Codebook

Transition to Clean Energy Enterprise Survey- Tunisia 2023

Transition to Clean Energy Enterprise Survey

ECONOMIC RESEARCH FORUM

منتدى البحوث الاقتصادية

OPEN ACCESS MICRO DATA INITIATIVE (OAMDI)

for the Arab Countries, Iran and Turkey

Variable name	Variable label	Ranges & States	Universe	Notes
Variables of Enterprises' Adoption of Renewable Energy Phone Survey				
Identifiers				
country	Country	Categorical 788= Tunisia	All	
serial	Unique firm identifier within country	Numeric	All	can be used for within country analysis
firmid	Unique firm identifier - between countries	String	All	can be used if countries are combined
Demographics				
cor5	How many workers are currently working in your firm including yourself?	Categorical	All	
resp	What is your role in the business?	Categorical	All	
tn_cor7	In which governorate is your business located?	Categorical	All	
cor8	Is the head office of this establishment located in Urban/Rural?	(1) Urban, (2) Rural	All	
Weights				
wfinal	Weight	Numeric	All	
Result of call				
cor2_1	Result of 1st call	Categorical	All	
date_1	Date of 1st call	Numeric	All	
time_1	Time of 1st call	String	All	
cor2_2	Result of 2nd call	Categorical	All	
date_2	Date of 2nd call	Numeric	All	
time_2	Time of 2nd call	String	All	
cor2_3	Result of 3rd call	Categorical	All	
date_3	Date of 3rd call	Numeric	All	
time_3	Time of 3rd call	String	All	
Consent				
cor3	Do you agree to participate in this survey?	1 (Yes), 2 (No)	All	
cor4	Do you agree to be recorded for quality control purposes?	1 (Yes), 2 (No)	All	

	Firm Characteristics			
cor6	What is the establishment's main sector of operation?	Categorical	All	
cor6_oth	cor6_other(specify)	String	If cor6 = 15 "Other"	
tn_cor9	Who are the owners/ Top Managers of this establishment?	Categorical	All	
cor9_oth	cor9_other(specify)	String	If tn_cor9 = 4 "Other"	
cor10	Is the establishment's premises owned or rented	Categorical	All	
cor10_oth	cor10_other(specify)	String	If cor10 = 3 "Other"	
cor11	In what year did your establishment begin operations?	Integer	All	
cor12	What percentage is owned by females?	Integer	All	
cor13	How many years of experience working in this sector does the Top Manager have?	Integer	All	
cor14	Is the Top Manager Male or Female	1 (MALE), 2 (FEMALE)	All	
cor15	How old is top manager?	Categorical	All	
tn_cor16	What is the last educational level that the top manager completed successfully?	Categorical	All	
COR16_2_1	the owner/general manager has the ability to recognize market opportunities	1 (Yes), 2 (No)	All	
COR16_2_2	Does the owner/general manager have the ability to innovate by creating products	1 (Yes), 2 (No)	All	
COR16_2_3	Does the owner/general manager have the ability to make crucial business decisio	1 (Yes), 2 (No)	All	
COR16_2_4	Does the owner/general manager have the ability to identify and manage the risks	1 (Yes), 2 (No)	All	
COR16_2_5	Does he have the ability to manage a team effectively to achieve the firm's obje	1 (Yes), 2 (No)	All	
cor17	On average, what is the share of Highly educated workers in the total workforce	Categorical	All	
tn_cor18_0	Does the establishment have a tax registration (formal registration)?	Categorical	All	
cor18	In what year was this establishment formally (Taxes Registration) registered	Integer	If tn_cor18_0 = 1 "YES"	
cor19	Does this establishment have an internationally recognized quality certification	Categorical	All	

	Firm's Labor			
emp1	How many workers in total does this establishment have including yourself?	Integer	All	
emp2	How many workers are between 18-29 years old? including the top manager	Integer	If emp1 > 1	
emp3_1	How many full-time individuals are working in this establishment?(Total)	Integer	If emp1 > 1	
emp3_1_1	How many full-time individuals are working in this establishment?(Females)	Integer	If emp1 > 1	
emp3_2	How many part-time workers?(Total)	Integer	If emp1 > 1	
emp3_2_2	How many part-time workers?(Females)	Integer	If emp1 > 1	
emp4	How many full-time production workers in this establishment?	Integer	If emp1 > 1 & (cor6 = 2 or 3 or 4 or 5 or 6 or other "Manufacturing")	
emp4_1	How many full-time production workers in this establishment?(Females)	Integer	If emp1 > 1 & (cor6 = 2 or 3 or 4 or 5 or 6 or other "Manufacturing")	
emp6	Have any of your employees/managers been trained in: energy saving or ISO certif	1 (Yes), 2 (No)	If emp1 > 1	
	Firm's Sales & Supplies			
fir1_0	I am aware of my competitors	Categorical	All	
fir2_0	Competition in my field is less intense	Categorical	All	
fir3_0	Did the firm export in [2022]?	Categorical	All	
fir3	What was the share of exports over sales in [2022]?	Integer	If fir3_0 = 1 "Yes"	
	Firm's Present Situation			
l4	Is Access to financing / credit a problem?	1 (Yes), 2 (No)	All	
	Financial inclusion			
l5	Do you have internet access in your enterprise?	1 (Yes), 2 (No)	All	
l11	Do you sell/buy any firm products online?	1 (Yes), 2 (No)	All	

	Connection to the grid			
tn_g6	In the last month, how much did the establishment spend on electricity? (in TND)	Integer	All	
g7	What was that as a share of your establishment operation cost (in percentage)	Integer	All	
g8_1	What are the worst months for service from the grid? January	0 "Not Mentioned", 1 "Mentioned"	All	
g8_2	What are the worst months for service from the grid? February	0 "Not Mentioned", 1 "Mentioned"	All	
g8_3	What are the worst months for service from the grid? March	0 "Not Mentioned", 1 "Mentioned"	All	
g8_4	What are the worst months for service from the grid? April	0 "Not Mentioned", 1 "Mentioned"	All	
g8_5	What are the worst months for service from the grid? May	0 "Not Mentioned", 1 "Mentioned"	All	
g8_6	What are the worst months for service from the grid? June	0 "Not Mentioned", 1 "Mentioned"	All	
g8_7	What are the worst months for service from the grid? July	0 "Not Mentioned", 1 "Mentioned"	All	
g8_8	What are the worst months for service from the grid? August	0 "Not Mentioned", 1 "Mentioned"	All	
g8_9	What are the worst months for service from the grid? September	0 "Not Mentioned", 1 "Mentioned"	All	
g8_10	What are the worst months for service from the grid? October	0 "Not Mentioned", 1 "Mentioned"	All	
g8_11	What are the worst months for service from the grid? November	0 "Not Mentioned", 1 "Mentioned"	All	
g8_12	What are the worst months for service from the grid? December	0 "Not Mentioned", 1 "Mentioned"	All	
g8_13	What are the worst months for service from the grid? All the months are the same	0 "Not Mentioned", 1 "Mentioned"	All	
g9	How many hours of electricity do you use in a day from the grid?	Integer	All	
g10	In a typical month, how many outages/blackouts of the grid happen?	Categorical	All	

g11	On average , what is the total duration of all the outages/blackouts?	Integer	If g10 = 1 "Daily " OR 2 "Once/Twice a Week" OR 3 "Once/Twice a Month"	
g13	What is your main back-up source of electricity during outages from the grid?	Categorical	All	
g13_oth	g13_other(specify)	String	If g13 = 8 "Other"	
g14_1	During the outage what is the way the establishment was affected? Wasted product	0 "Not Mentioned", 1 "Mentioned"	All	
g14_2	During the outage what is the way the establishment was affected? Damage	0 "Not Mentioned", 1 "Mentioned"	All	
g14_3	During the outage what is the way the establishment was affected? Not Operating	0 "Not Mentioned", 1 "Mentioned"	All	
g14_4	During the outage what is the way the establishment was affected? Not Serving	0 "Not Mentioned", 1 "Mentioned"	All	
g14_5	During the outage what is the way the establishment was affected? No Problem	0 "Not Mentioned", 1 "Mentioned"	All	
g14_8	During the outage what is the way the establishment was affected? Other	0 "Not Mentioned", 1 "Mentioned"	All	
g14_oth	g14_8_other(specify)	String	If g14_8 = 1 "Mentioned"	
g15	in the last 12 months, Did any appliances get damaged due to voltage fluctuat?	Categorical	All	
g16	What is the most serious problem you experience with electricity from the grid?	Categorical	All	
g16_oth	g16_other(specify)	String	If g16 = 9 "Other"	
Electricity Other Sources				
o1	In the last 12 months, did the establishment use a generator?	1 (Yes), 2 (No)	All	
o2	In the last 12 months, did the establishment use any stored electricity?	1 (Yes), 2 (No)	All	

	Awareness of new energy sources			
aw1	Are you familiar with the term Clean Energy?	1 (Yes), 2 (No)	All	
aw2	Are you familiar with the term Renewable energy?	1 (Yes), 2 (No)	All	
aw3	Are you familiar with the following terms: Energy intensity	1 (Yes), 2 (No)	All	
aw4	Are you familiar with the following terms: Energy transition	1 (Yes), 2 (No)	All	
aw5	Are you familiar with the following terms: Energy efficiency	1 (Yes), 2 (No)	All	
aw6	Are you familiar with the following terms: Energy saving	1 (Yes), 2 (No)	All	
aw21	Are you familiar with the following benefits of clean energy : Reduction of carb	1 (Yes), 2 (No)	If aw1 = 1 "Yes"	
aw22	Are you familiar with the following benefits of clean energy : Air quality impro	1 (Yes), 2 (No)	If aw1 = 1 "Yes"	
aw23	Are you familiar with the following benefits of clean energy : Energy independen	1 (Yes), 2 (No)	If aw1 = 1 "Yes"	
	Willingness to pay for a solar PV system			
w1	Have you personally considered using clean energies for your business?	Categorical	All	
w2	If you employ renewables, do you pay any tariffs on the final product?	1 (Yes), 2 (No)	If w1 = 3 "I am using it"	
w3	On how many monthly installments the establishment accept the offer?	Categorical	All	
w4	Why are you not willing to pay this amount?	Categorical	If w3 = 4 "I won't accept"	
w4_oth	w4_other(specify)	String	If w4 = 6 "Other"	
	TAM-UTAUT			
tam1	Adopting renewable energy technologies would improve our energy efficiency	Categorical	All	
tam2	The use of renewable energy technologies would enhance our daily operations	Categorical	All	
tam3	Renewable energy technologies would make a positive impact on the environment	Categorical	All	
tam4	Renewable energy technologies would reduce our energy costs	Categorical	All	
tam5	Our staff finds renewable energy technologies easy to understand and operate	Categorical	All	
tam6	The installation and maintenance of renewable energy techn. seem hassle-free	Categorical	All	

tam6_2	The transition to renewable energy techn. would be smooth for our organization	Categorical	All	
tam6_3	The training required for our staff to use renewable energy techn. is minimal	Categorical	All	
tam7	Recommendations would encourage us to adopt renewable energy technologies.	Categorical	All	
tam8	Media coverage on renewable energy play a role in shaping our perceptions	Categorical	All	
tam9	Government incentives and policies that support the adoption of renewable energy	Categorical	All	
tam9_2	Our stakeholders express a preference for companies adopting renewable energies	Categorical	All	
tam10	We have access to the necessary infrastructure to adopt renewable energy tech.	Categorical	All	
tam11	The cost of implementing renewable energy tech. is within our financial means	Categorical	All	
tam12	We have the technical knowledge required to utilize renewable energy techn.	Categorical	All	
tam13	We're aware of government policies that support renewable energy tech. adoption	Categorical	All	
tam15	We plan to invest in renewable energy technologies	Categorical	All	
tam16	We are motivated to learn more about renewable energies and their benefits	Categorical	All	
tam17	Our company intends to adopt renewable energy technologies in the near future	Categorical	All	
tam18	We are exploring options to integrate renewable energy techn. into our operation	Categorical	All	
Business Environment				
m1	To what extent are you satisfied with the official electricity service?	Categorical	All	
m2	To what extent are you satisfied with the bill based on the service you receive?	Categorical	All	

	Access to information			
m3	Do you have access to weather early warning information?	1 (Yes), 2 (No)	All	
m4	Do you have access to weather early warning information?	1 (Yes), 2 (No)	All	
m5	Do you have access to information regarding electricity price changes?	1 (Yes), 2 (No)	All	
m6	Do you have access to information regarding additional/backup production techn.	1 (Yes), 2 (No)	All	
m8_1	Do you know how much a 20 kW solar PV system costs?	Categorical	All	
m8_2	Please give us an estimate of how much you think a 20 kW solar PV system costs.	Integer	If m8_1 = 1 "Yes"	
m9_1	What information would be useful? electricity outages schedule	0 "Not Mentioned", 1 "Mentioned"	All	
m9_2	What information would be useful? changes in fuel prices	0 "Not Mentioned", 1 "Mentioned"	All	
m9_3	What information would be useful? changes in electricity tariffs	0 "Not Mentioned", 1 "Mentioned"	All	
m9_4	What information would be useful? prices for back-up generation	0 "Not Mentioned", 1 "Mentioned"	All	
m9_5	What information would be useful? financing options	0 "Not Mentioned", 1 "Mentioned"	All	
m9_6	What information would be useful? scheduled maintainance for the grid	0 "Not Mentioned", 1 "Mentioned"	All	
m9_7	What information would be useful? Other (specify)	0 "Not Mentioned", 1 "Mentioned"	All	
m9_oth	m9_other(specify)	String	If m9_7 = 1 "Mentioned"	
	Expectations from the government			
m11	Should the cost of electricity be subsidised?	Categorical	All	
m12	If yes, should the subsidy be universal or targetted?	Categorical	If m11 =1 "Yes"	
m13	Should electricity from renewable sources be subsidised?	Categorical	All	
	Post-materialism index			
m16	Which one of these do you consider the most important? | First list	Categorical	All	
m17	Which one of these do you consider the most important? | Second list	Categorical	All	
m18	Which one of these do you consider the most important? | Third list	Categorical	All	
	Firm's Revenue			
tn_fir4	What category was the establishment's total annual revenue in 2022 (in TND)	Categorical	All	