10(EC.7)	Greenhouse gas emission reduction program	 None (reduction program is needed, but nothing has been done) Program in preparation (e.g. feasibility study and promotion) Program(s) aims to reduce one out of three scopes emissions (Scope 1 or 2 or 3) Program(s) aims to reduce two out of three scopes emissions (Scope 1 and 2 or Scope 1 and 3 or Scope 2 and 3) Program(s) aims to reduce all three scopes emissions (Scope 1, 2 and 3)
2.11()	emission in the last 12 months, in metric tons)	23365
2.12(EC.8)	The total carbon footprint divided by total campus population (metric tons per person). Formula: (2.11)/(1.12+1.14)	 ○ >= 2.05 metric ton ○ < 2.05 - 1.11 metric ton ○ < 1.11 - 0.42 metric ton ◎ < 0.42 - 0.10 metric ton ○ < 0.10 metric ton
Waste	093-5096887 Hunghanbar 25000	
Question		Answer
3.1(WS.1)	Recycling program for university waste	 ○ Not Applicable ○ Partial (1% - 25% of waste) ◎ Partial (> 25% - 50% of waste) ○ Partial (> 50% - 75% of waste) ○ Extensive (> 75% waste)
3.2(WS.2)	Program to reduce the use of paper and plastic on campus	 Not applicable. If there is no program in your university. 1 program 2 programs 3 programs more than 3 programs
3.3(WS.3)	Organic waste treatment	 Open dumping Partial (1% - 25% of treated) Partial (> 25% - 50% of treated) Partial (> 50% - 75% of treated) Extensive (> 75% treated)
3.4(WS.4)	Inorganic waste treatment	 ○ Burned in the open ○ Partial (1% - 25% of treated) ◎ Partial (> 25% - 50% of treated) ○ Partial (> 50% - 75% of treated) ○ Extensive (> 75% treated)
3.5(WS.5)	Toxic waste treatment	 Not Managed Partial (1% - 25% of treated) Partial (> 25% - 50% of treated) Partial (> 50% - 75% of treated) Extensive (> 75% treated)
3.6(WS.6)	Sewage disposal	 O Untreated to waterways O Treated conventionally Treated technically for reuse O Treatment for down cycling O Treatment for up cycling
Water	093-5096887 200 And An Arid 1995 121	14A.
Question		Answer
4.1(WR.1)	Water conservation program implementation	 ○ None (Conservation program is needed, but nothing has been done) ○ Program in preparation (e.g. feasibility study and promotion) ● 1 - 25% implemented at early stage (e.g. measurement of potential surface runoff volume) ○ > 25 - 50% water conserved ○ > 50% water conserved
4.2(WR.2)	Water recycling program implementation	 ○ None (Water recycling program is needed, but nothing has been done) ○ Program in preparation (e.g. feasibility study and promotion) ● 1 - 25% Implemented at early stage (e.g. measurement of waste water) ○ > 25 - 50% water recycled ○ > 50% water recycled

4.3(WR.3)	Water efficient appliance usage	 None (Water efficient appliances is needed, but nothing has been done) Program in preparation (e.g. feasibility study and promotion) 1 - 25% of water efficient appliances installed > 25 - 50% of water efficient appliances installed > 50% of water efficient appliances installed
4.4(WR.4)	Treated water consumed	 ○ None ○ 1% - 25% treated water consumed ○ > 25% - 50% treated water consumed ● > 50% - 75% treated water consumed ○ > 75% treated water consumed
Transportation 082-2608987 puters		
Question		Answer
5.1()	Number of cars actively used and managed by University	190
5.2()	Number of cars entering the university daily	2423
5.3()	Number of motorcycles entering the university daily	7079
5.4(TR.1)	The total number of vehicles (cars and motorcycles) divided by total campus population. Formula: (5.1+5.2+5.3)/(1.12+1.14)	 ○ >=1 ○ < 1 - 0.5 ◎ < 0.5 - 0.125 ○ < 0.125 - 0.045 ○ < 0.045
5.5(TR.2)	Shuttle service	 Shuttle service is possible but not provided by university Shuttle service is provided (by university or other parties) and regular but not free Shuttle service is provided (by university or other parties) and the university contributes a part of the cost. Shuttle service is provided by university, regular, and free Shuttle service is provided by university, regular, and free Shuttle service is provided by university, regular, and zero emission. Or shuttle use is not possible (not applicable)
5.6()	Number of shuttles operated in your university	7
5.7()	Average number of passengers of each shuttle	424
5.8()	Total trips of shuttle services each day	147
5.9(TR.3)	Zero Emission Vehicles (ZEV) policy on campus	 Zero Emission Vehicles are not available Zero Emission Vehicles use is not possible or practical Zero Emission Vehicles are available, but not provided by university Zero Emission Vehicles are available, and provided by university and charged Zero Emission Vehicles are available, and provided by university and charged Zero Emission Vehicles are available, and provided by university for free
5.10()	Average number of Zero Emission Vehicles (e.g. bicycles, cano, snowboard, electric car, etc.) on campus per day	550
5.11(TR.4)	The total number of Zero Emission Vehicles (ZEV) divided by total campus population. Formula: (5.10)/(1.12+1.14)	$\bigcirc <= 0.002 \\ \bigcirc > 0.002 - 0.004 \\ \bigcirc > 0.004 - 0.008 \\ \circledcirc > 0.008 - 0.02 \\ \bigcirc > 0.02 \\ \end{vmatrix}$
5.12()	Total parking area (m²)	15322
5.13(TR.5)	Ratio of parking area to total campus area. Formula: ((5.12/1.5) x 100%)	 ○ > 11% ○ < 11 - 7% ○ < 7 - 4% ○ < 4 - 1% ● < 1%
5.14(TR.6)	Transportation program designed to limit or decrease the parking area on campus for the last 3 years (from 2016 to 2018)	 Not Applicable Program in preparation (e.g. feasibility study and promotion) Less than 10% decrease Between 10% - 30% decrease Program resulting in more than 30% decrease in parking or parking is restricted

5.15(TR.7)	Number of transportation initiatives to decrease private vehicles on campus (e.g. car sharing, charging high parking fees, metro / tram / bus services and etc)	 Not Applicable 1 initiative 2 initiatives 3 initiatives > 3 initiatives
5.16(TR.8)	Pedestrian path policy on campus	 Pedestrian paths are not applicable Pedestrian paths are available Pedestrian paths are available, and design for safety Pedestrian paths are available, designed for safety and convenience Pedestrian paths are available, designed for safety, convenience, and in some parts provided with disabled-friendly features
5.17()	Approximate daily travel distance of a vehicle inside campus only (in Kilometers)	4360
Education	n and Researc 087-462-4945 2.7	ร. กรลักษณ์ สรีบรรณสาร.
Question	1	Answer
6.1()	Number of courses/subjects related to sustainability offered	62
6.2()	Total number of courses/subjects offered	100
6.3(ED.1)	The ratio of sustainability courses to total courses/subjects	 ○ <= 1% ○ > 1 - 5% ○ > 5 - 10% ○ > 10 - 20% ● > 20%
6.4()	Total research funds dedicated to sustainability research (in US Dollars) (average per annum over the last 3 years).	541182
6.5()	Total research funds (in US Dollars) (average per annum over the last 3 years).	638576
6.6(ED.2)	The ratio of sustainability research funding to total research funding	$\bigcirc <= 1\% \\ \bigcirc > 1 - 8\% \\ \bigcirc > 8 - 20\% \\ \bigcirc > 20 - 40\% \\ @> 40\% \\$
6.7(ED.3)	Number of scholarly publications on sustainability published. (average annualy for the past 3 years)	○ 0 ○ 1 - 20 ○ 21 - 83 ● 84 - 300 ○ > 300
6.8(ED.4)	Number of events related to sustainability. (average annualy for the past 3 years)	○ 0 ○ 1 - 4 ◎ 5 - 17 ○ 18 - 47 ○ > 47
6.9(ED.5)	Number of student organizations related to sustainability	○ 0 ○ 1 - 2 ○ 3 - 4 ◎ 5 - 10 ○ > 10
6.10(ED.6)	University-run sustainability website	 Not available Website in progress or under construction Website is available and accessible Website is available, accessible, and updated occasionally Website is available, accessible, and updated regularly
6.11()	Sustainability website address (URL) if available	http://green.msu.ac.th
6.12(ED.7)	Sustainability report	 Not available Sustainability report is in preparation Sustainability report is available and accessible Sustainability report is available, accessible and updated occasionally Sustainability report is available, accessible and updated annually