



Codebook

Transition to Clean Energy Enterprise Survey- Morocco 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*

Variables of Enterprises' Adoption of Renewable Energy Phone Survey				
Variable name	Variable label	Ranges & States	Universe	Notes
Identifiers				
country	Country	Categorical 504= Morocco	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	
ma_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"	
ma_cor9	Who are the owners/ Top Managers of this establishment?	Categorical	All	
cor9_oth	cor9_other(specify)	String	If ma_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	
ma_cor16	What is the last educational level that the top manager completed successfully?	Categorical	All	
cor17	On average, what is the share of Highly educated workers in the total workforce	Categorical	All	
ma_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 ma_cor18_0 = 1 "YES"	

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")	
emp5_1	How many full-time workers in this establishment were in highly skilled jobs	Integer	If emp1 > 1	
emp5_2	How many full-time workers in this establishment were in Semi skilled jobs	Integer	If emp1 > 1	
emp5_3	How many full-time workers in this establishment were in Low skilled jobs	Integer	If emp1 > 1	
Firm's Sales & Supplies				
fir1_1	What percentage of this establishment's purchases of supplies were domestic?	Integer	All	

fir1_2	What percentage of this establishment's purchases of supplies were foreign?	Integer	All	
fir2	Were any of those material inputs or supplies imported directly?	Categorical	if fir1_2 > 0	
fir3	What was the share of exports over sales in [2022]?	Integer	All	
Firm's Present Situation				
l1	Having a checking or savings account?	Categorical	All	
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	
l6	Do you use any mobile banking services?	1 (Yes), 2 (No)	All	
l9	Do you use mobile money to send/receive money?	1 (Yes), 2 (No)	All	
l11	Do you sell/buy any firm products online?	1 (Yes), 2 (No)	All	
l12_1	How do you receive payment for online sales? Mobile banking app	0 "Not Mentioned", 1 "Mentioned"	If l11 = 1 "Yes"	
l12_2	How do you receive payment for online sales? E-wallets	0 "Not Mentioned", 1 "Mentioned"	If l11 = 1 "Yes"	
l12_3	How do you receive payment for online sales? Cash	0 "Not Mentioned", 1 "Mentioned"	If l11 = 1 "Yes"	
l12_4	How do you receive payment for online sales? Other (specify)	0 "Not Mentioned", 1 "Mentioned"	If l11 = 1 "Yes"	
l12_oth	l12_4_other(specify)	String	If l11 = 1 "Yes" and l12_4 = 1 "Mentioned"	
Connection to the grid				
g1	Is this establishment connected to the grid?	1 (Yes), 2 (No)	All	
ma_g2	How much did the establishment pay for the grid connection fees? (in MAD)	Integer	If g1 = 1 "Yes"	

g3	Who do you currently pay for your electricity service from the grid?	Categorical	If g1 = 1 "Yes"	
g3_oth	g3_other(specify)	String	If g1 = 1 "Yes" and g3 = 8	
g4_1	How do you make your electricity bill payment? Bill collector	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g4_2	How do you make your electricity bill payment? E-wallets	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g4_3	How do you make your electricity bill payment? Mobile payments app	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g4_4	How do you make your electricity bill payment? Pay at the utility office	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g4_5	How do you make your electricity bill payment? Pay at the bank/post office	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g4_6	How do you make your electricity bill payment? Other (specify)	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g4_oth	g4_6_other(specify)	String	If g1 = 1 "Yes" and g4_6 = 1 "Mentioned"	
g5	How often can you pay your electricity bill?	Categorical	If g1 = 1 "Yes"	
ma_g6	In the last month, how much did the establishment spend on electricity? (in MAD)	Integer	If g1 = 1 "Yes"	
g7	What was the percentage of that cost as a share of your establishment operation	Integer	If g1 = 1 "Yes"	
g8_1	What are the worst months for service from the grid? January	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	

g8_2	What are the worst months for service from the grid? February	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_3	What are the worst months for service from the grid? March	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_4	What are the worst months for service from the grid? April	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_5	What are the worst months for service from the grid? May	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_6	What are the worst months for service from the grid? June	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_7	What are the worst months for service from the grid? July	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_8	What are the worst months for service from the grid? August	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_9	What are the worst months for service from the grid? September	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_10	What are the worst months for service from the grid? October	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_11	What are the worst months for service from the grid? November	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_12	What are the worst months for service from the grid? December	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g8_13	What are the worst months for service from the grid? All the months are the same	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	

g9	How many hours of electricity do you use in a day from the grid?	Integer	If g1 = 1 "Yes"	
g10	In a typical month, how many outages/blackouts of the grid happen?	Categorical	If g1 = 1 "Yes"	
g11	On average , what is the total duration of all the outages/blackouts?	Integer	If g1 = 1 "Yes" and (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	If g1 = 1 "Yes"	
g13_oth	g13_other(specify)	String	If g1 = 1 "Yes" and g13 = 8 "Other"	
g14_1	During the outage what is the way the establishment was affected? Wasted product	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g14_2	During the outage what is the way the establishment was affected? Damage	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g14_3	During the outage what is the way the establishment was affected? Not Operating	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g14_4	During the outage what is the way the establishment was affected? Not Serving	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g14_5	During the outage what is the way the establishment was affected? No Problem	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	
g14_8	During the outage what is the way the establishment was affected? Other	0 "Not Mentioned", 1 "Mentioned"	If g1 = 1 "Yes"	

g14_oth	g14_8_other(specify)	String	If g1 = 1 "Yes" and g14_8 = 1 "Other"	
g15	in the last 12 months, Did any appliances get damaged due to voltage fluctuat?	Categorical		
g16	What is the most serious problem you experience with electricity from the grid?	Categorical	If g1 = 1 "Yes"	
g16_oth	g16_other(specify)	String	If g1 = 1 "Yes" and 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	
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	
tam7	Recommendations would encourage us to adopt renewable energy technologies.	Categorical	All	
tam9	Government incentives and policies that support the adoption of renewable energy	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	
tam13	We're aware of government policies that support renewable energy tech. adoption	Categorical	All	
tam14	The availability of renewable energy tech. providers in our area is sufficient	Categorical	All	
tam15	We plan to invest in renewable energy technologies	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				
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	
m14_1	How do you hear about the government's grid expansion projects? Newspapers	0 "Not Mentioned", 1 "Mentioned"	All	
m14_2	How do you hear about the government's grid expansion projects? Radio	0 "Not Mentioned", 1 "Mentioned"	All	
m14_3	How do you hear about the government's grid expansion projects? TV	0 "Not Mentioned", 1 "Mentioned"	All	

m14_4	How do you hear about the government's grid expansion projects? Billboards	0 "Not Mentioned", 1 "Mentioned"	All	
m14_5	How do you hear about the government's grid expansion projects? Whatsapp	0 "Not Mentioned", 1 "Mentioned"	All	
m14_6	How do you hear about the government's grid expansion projects? Word of mouth	0 "Not Mentioned", 1 "Mentioned"	All	
m14_7	How do you hear about the government's grid expansion projects? Community meeting	0 "Not Mentioned", 1 "Mentioned"	All	
m14_8	How do you hear about the government's grid expansion projects? Place of worship	0 "Not Mentioned", 1 "Mentioned"	All	
m14_9	How do you hear about the government's grid expansion projects? Other	0 "Not Mentioned", 1 "Mentioned"	All	
m14_10	I never hear of the government's projects	0 "Not Mentioned", 1 "Mentioned"	All	
m14_oth	m14_other(specify)	String	If m14_9 = 1 "Mentioned"	
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				
ma_fir4	What category was the establishment's total annual revenue in 2022 (in MAD)	Categorical	All	