```
 >Warning # 849 in column 23.  Text: en_NG
>The LOCALE subcommand of the SET command has an invalid parameter.  It cou
ld
>not be mapped to a valid backend locale.

GET DATA  /TYPE=TXT
  /FILE="C:\Users\6ukunmi\Downloads\complete_renewable_energy_dataset.csv"
  /DELCASE=LINE
  /DELIMITERS=","
  /ARRANGEMENT=DELIMITED
  /FIRSTCASE=2
  /IMPORTCASE=ALL
  /VARIABLES=
  Country A9
  Year F4.0
  EnergyType A10
  ProductionGWh 18X
  InstalledCapacityMW18X
  InvestmentsUSD F18.9
  Population F10.0
  GDP F18.5
  EnergyConsumption F18.13
  EnergyExports 18X
  EnergyImports 18X
  CO2Emissions F18.12
  RenewableEnergyJobsF6.0
  GovernmentPolicies1X
  RDExpenditure 18X
  RenewableEnergyTargets1X
  AverageAnnualTemperatureF20.16
  AnnualRainfall F18.14
  SolarIrradiance F18.14
  WindSpeed F19.16
  HydroPotential F19.16
  GeothermalPotentialF18.16
  BiomassAvailabilityF19.16
  EnergyStorageCapacityF18.16
  GridIntegrationCapability22X
  ElectricityPrices F20.16
  EnergySubsidies A18
  InternationalAidforRenewables A18
  PublicAwareness A20
```

```
  EnergyEfficiencyPrograms 1 X
  UrbanizationRate F18.16
  IndustrializationRate F18.16
  EnergyMarketLiberalization F1.0
  RenewableEnergyPatents F3.0
  EducationalLevel A20
  TechnologyTransferAgreements F1.0
  RenewableEnergyEducationPrograms F1.0
  LocalManufacturingCapacity A18
  ImportTariffsonEnergyEquipment A18
  ExportIncentivesforEnergyEquipment A20
  NaturalDisasters F1.0
  PoliticalStability A19
  CorruptionPerceptionIndex A19
  RegulatoryQuality A19
  RuleofLaw A19
  ControlofCorruption A19
  EconomicFreedomIndex A19
  EaseofDoingBusiness A19
  InnovationIndex A19
  NumberofResearchInstitutions F3.0
  NumberofRenewableEnergyConferences F2.0
  NumberofRenewableEnergyPublications F4.0
  EnergySectorWorkforce F6.0
  ProportionofEnergyfromRenewables A19
  PublicPrivatePartnershipsinEnergy F1.0
  RegionalRenewableEnergyCooperation F1.0.
CACHE.
EXECUTE.
DATASET NAME DataSet1 WINDOW=FRONT.
DESCRIPTIVES VARIABLES=InvestmentsUSD GDP CO2Emissions
  /STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptives

Notes

Output Created		17-JAN-2025 10:48:06
Comments		
Input	Data	C:\Users\6ukunmi\Downloads\complete_renewable_energy_dataset.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	2500
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=InvestmentsUSD GDP CO2Emissions /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

[DataSet1]

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
InvestmentsUSD	2500	5886994.473	9998292119	4956154670	2894788723
GDP	2500	5.60397E+10	1.99922E+14	1.01074E+14	5.78236E+13
CO2Emissions	2500	1124.768458	999816.5002	491218.4126	289783.7333
Valid N (listwise)	2500				

```
DESCRIPTIVES VARIABLES=InvestmentsUSD GDP CO2Emissions ProportionofEnergyfromRenewables
    UrbanizationRate
  /STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptives

Notes

Output Created		17-JAN-2025 10:49:03
Comments		
Input	Data	C:\Users\6ukunmi\Downloads\complete_renewable_energy_dataset.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	2500
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=InvestmentsUSD GDP CO2Emissions ProportionofEnergyfromRenewables UrbanizationRate /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.05

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
InvestmentsUSD	2500	5886994.473	9998292119	4956154670	2894788723
GDP	2500	5.60397E+10	1.99922E+14	1.01074E+14	5.78236E+13
CO2Emissions	2500	1124.768458	999816.5002	491218.4126	289783.7333
ProportionofEnergyfromRenewables	2500	0	100	49.75	28.924
UrbanizationRate	2500	.0672531664	99.95736550	48.94689897	28.74503196
Valid N (listwise)	2500				

```
CORRELATIONS
  /VARIABLES=ProportionofEnergyfromRenewables GDP RenewableEnergyJobs
  /PRINT=ONETAIL NOSIG
  /MISSING=PAIRWISE.
```

Correlations

Notes

Output Created		17-JAN-2025 10:50:13
Comments		
Input	Data	C:\Users\6ukunmi\Downloads\complete_renewable_energy_dataset.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	2500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=ProportionofEnergyfromRenewables GDP RenewableEnergyJobs /PRINT=ONETAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

Correlations

		ProportionofEnergyfromRenewables	GDP	RenewableEnergyJobs
ProportionofEnergyfromRenewables	Pearson Correlation	1	.001	-.006
	Sig. (1-tailed)		.487	.379
	N	2500	2500	2500
GDP	Pearson Correlation	.001	1	.034*
	Sig. (1-tailed)	.487		.043
	N	2500	2500	2500
RenewableEnergyJobs	Pearson Correlation	-.006	.034*	1
	Sig. (1-tailed)	.379	.043	
	N	2500	2500	2500

*. Correlation is significant at the 0.05 level (1-tailed).

```
REGRESSION
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA
 /CRITERIA=PIN(.05) POUT(.10)
```

```
  /NOORIGIN
  /DEPENDENT ProportionofEnergyfromRenewables
  /METHOD=ENTER InvestmentsUSD GDP CO2Emissions.
```

Regression

Notes

Output Created		17-JAN-2025 10:52:59
Comments		
Input	Data	C:\Users\6ukunmi\Downloads\complete_renewable_energy_dataset.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	2500
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ProportionofEnergyfromRenewables /METHOD=ENTER InvestmentsUSD GDP CO2Emissions.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.02
	Memory Required	3452 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	CO2Emissions, GDP, InvestmentsUSD[b]	.	Enter

a. Dependent Variable: ProportionofEnergyfromRenewables

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.017[a]	.000	-.001	28.938

a. Predictors: (Constant), CO2Emissions, GDP, InvestmentsUSD

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	583.016	3	194.339	.232	.874[b]
	Residual	2090119.243	2496	837.388		
	Total	2090702.259	2499			

a. Dependent Variable: ProportionofEnergyfromRenewables

b. Predictors: (Constant), CO2Emissions, GDP, InvestmentsUSD

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	48.613	1.862		26.103	.000
	InvestmentsUSD	6.361E-11	.000	.006	.318	.751
	GDP	5.158E-16	.000	.001	.051	.959
	CO2Emissions	1.565E-6	.000	.016	.783	.434

a. Dependent Variable: ProportionofEnergyfromRenewables

```
FACTOR
  /VARIABLES InvestmentsUSD GDP AverageAnnualTemperature AnnualRainfall Sol
arIrradiance WindSpeed
    HydroPotential GeothermalPotential
  /MISSING LISTWISE
```

```
  /ANALYSIS InvestmentsUSD GDP AverageAnnualTemperature AnnualRainfall Sola
rIrradiance WindSpeed
    HydroPotential GeothermalPotential
  /PRINT INITIAL EXTRACTION
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PC
  /ROTATION NOROTATE
  /METHOD=CORRELATION.
```

Factor Analysis

Notes

Output Created		17-JAN-2025 10:55:45
Comments		
Input	Data	C:\Users\6ukunmi\Downloads\complete_renewable_energy_dataset.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	2500
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES InvestmentsUSD GDP AverageAnnualTemperature AnnualRainfall SolarIrradiance WindSpeed HydroPotential GeothermalPotential /MISSING LISTWISE /ANALYSIS InvestmentsUSD GDP AverageAnnualTemperature AnnualRainfall SolarIrradiance WindSpeed HydroPotential GeothermalPotential /PRINT INITIAL EXTRACTION /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /ROTATION NOROTATE /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03
	Maximum Memory Required	9080 (8.867K) bytes

Communalities

	Initial	Extraction
InvestmentsUSD	1.000	.598
GDP	1.000	.604
AverageAnnualTemperature	1.000	.517
AnnualRainfall	1.000	.479
SolarIrradiance	1.000	.422
WindSpeed	1.000	.548
HydroPotential	1.000	.394
GeothermalPotential	1.000	.614

Extraction Method: Principal Component Analysis.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.072	13.406	13.406	1.072	13.406	13.406
2	1.043	13.038	26.444	1.043	13.038	26.444
3	1.035	12.932	39.377	1.035	12.932	39.377
4	1.024	12.802	52.179	1.024	12.802	52.179
5	.974	12.175	64.354			
6	.968	12.101	76.455			
7	.947	11.840	88.295			
8	.936	11.705	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component			
	1	2	3	4
InvestmentsUSD	.311	.417	-.457	-.345
GDP	.252	-.260	.687	-.026
AverageAnnualTemperature	.168	.623	.015	.318
AnnualRainfall	-.338	.325	.250	-.443
SolarIrradiance	.624	-.011	-.029	.177
WindSpeed	-.060	.532	.507	-.060
HydroPotential	.589	.014	.178	-.124
GeothermalPotential	-.174	.159	.031	.747

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

```
 * Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=GDP ProportionofEnergyfromRen
ewables Country
    MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: GDP=col(source(s), name("GDP"))
  DATA: ProportionofEnergyfromRenewables=col(source(s), name("ProportionofE
nergyfromRenewables"))
  DATA: Country=col(source(s), name("Country"), unit.category())
  GUIDE: axis(dim(1), label("GDP"))
  GUIDE: axis(dim(2), label("ProportionofEnergyfromRenewables"))
  GUIDE: legend(aesthetic(aesthetic.color.exterior), label("Country"))
  ELEMENT: point(position(GDP*ProportionofEnergyfromRenewables), color.exte
rior(Country))
END GPL.
```

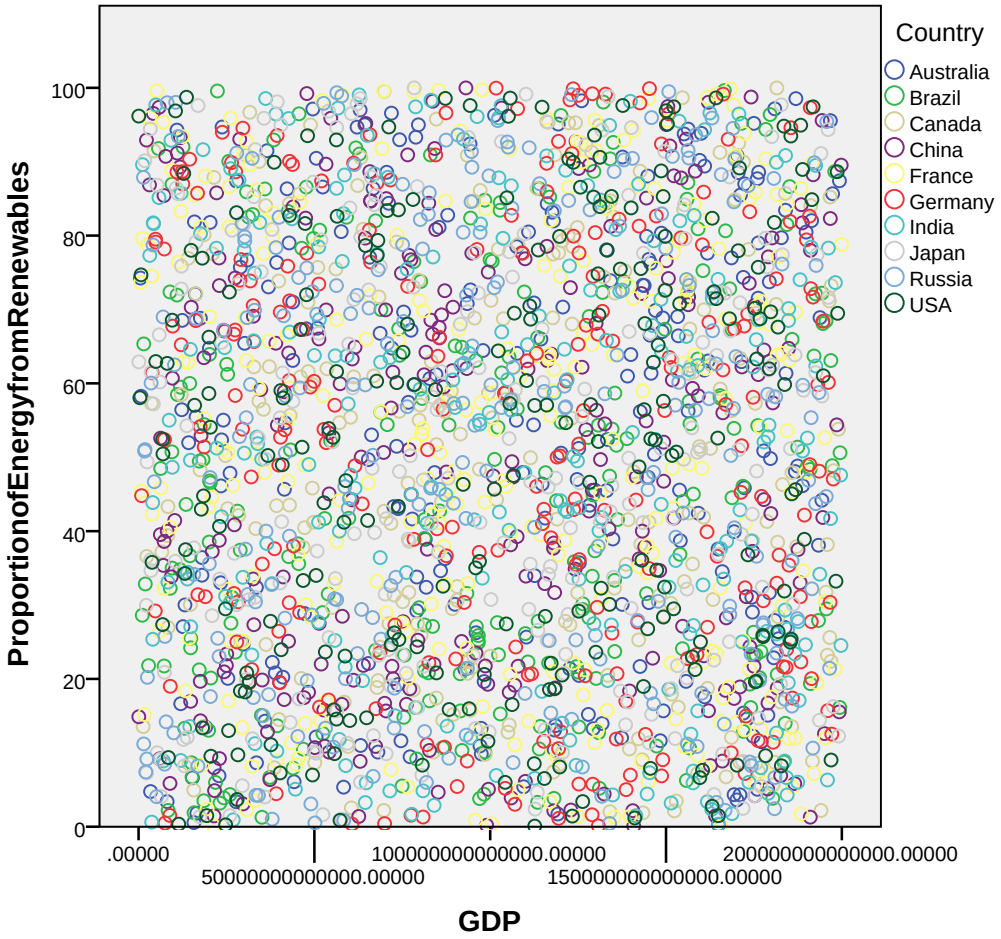
GGraph

Notes

Output Created		17-JAN-2025 11:01:40
Comments		
Input	Data	C:\Users\6ukunmi\Downloads\complete_renewable_energy_dataset.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	2500

Notes

Syntax		GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=GDP ProportionofEnergyfromRenewables Country MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource(id("graphdataset")) DATA: GDP=col(source(s), name("GDP")) DATA: ProportionofEnergyfromRenewables=col(source(s), name("ProportionofEnergyfromRenewables")) DATA: Country=col(source(s), name("Country"), unit.category()) GUIDE: axis(dim(1), label("GDP")) GUIDE: axis(dim(2), label("ProportionofEnergyfromRenewables")) GUIDE: legend(aesthetic(aesthetic.color.exterior), label("Country")) ELEMENT: point(position(GDP*ProportionofEnergyfromRenewables), color.exterior(Country)) END GPL.
Resources	Processor Time	00:00:02.09
	Elapsed Time	00:00:01.20



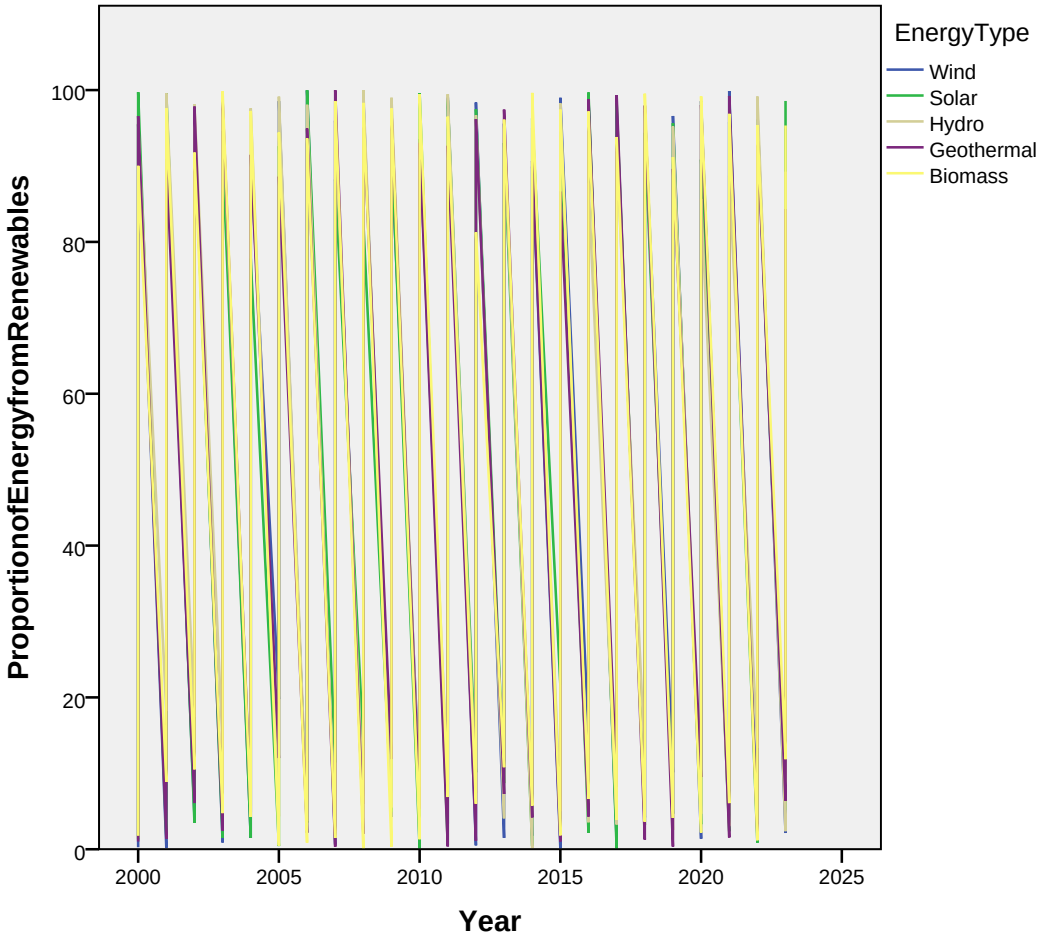

```
 * Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=Year ProportionofEnergyfromRe
newables EnergyType
    MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: Year=col(source(s), name("Year"))
  DATA: ProportionofEnergyfromRenewables=col(source(s), name("ProportionofE
nergyfromRenewables"))
  DATA: EnergyType=col(source(s), name("EnergyType"), unit.category())
  GUIDE: axis(dim(1), label("Year"))
  GUIDE: axis(dim(2), label("ProportionofEnergyfromRenewables"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("EnergyType"))
  SCALE: cat(aesthetic(aesthetic.color.interior), reverse())
  ELEMENT: line(position(Year*ProportionofEnergyfromRenewables), color.inte
rior(EnergyType),
    missing.wings())
```

```
END GPL.
```

GGraph

Notes

Output Created		17-JAN-2025 11:04:38
Comments		
Input	Data	C:\Users\6ukunmi\Downloads\complete_renewable_energy_dataset.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	2500
Syntax		GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=Year ProportionofEnergyfromRenewables EnergyType MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource(id("graphdataset")) DATA: Year=col(source(s), name("Year")) DATA: ProportionofEnergyfromRenewables=col(source(s), name("ProportionofEnergyfromRenewables")) DATA: EnergyType=col(source(s), name("EnergyType"), unit.category()) GUIDE: axis(dim(1), label("Year")) GUIDE: axis(dim(2), label("ProportionofEnergyfromRenewables")) GUIDE: legend(aesthetic(aesthetic.color.interior), label("EnergyType")) SCALE: cat(aesthetic(aesthetic.color.interior), reverse()) ELEMENT: line(position(Year*ProportionofEnergyfromRenewables), color.interior(EnergyType), missing.wings()) END GPL.
Resources	Processor Time	00:00:00.86
	Elapsed Time	00:00:00.37


EnergyType
Wind
Solar
Hydro
Geothermal
Biomass
ProportionofEnergyfromRenewables
100
80
60
40
20
0
2000
2005
2010
2015
2020
2025
Year