System of Environmental and Economic Accounting for Energy

SEEA-E

Annexes and Glossary

United Nations Statistics Division

DESA

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Annex 1. Main Tables

Chapters 3 to 6 of SEEA-E include a large number of tables of which many are characterised by being supplementary tables, which help explain concepts and show details of the SEEA-E accounts. In order to give a condensed presentation of the SEEA-E accounts this Annex presents what can be called the main or core tables of the System. Implementation of these tables ensures that a country has available consistent and comprehensive information on energy and its role in the economy. On the other hand, it is clear that not all tables may be equally relevant for all countries, and the suite of accounts and tables should therefore be seen as an illustration of the possibilities for doing comprehensive energy accounting. All tables are numbered using the same numbers as in the chapters. Thereby it is easy for the user to find the tables in the chapters and the corresponding explanation of the tables.

Table 3.3 Physical asset account for an energy resource

	Total	Of which		
	Known deposits	A. Commercial energy resources	B. Potential commercial energy resources	C. Non-commercial and other known deposits
	Million m^3			
Opening stocks	**257**	**203**	**7**	**47**
Changes due to transactions				
Acquisitions less disposals				
Increases in stocks				
Discoveries	33			33
Reappraisals (upwards)	3		3	
Decreases in stocks				
Extractions	- 20	- 20		
Reappraisals (downwards)	- 11	- 8		- 3
Other changes in stocks				
Catastrophic losses and uncompensated seizures				
Changes in classifications and structure				
Closing stocks	**262**	**175**	**10**	**77**

Table 3.4 Physical asset accounts for inventories of energy products

	1. Coal, coke,gas work gas and peat		2. Oil	3. Natural Gas	4. Electricity	5. Heat	6. Renewable fuels and waste	
	a) Coal, coke and peat	b) Gas work gas					a) Solid biomass and wastes	b) Liquid biofuels and biogas
	1000 Tonnes	1000 m^3	1000 Tonnes	1000 m^3	TWh	Terajoules	1000 Tonnes	1000 m^3
Opening stocks (LS)	1 899	20	5 336	2 004			45	
Changes due to transactions								
Changes in inventories (P52)	- 796		- 59	53			18	
Other changes in the volume								
Catastrophic losses and uncompensated seizures (K3 and K4)								
Other changes in inventories n.e.c. (K5)	99		- 14					
Changes in classifications (K6)								
Closing stocks (LE)	1 202	20	5 263	2 057			63	

Note. Codes in parenthesis refer to the SNA 2008 classification and coding structure
The gray are indicates that inventories of electricity and heat is not applicable

Table 4.2 SEEA-E monetary energy asset accounts

	Commercial Energy Resources
	1000 currency units
Opening stocks (LS)	**253**
Changes due to transactions	
Acquisitions less disposals (NP1)	0
Increases in stocks	
Discoveries (K11)	50
Reappraisals (upwards) (K12)	2
Decreases in stocks	
Depletion (K21)	-29
Reappraisals (downwards) (K22)	-6
Other changes in stocks	
Catastrophic losses (K3) and uncompensated seizures (K4)	
Changes in classifications and structure	
Revaluation	
Holding gains and losses (K7)	104
Closing stocks (LE)	**374**

Note. Codes in parenthesis refer to the SNA 2008 classification and coding structure (K1 divided into K12 and K13)

Table 4.12 SNA 2008 asset account for other assets[1)] owned by the mining and quarrying industry

	Total	AN11 Fixed assets	*Of which: AN1172 Mineral exploration and evaluation*	*Terminal costs (part of AN116)*	AN2 Non-produced non-financial assets [1)]	*Of which: AN22 Contracts, leases and licenses*
	Currency unit					
Opening stock	**68 987**	**54 967**	***43 900***		**14 020**	***14 020***
Total changes in assets	**11 514**	11 514	*4 008*			
Of which						
Gross fixed capital formation (P51g)	**5 399**	5 399	*3 027*			
Consumption of fixed capital (P51c)	**-1 117**	-1 117	*- 875*			
Acquisitions less disposals of non-produced assets (NP)	**300**	300	*413*			
Other changes in the volume of assets						
Revaluation						
Closing stock	**85 083**	**71 063**	***50 473***		**14 020**	***14 020***

1) Excludes commercial energy resources

Table 4.13 Split monetary asset account for energy resources by owner and extractor

	Total	**Extractor**	**Owner**
	1000 currency units		
Opening stocks (LS)	**253**	**75**	**178**
Changes due to transactions			
Acquisitions less disposals (NP1)			
Increases in stocks			
Discoveries (K11)	50	50	
Reappraisals (upwards) (K12)	2	2	
Decreases in stocks			
Depletion (K21)	-29	-29	
Reappraisals (downwards) (K22)	-6	-6	
Other changes in stocks			
Catastrophic losses (K3) and uncompensated seizures (K4)			
Changes in classifications and structure			
Other changes in volume n.e.c. (K5)		-7	7
Revaluation			
Holding gains and losses (K7)	104	40	64
Closing stocks (LE)	**374**	**125**	**249**

Table 5.1 Physical supply table for energy including breakdown by type of flow – Original units (mass and volume)

			Industries by ISIC						Total output	Imports		Total supply
			A	B	C	D	H	E-G, I-U		Total	*of which*	
			Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries			*Pur-chased by resi-dents abroad*	
To the economy	**Supply to other economic units**											
	1. Coal, coke, gas work gas and peat											
	a) Coal, coke and peat	1000 Tonnes								8 946		**8 946**
	b) Gas work gas	1000 m3				28			28			**28**
	2. Oil	1000 Tonnes		16 782	7 848				24 630	22 537	*13 800*	**47 166**
	3. Natural Gas 1)	1000 m3		9 344		9 341			18 685			**18 685**
	4. Electricity	TWh				45			45	6		**51**
	5. Heat	Terajoules				102			102			**102**
	6. Renewable fuels and waste											
	a) Solid biomass and wastes	1000 Tonnes	3 281		1 137				4 418	1 219		**5 637**
	b) Liquid biofuels and biogas	1000 m3										
	Production for own use, etc. 1)											
	1. Coal, coke, gas work gas and peat											
	a) Coal, coke and peat	1000 Tonnes										
	b) Gas work gas	1000 m3										
	2. Oil	1000 Tonnes			347				347			**347**
	3. Natural Gas	1000 m3		709					709			
	4. Electricity	TWh				3			3			**3**
	5. Heat	Terajoules				2			2			**2**
	6. Renewable fuels and waste											
	a) Solid biomass and wastes 1)	1000 Tonnes			3 569				3 569			**3 569**
	b) Liquid biofuels and biogas	1000 m3	13		7	66			86			**86**
To the environ-ment 2)	**Losses and returns to the env. 2)**											
	1. Coal, coke, gas work gas and peat											
	a) Coal, coke and peat	1000 Tonnes								90		**90**
	b) Gas work gas	1000 m3				1			1			**1**
	2. Oil	1000 Tonnes		57	43				99	51		**151**
	3. Natural Gas											
	Reinjection	1000 m3		821					821			**821**
	Flaring and venting	1000 m3		186					186			**186**
	Losses in distribution	1000 m3				3			3			**3**
	4. Electricity	TWh				2			2	1		**2**
	5. Heat	Terajoules				26			26			**26**
	6. Renewable fuels and waste											
	a) Solid biomass and wastes	1000 Tonnes			44				44	13		**57**
	b) Liquid biofuels and biogas	1000 m3				1			1			**1**

1) Includes also waste delivered from one economic unit to another without payment

2) Includes also energy lost due to thefts

Table 5.2 Physical use table for energy resources and transactions of energy products – Original units (mass and volume)

			Use												
			Intermediate Consumption, Industries by ISIC							Final consumtion, inventories and exports					Total use
			A	B	C	D	H	E-G, I-U	Total	Consumption by households	Changes in inventories	Exports		Total final consumption, inventories and exports	
			Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries	Total Industries			Total	*of which sold to non-residents on national territory*		
From the environment	**Energy resources (gross extraction)**														
	E.11 Natural gas	1000 m3		11 060					11 060						11 060
	Extraction for own use	1000 m3		*709*					*709*						*709*
	Reinjection	1000 m3		*821*					*821*						*821*
	Flaring and venting	1000 m3		*186*					*186*						*186*
	Extraction for distribution	1000 m3		*9 344*					*9 344*						*9 344*
	E.12 + E.13 Crude Oil and natural gas liquids, Oil shale	Tonnes		16 839					*16 839*						16 839
	E.14 Natural bitumen, extra heavy oil, shale oil, sand oil and others	Tonnes													
	E.21 Coal	Tonnes													
	E.22 Peat	Tonnes													
	E.23 Uranium and thorium ores	Tonnes													
	Total energy resources			**27 899**					**27 899**						**27 899**
Within the economy	**Use of energy received from other economic units**														
	1. Coal, coke, gas work gas and peat														
	a) Coal, coke and peat	1000 Tonnes	81	5	623	8 943			9 652	21	- 796	70		- 706	8 946
	b) Gas work gas	1000 m3			1			2	3	25				25	28
	2. Oil	1000 Tonnes	799	38	8 489	398	15 222	1 149	26 095	2 346	*- 59*	*18 784*	*723*	21 071	47 166
	3. Natural Gas	1000 m3	51	55	979	11 428	12	306	12 830	711	*53*	*5 091*		5 856	18 685
	4. Electricity	TWh	2	0,1	9	4	2	10	27	11		*14*		24	51
	5. Heat	Terajoules	2	0,0	7		1	29	39	63				63	102
	6. Renewable fuels and waste														
	a) Solid biomass and wastes	1000 Tonnes	178	9	291	2 077		57	2 612	2 942	*18*	*64*		3 024	5 637
	b) Liquid biofuels and biogas	1000 m3													
	Own use of energy. etc. 1)														
	1. Coal, coke, gas work gas and peat														
	a) Coal, coke and peat	1000 Tonnes													
	b) Gas work gas	1000 m3													
	2. Oil	1000 Tonnes			347				347						347
	3. Natural Gas	1000 m3		709											
	4. Electricity	TWh				3			3						3
	5. Heat	Terajoules				2			2						2
	6. Renewable fuels and waste														
	a) Solid biomass and wastes 1)	1000 Tonnes				3 569			3 569						3 569
	b) Liquid biofuels and biogas	1000 m3	13		7	66			86						86

1) Includes also waste delivered from one economic unit to another without payment

Table 5.3 Physical supply table for energy including breakdown by type of flow – Common unit (terajoule)

		Industries by ISIC						Total output	Imports		Total supply
		A	B	C	D	H	E-G, I-U		Total	*of which*	
		Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries			*Purchased by residents abroad*	
		TeraJoule									
To the economy	**Supply to other economic units**										
	1. Coal, coke, gas work gas and peat										
	a) Coal, coke and peat								225		**225**
	b) Gas work gas				0.5			0.5			**0.5**
	2. Oil		722	338				1 060	930	*560*	**1 990**
	3. Natural Gas 1)		369		369			739			**739**
	4. Electricity				150			150	22		**173**
	5. Heat				102			102			**102**
	6. Renewable fuels and waste										
	a) Solid biomass and wastes	39		17				56	16.9		**73**
	b) Liquid biofuels and biogas										
	Total transactions	**39**	**1 091**	**355**	**622**			**2 107**	**1 194**	***560***	**3 301**
	Production for own use, etc. 1)										
	1. Coal, coke, gas work gas and peat										
	a) Coal, coke and peat										
	b) Gas work gas							0			**0**
	2. Oil			15				15			**15**
	3. Natural Gas		28		0.1			28.1			**28.1**
	4. Electricity				31			31			**31**
	5. Heat				2			2			**2**
	6. Renewable fuels and waste										
	a) Solid biomass and wastes 1)			37				37			**37**
	b) Liquid biofuels and biogas	0.3		0.2	1.5			2			**2**
	Total own use 1)	**0.3**	**28**	**52**	**34**			**115**			**115**
To the environment 2)	**Losses and returns to the env. 2)**										
	1. Coal, coke, gas work gas and peat										
	a) Coal, coke and peat								2.0		**2**
	b) Gas work gas				0			0			**0**
	2. Oil		2.0	2.0				4	2.0		**6**
	3. Natural Gas				0			0			**0**
	Reinjection		*32*					32			**32**
	Flaring and venting		*7*					7			**7**
	Losses in distribution										
	4. Electricity				6			6	2.0		**8**
	5. Heat				26			26			**26**
	6. Renewable fuels and waste							0			0
	a) Solid biomass and wastes			1				1	0.2		**1**
	b) Liquid biofuels and biogas										
	Total losses and returns		**42**	**3**	**32**			**76**	**6**		**83**

1) Includes also waste delivered from one economic unit to another without payment

2) Includes also energy lost due to thefts

Table 5.4 Physical use table for energy resources and transactions of energy products – Common unit (terajoule)

		Use												
		Intermediate Consumption, Industries by ISIC							Final consumtion, inventories and exports					Total use
		A	B	C	D	H	E-G, I-U	**Total**	Con-sump-tion by house-holds	Chan-ges in inven-tories	Exports		**Total final con-sump-tion, inven-tories and exports**	
		Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries	Total Indu-stries			Total	*of which sold to non-residents on national territory*		
		TeraJoule												
From the environment	**Energy resources (gross extraction)**													
	E.11 Natural gas		437					437						437
	Extraction for own use		*28*					*28*						*28*
	Reinjection		*32*					*32*						*32*
	Flaring and venting		*7*					*7*						*7*
	Extraction for distribution		*369*					*369*						*369*
	E.12 + E.13 Crude Oil and natural gas liquids, Oil shale		724					*724*						724
	E.14 Natural bitumen, extra heavy oil, shale oil, sand oil and others													
	E.21 Coal													
	E.22 Peat													
	E.23 Uranium and thorium ores													
	Total energy resources		**1 161**					**1 161**						**1 161**
Within the economy	**Use of energy received from other economic units**													
	1. Coal, coke, gas work gas and peat													
	a) Coal, coke and peat	2	0,1	18	223			243	1	- 21	1,9		- 19	225
	b) Gas work gas			0,0			0,0	0,1	0,4				0,4	0,5
	2. Oil	34	2	367	16	621	49	1 089	102	*- 3*	*801*	*31*	900	1 990
	3. Natural Gas	2	2	39	452	0	12	507	28	*2*	*201*		232	739
	4. Electricity	7	0,3	34	2	6	35	84	39		*49*		88	173
	5. Heat	2	0,0	7		1	29	39	63				63	102
	6. Renewable fuels and waste													
	a) Solid biomass and wastes	3	0,1	4	31		1	38	33	*0,3*	*1*		34	73
	b) Liquid biofuels and biogas													
	Total transactions	**50**	**4**	**469**	**724**	**628**	**127**	**2 002**	**267**	***- 22***	***1 055***	***31***	**1 300**	**3 301**
	Own use of energy. etc. 1)													
	1. Coal, coke, gas work gas and peat													
	a) Coal, coke and peat													
	b) Gas work gas													
	2. Oil			15				15						15
	3. Natural Gas		28		0,1			28,1						28,1
	4. Electricity				31			31						31
	5. Heat				2			2						2
	6. Renewable fuels and waste													
	a) Solid biomass and wastes 1)				37			37						37
	b) Liquid biofuels and biogas	0,3		0,2	1,5			1,9						1,9
	Total own use	**0,3**	**28**	**15**	**71**			**115**						**115**

1) Includes also waste delivered from one economic unit to another without payment

Table 5.5 Supply table for total flows of energy – Common unit (terajoule)

	Industries by ISIC						Total output	Imports		Total supply
	A	B	C	D	H	E-G, I-U		Total	*of which*	
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries			*Purchased by residents abroad*	
	TeraJoule									
1. Coal, coke, gas work gas and peat										
a) Coal, coke and peat								227		**227**
b) Gas work gas				*0.5*			0.5			**0.5**
2. Oil		724	355				1 079	932	*560*	**2 011**
3. Natural Gas		437		369			806			806
Extraction for own use		*28*					*28*			*28*
Reinjection		*32*					*32*			*32*
Flaring and venting		*7*					*7*			*7*
Distribution		*369*		*369*			*739*			*739*
4. Electricity				187			187	24		**212**
5. Heat				130			130			**130**
6. Renewable fuels and waste										
a) Solid biomass and wastes	39		54				93	17.1		**111**
b) Liquid biofuels and biogas	0.3		0.2	1.5			2			**2**
Total supply of energy	**39**	**1 161**	**410**	**688**			**2 298**	**1 200**	***560***	**3 498**

Table 5.6 Use table for total flows of energy - Common unit (terajoule)

Use															
	Intermediate Consumption, Industries by ISIC							Final consumtion, inventories and exports					Total use by the economy	To the environment: Losses and re-turns	Total use incl. losses and returns
	A	B	C	D	H	E-G, I-U	**Total**	Con-sump-tion by house-holds	Chan-ges in inven-tories	Exports		**Total final con-sump-tion, inven-tories and exports**			
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries	Total Indu-stries			Total	*of which sold to non-residents on national territory*				
	TeraJoule														
1. Coal, coke, gas work gas and peat															
a) Coal, coke and peat	2	0,1	18	223			243	1	- 21	1,9		- 19	225	2	**227**
b) Gas work gas			0,0			0,0	0,1	0,4				0,4	0,5	0	**0,5**
2. Oil	34	2	382	16	621	49	1 104	102	- 3	801	*31*	900	2 004,5	*6*	**2 011**
3. Natural Gas	2	30	39	452	0	12	535	28	2	201		232	767	*40*	**806**
Own use		*28*					*28*						*28*		*28*
Reinjection														*32*	*32*
Flaring and venting														*7*	*7*
Distribution	*2*	*2*	*39*	*452*	*0*	*12*	*507*	*28*	*2*	*201*		*232*	*739*		*739*
4. Electricity	7	0,3	34	33	6	35	115	39		49		88	204	*8*	**212**
5. Heat	2	0	7	2	1	29	41	63				63	104	*26*	**130**
6. Renewable fuels and waste															
a) Solid biomass and wastes	3	0,1	4	68		1	75	33	0,3	1		34	110	*1*	**111**
b) Liquid biofuels and biogas	0,3		0,2	1,5			1,9						1,9		**2**
Total use of energy	**50**	**32**	**484**	**795**	**628**	**127**	**2 116**	**267**	***- 22***	***1 055***	***31***	**1 300**	**3 415**	***83***	**3 498**

Table 5.12 Energy use by purpose

	Intermediate Consumption, Industries by ISIC							Final consumption					Total use by the economy	To the environment: Losses and returns	Total use incl. losses and returns
	A	B	C	D	H	E-G, I-U	Total	Consumption by house-holds	Changes in inventories	Exports		Total final con-sumption			
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries	Total Industries			Total	of which Sold to non-resi-dents on national territory				
	TeraJoule														
Energy purposes															
Transport	**22**	**1**	**150**	**3**	**601**	**40**	**817**	**65**				**65**	**882**		**882**
2. Oil	22	0.6	150	3	600	40	816	65				65	881		**881**
4. Electricity					1		1						1		**1**
Heating, etc	**23**	**2**	**130**	**6**	**24**	**81**	**267**	**201**				**201**	**468**		**468**
1. Coal, coke, gas work gas and peat															
a) Coal, coke and peat	2						2	0.6				0.6	3		**3**
b) Gas work gas								0.4				0.4	0.4		**0.4**
2. Oil	10	0	110	1	21	9	151	36.9				37	188		**188**
3. Natural Gas	1	2	5	2	0.5	12.1	22.5	28.1				28	51		**51**
4. Electricity	6	0.1	4	1	2	30	43	39				39	82		**82**
5. Heat	2	0.0	7	2	1	29	41	63				63	104		**104**
6. Renewable fuels and waste															
a) Solid biomass and wastes	2	0.1	4			0.8	7	33				33	40		**40.1**
b) Liquid biofuels and biogas	0.2		0.2				0.4						0.4		**0.4**
Others, (energy for processes, etc.)	**5**	**29**	**200**	**786**	**3**	**5**	**1 028**						**1 028**		**1 028**
1. Coal, coke, gas work gas and peat															
a) Coal, coke and peat		0.1	18	223			241						241		**241**
b) Gas work gas			0.0			0.0	0.1						0.1		**0.1**
2. Oil	2	0.8	118	12			133						133		**133**
3. Natural Gas	1	28.2	34	450			513						513		**513**
4. Electricity	1	0.2	30	32	3	5	71						71		**71**
5. Heat															
6. Renewable fuels and waste															
a) Solid biomass and wastes	0.6			68			68						68		**68**
b) Liquid biofuels and biogas	0.1			1			2						2		**2**
Non-energy purposes			**4**				**4**		**- 21.6**	**1 055**	**31**	**1 033**	**1 037**	**83**	**1 120**
1. Coal, coke, gas work gas and peat															
a) Coal, coke and peat									- 21	1.9		- 19.3	- 19.3	2.4	**- 16.9**
b) Gas work gas														0.0	**0.0**
2. Oil			4				4		- 3	801	31	798	802	6	**809**
3. Natural Gas									2	201		203	203	40	**243**
4. Electricity										49		49	49	8	**57**
5. Heat														26	**26**
6. Renewable fuels and waste															
a) Solid biomass and wastes									0.3	0.9		1.2	1.2	0.7	**1.9**
b) Liquid biofuels and biogas															
Total	**50**	**32**	**484**	**795**	**628**	**127**	**2 116**	**267**	**- 22**	**1 055**	**31**	**1 300**	**3 415**	**83**	**3 498**

Table 5.13 Supply of primary energy and imports of energy

	Industries by ISIC						Total output	Imports		Total supply of primary energy and imports
	A	B	C	D	H	E-G, I-U		Total	*of which*	
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other Industries			*Purchased by residents abroad*	
	TeraJoule									
1. Coal, coke, gas work gas and peat										
a) Coal, coke and peat								227		**227**
b) Gas work gas										
2. Oil										
Crude oil		724					724	110		**834**
Oil products								822	*560*	**822**
3. Natural Gas		**437**					**437**			**437**
4. Electricity										
Primary (wind, solar, hydro, nuclear, etc.)				22			22			**22**
Secondary electricity								24		**24**
5. Heat										
Primary (solar, geothermal, etc.)										
Secondary heat										
6. Renewable fuels and waste										
a) Solid biomass and wastes	39		54				93	17		**110**
b) Liquid biofuels and biogas	0.3		0.2	1			2			**2**
Total	**39**	**1 161**	**54**	**23**			**1 279**	**1 201**	***560***	**2 480**

Table 5.14 Transformation of primary energy and imports into energy available for end use

	1. Total supply of primary energy and imports	Inputs to (-) and outputs from (+) energy transformation processes									2. Net output (+) / use (-) of energy from transformation	3. Available for end use (1. + 2)
		A	B	C	D				H	E-G, I-U		
		Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	of which D. 351 Electric power generation, etc.	of which D. 352 Manufacture of gas; distribution, etc.	of which D. 353 Steam and air conditioning supply	Transportation and storage	Other Industries		
	TeraJoule											
1. Coal, coke, gas work gas and peat												
a) Coal, coke and peat	227				*- 223*	*- 168*		*- 55*			- 223	4
b) Gas work gas					0		*0*				0.5	0.5
2. Oil												
Crude oil	834			- 341							- 341	493
Oil products	822			340	*- 16*	*- 13*		*- 4*			324	1 146
3. Natural Gas 1) 2)	**437**		**- 68**		***- 82***	***- 47***	***- 1***	***- 35***			**- 150**	**287**
4. Electricity												
Primary (wind, solar, hydro, nuclear, etc.)	22				*- 22*	*- 22*					- 22	
Secondary electricity	24				*156*	*156*					156	180
5. Heat												
Primary (solar, geothermal, etc.)												
Secondary heat					*130*			*130*			130	130
6. Renewable fuels and waste												
a) Solid biomass and wastes	110				*- 68*	*- 24*		*- 44*			- 68	43
b) Liquid biofuels and biogas	2				*- 1*	*- 1*		*- 0.5*			- 1	0
Transformation losses (inputs-outputs)			**68**	**1**	**127**	**117**	**0**	**9**			**195**	
Total	**2 480**											**2 284**

1) Reinjection, flaring, venting and own use of natural gas by the extraction industry is considered as use for transformation

2) The entry for ISIC D 352 is net input of natural gas representing an input of 370 TJ and an output of 369,5 TJ.

Table 5.15 End use of energy

	Intermediate Consumption, Industries by ISIC												Total use	Losses in distribution etc.	Total use incl. losses in distribution, etc
	A	B	C	D	H	E-G, I-U	**Total**	Final consumption by households	Changes in inventories	Exports		**Total final consumption**			
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other Industries	Total Industries			Total	*of which Sold to non-residents on national territory*				
	TeraJoule														
1. Coal, coke, gas work gas and peat															
a) Coal, coke and peat	*2*	*0.1*	*18*				20	*1*	*- 21*	*2*		- 19	2	2	4
b) Gas work gas			*0*			*0*	0.1	*0.4*				0.4	0.5	0.0	0.5
2. Oil															
Primary oil (crude oil)									- 2	493		490	490	2	493
Secondary oil products	34	2	26	0.1	621	49	732	102	- 0.5	308	*31*	410	1 142	4	1 146
3. Natural Gas	**2**	**2.2**	**39**		**0**	**12**	**55**	**28**	**2**	**201**		**232**	**287**		**287**
4. Electricity															
Primary (wind, solar, hydro, nuclear, etc.)															
Secondary electricity	7	0.3	34	2	6	35	84	39		49		88	173	8	180
5. Heat															
Primary (solar, geothermal, etc.)															
Secondary heat	2	0.0	7	2	1	29	41	63				63	104	26	130
6. Renewable fuels and waste															
a) Solid biomass and wastes	3	0.1	4			1	7	33	0	1		34	42	1	43
b) Liquid biofuels and biogas	0.3		0				0.5						0.5		0.5
Total end use	**50**	**4**	**128**	**3**	**628**	**127**	**941**	**267**	**- 22**	**1 055**	***31***	**1 300**	**2 240**	**43**	**2 283**
Transformation losses		**68**	**1**	**127**			**195**						**195**		**195**
Total use (= primary supply and imports)	**50**	**72**	**129**	**130**	**628**	**127**	**1 136**	**267**	**- 22**	**1 055**	***31***	**1 300**	**2 436**	**43**	**2 479**

Table 6.1 Supply table at basic prices with transformation to purchasers' prices

	Industries by ISIC						Total output, basic prices	Imports c.i.f.		Total supply, basic prices
	A	B	C	D	H	E-G, I-U		Total	*of which*	
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries			*Purchased by residents abroad*	
	Currency unit									
Energy products										
1. Coal, coke, gas work gas and peat				171			171	3 783		**3 955**
a) Coal, coke and peat								3 783		**3 783**
b) Gas work gas				171			171			**171**
2. Oil		48 455	26 818				75 273	52 757	*26 310*	**128 030**
3. Natural Gas		12 289		19 344			31 633			**31 633**
4. Electricity				23 741			23 741	1 778		**25 519**
5. Heat				13 538			13 538			**13 538**
6. Renewable fuels and waste	873		267				1 140	932		**2 072**
a) Solid biomass and wastes	873		267				1 140	932		**2 072**
b) Liquid biofuels and biogas										
Total supply	**873**	**60 744**	**27 085**	**56 795**			**145 497**	**59 251**	***26 310***	**204 748**

	Total supply at basic prices	Taxes on energy products	Subsidies on energy products	Taxes, net	Trade and transport margins	**Total supply at purchasers' prices**
	Currency unit					
Energy products						
1. Coal, coke, gas work gas and peat	3 955			203	104	**4 262**
a) Coal, coke and peat	3 783			154	104	**4 041**
b) Gas work gas	171			49		**221**
2. Oil	128 030			27 372	7 800	**163 202**
3. Natural Gas	31 633			4 252		**35 885**
4. Electricity	25 519			16 148		**41 667**
5. Heat	13 538			6 135		**19 673**
6. Renewable fuels and waste	2 072			482	894	**3 448**
a) Solid biomass and wastes	2 072			482	894	**3 448**
b) Liquid biofuels and biogas						
Total supply	**204 748**			**54 592**	**8 797**	**268 137**

Table 6.2 Use table at purchasers' prices

Use														
	Intermediate Consumption, Industries by ISIC								Private consumption, inventories and exports					Total use of energy products
	A	B	C	D	H	E-G, I-U	Total		Private consumption	Changes in inventories	Exports		Total private consumption, inventories and exports	
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries	Total Industries	*of which Non-energy purposes*			Total	*of which Sold to non-residents on national territory*		
	Currency unit													
Energy products														
1. Coal, coke, gas work gas and peat	58	10	423	*3 618*		16	4 124		340	- 254	52		138	**4 262**
a) Coal, coke and peat	58	10	419	*3 618*			4 104		139	- 254	52		- 63	**4 041**
b) Gas work gas			4			16	20		201				201	**221**
2. Oil	4 377	114	27 361	*964*	35 744	9 461	78 021	*270*	26 218	2 279	56 684	*4 353*	85 181	**163 202**
3. Natural Gas	117	109	2 858	*15 867*	73	1 906	20 930		5 587	138	9 230		14 955	**35 885**
4. Electricity	1 196	46	5 169	*272*	1 401	9 135	17 219		19 985		4 464		24 449	**41 667**
5. Heat	97	0	636		202	5 353	6 289		13 383				13 383	**19 673**
6. Renewable fuels and waste	50		165	*891*		67	1 173		2 234		42		2 276	**3 448**
a) Solid biomass and wastes	50		165	*891*		67	1 173		2 234		42		2 276	**3 448**
b) Liquid biofuels and biogas														
Total use	**5 894**	**279**	**36 611**	***21 612***	**37 421**	**25 939**	**127 756**	***270***	**67 748**	**2 162**	**70 471**	*4 353*	**140 381**	**268 137**

Table 6.3 Taxes less subsidies on products allocated to use of energy products

	Intermediate Consumption, Industries by ISIC								Final consumption					Total use of energy products
	A	B	C	D	H	E-G, I-U	Total		Private consumption	Changes in inventories	Exports		Total final consumption	
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries	Total Industries	*of which Non-energy purposes*			Total	*of which Sold to non-residents on national territory*		
	Currency unit													
Energy products														
1. Coal, coke, gas work gas and peat	2	6	23	18		3	52		151				151	203
a) Coal, coke and peat	2	6	23	18			49		104				104	154
b) Gas work gas			0			3	3		46				46	49
2. Oil	749	17	941	49	2 963	4 304	9 023	*8*	16 103		2 246	*2 246*	18 350	27 372
3. Natural Gas	8	2	653		32	835	1 530		2 722				2 722	4 252
4. Electricity	123	4	499	- 3	519	3 914	5 057		11 139		- 49		11 090	16 148
5. Heat	42	0	95		46	1 317	1 499		4 635				4 635	6 135
6. Renewable fuels and waste				9		13	23		460				460	482
a) Solid biomass and wastes				9		13	23		460				460	482
b) Liquid biofuels and biogas														
Total use	**924**	**29**	**2 212**	**74**	**3 560**	**10 385**	**17 184**	*8*	**35 210**		**2 197**	*2 246*	**37 407**	54 592

Table 6.4 Trade and transport margins allocated to use of energy products

Use													
	Intermediate Consumption, Industries by ISIC								Final consumption				Total use of energy pro-ducts
	A	B	C	D	H	E-G, I-U	Total		Private con-sump-tion	Chan-ges in inven-tories	Exports		Total final con-sump-tion	
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries	Total Indu-stries	*of which Non-energy purpo-ses*			Total	*of which Sold to non-resi-dents on national territory*		
	Currency unit													
Energy products, own use and losses, etc.														
1. Coal, coke, gas work gas and peat	21	1	49	28			98		6				6	**104**
a) Coal, coke and peat	21	1	49	28			98		6				6	**104**
b) Gas work gas														
2. Oil	1 019	12	265	100	1 532	1 401	4 329		2 825		646	25	3 471	**7 800**
3. Natural Gas														
4. Electricity														
5. Heat														
6. Renewable fuels and waste	10		0	114			123		770				770	**894**
a) Solid biomass and wastes	10		0	114			123		770				770	**894**
b) Liquid biofuels and biogas														
Total use	**1 049**	**12**	**315**	**242**	**1 532**	**1 401**	**4 551**		**3 601**		**646**	*25*	**4 247**	**8 797**

Table 6.5 Use table at basic prices

	Intermediate Consumption, Industries by ISIC								Final consumption					Total use of energy products at basic prices
	A	B	C	D	H	E-G, I-U	Total		Private con- sump tion	Changes in inven-tories	Exports		Total final con-sump-tion	
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries	Total Indu-stries	*of which Non-energy purpo-ses*			Total	*of which Sold to non-resi-dents on natio-nal terri-tory*		
	Currency unit													
Energy products														
1. Coal, coke, gas work gas and peat	35	3	350	3 572		13	3 973		183	- 254	*52*		- 19	**3 955**
a) Coal, coke and peat	35	3	347	3 572			3 956		29	- 254	52		- 173	**3 783**
b) Gas work gas			4			13	17		154				154	**171**
2. Oil	2 609	86	26 154	814	31 250	3 757	64 670	*262*	7 290	2 279	53 792	*2 082*	63 361	**128 030**
3. Natural Gas	109	106	2 205	15 867	41	1 072	19 400		2 865	138	9 230		12 233	**31 633**
4. Electricity	1 073	42	4 670	275	882	5 220	12 161		8 846		4 513		13 358	**25 519**
5. Heat	55	0	541		157	4 036	4 790		8 748				8 748	**13 538**
6. Renewable fuels and waste	41		165	767		54	1 027		1 004		*42*		1 046	**2 072**
a) Solid biomass and wastes	41		165	767		54	1 027		1 004		42		1 046	**2 072**
b) Liquid biofuels and biogas														
Total use	**3 921**	**238**	**34 085**	**21 295**	**32 329**	**14 153**	**106 021**	*262*	**28 936**	**2 162**	**67 628**	*2 082*	**98 727**	**204 748**

Table 6.6 Hybrid supply table for energy products

Supply										Taxes and margins				Total supply at purchasers' prices
	Industries by ISIC						Total output, basic prices	Imports c.i.f.	Total supply, basic prices	Taxes	Subsidies	Taxes less subsidies	Trade and transport margins	
	A	B	C	D	H	E-G, I-U								
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries								
Monetary output	1000 Currency unit (basic prices)									1000 Currency units				
Energy products														
1. Coal, coke, gas work gas and peat				0.2			0.2	4	4			0.2	0.1	4
a) Coal, coke and peat								4	4			0.2	0.1	4
b) Gas work gas				0.2			0.2		0.2			0.0		0.2
2. Oil		48	27				75	53	128			27	8	163
3. Natural Gas		12		19			32		32			4		36
4. Electricity				24			24	2	26			16		42
5. Heat				14			14		14			6		20
6. Renewable fuels and waste	1		0.3				1	1	2			0	1	3
a) Solid biomass and wastes	1		0.3				1	1	2			0	1	3
b) Liquid biofuels and biogas														
Total output of energy products	**1**	**61**	**27**	**57**			**145**	**59**	**205**	**55**		**55**	**9**	**268**
Supply of other products	**64**	**4**	**583**	**0.3**	**351**	**1 774**	**2 778**	**742**	**3 520**	**211**	**- 17**	**194**	**(325)[1)]**	**3 705**
Total supply, all products	**65**	**65**	**611**	**57**	**351**	**1 774**	**2 923**	**801**	**3 724**	**265**	**- 17**	**249**	**(334)[1)]**	**3 973**
Physical energy supply	Terajoule													
Supply of energy products to other economic units														
1. Coal, coke, gas work gas and peat														
a) Coal, coke and peat								225	225					
b) Gas work gas				0.5			0.5		0					
2. Oil		722	338				1 060	930	1 990					
3. Natural Gas		369		369			739		739					
4. Electricity				150			150	22	173					
5. Heat				102			102		102					
6. Renewable fuels and waste														
a) Solid biomass and wastes	39		17				56	17	73					
b) Liquid biofuels and biogas														
Total supply of energy products to other economic units	**39**	**1 091**	**355**	**622**			**2 107**	**1 194**	**3 301**					
Total supply for own use, losses and re-injection, etc.	**0.3**	**70**	**55**	**66**			**191**	**6**	**197**					
Total physical supply	**39**	**1 161**	**410**	**689**			**2 298**	**1 200**	**3 498**					

1) These numbers are not not included in sums since they are included in output of ISIC G.

Table 6.7 Hybrid use table for energy products

	Intermediate Consumption, Industries by ISIC							Private consumption, inventories, exports and other uses						Losses and reinjection	Total use
	A	B	C	D	H	E-G, I-U	Total Industries	Private consumption	Changes in inventories	Exports	Government consumption	Final uses	Private consumption, inventories, exports and other uses		
	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas steam and air conditioning supply	Transportation and storage	Other industries									
Monetary use	1000 Currency unit (purchasers' prices)														
Energy products															
1. Coal, coke, gas work gas and peat	0.1	0.0	0.4	3.6		0	4.1	0.3	- 0.3	*0.1*			0.1		**4**
a) Coal, coke and peat	0.1	0.0	0.4	3.6			4.1	0.1	- 0.3	0.1			- 0.1		**4**
b) Gas work gas			0.0			0.0	0.0	0.2					0.2		**0.2**
2. Oil	4	0.1	27	1.0	36	9.5	78	26	2				85		**163**
3. Natural Gas	0.1	0.1	3	16	0.1	1.9	21	6	0.1	9			15		**36**
4. Electricity	1.2	0.0	5	0.3	1	9.1	17	20		4			24		**42**
5. Heat	0.1	0.0	1		0.2	5.4	6	13					13		**20**
6. Renewable fuels and waste	0.1		0.2	0.9		0.1	1	2		*0.0*			2		**3**
a) Solid biomass and wastes	0.1		0.2	0.9		0.1	1	2		0.0			2		**3**
b) Liquid biofuels and biogas															
Total use of energy products	**6**	**0.3**	**37**	**22**	**37**	**25.9**	**128**	**68**	**2**	**70**			**140**		**268**
Use of other products	**41**	**8**	**379**	**8**	**169**	**812**	**1 416**	**718**	**13**	**780**	**422**	**356**	**2 289**		**3 705**
Total use, all products	**47**	**8**	**415**	**29**	**206**	**838**	**1 544**	**786**	**15**	**850**	**422**	**356**	**2 429**		**3 973**
Physical use	TeraJoule														
Energy products received from other economic units															
1. Coal, coke, gas work gas and peat															
a) Coal, coke and peat	2	0	18	223			243	1	- 21	2			- 19		**225**
b) Gas work gas			0			0	0	0					0		**0**
2. Oil	34	2	367	16	621	49	1 089	102	- 3	801			900		**1 990**
3. Natural Gas	2	2	39	452	0	12	507	28	2	201			232		**739**
4. Electricity	7	0	34	2	6	35	84	39		49			88		**173**
5. Heat	2	0	7		1	29	39	63					63		**102**
6. Renewable fuels and waste															
a) Solid biomass and wastes	3	0	4	31		1	38	33	0	1			34		**73**
b) Liquid biofuels and biogas															
Total use of energy products received from other ec. units	**50**	**4**	**469**	**724**	**628**	**127**	**2 002**	**267**	**- 22**	**1 055**			**1 300**		**3 301**
Total own use, losses and re-injection	**0**	**28**	**15**	**71**			**115**							**83**	**197**
Total physical use	**50**	**32**	**484**	**795**	**628**	**127**	**2 116**	**267**	**- 22**	**1 055**			**1 300**	**83**	**3 498**

Table 6.8 Production, generation and allocation of income, and gross fixed capital formation - Mining and production of energy

		ISIC B		ISIC C	ISIC D			Govern-ment	House-holds	Total	
		05 - Mining of coal and lignite	06 - Extraction of crude petroleum and natural gas	19 - Manufac-ture of coke and refined petroleum products	351 - Electric power gene-ration, etc.	352 - Manufac-ture of gas; distri-bution, etc.	353 - Steam and air conditio-ning supply			Use	Ressour-ces
		Currency units									
1. The Production Account											
P1	Output		60 744	28 415	23 891	19 622	13 542				146 214
P2	- Intermediate consumption		6 487	27 160	11 567	12 933	4 623			62 770	
D21	*of which non specific taxes on products*		*20*	*10*	*31*	*5*	*58*			*124*	
D21	*specific taxes on products 1)*		*100*							*100*	
D31	*non specific subsidies on products*		*- 52*		*- 3*					*- 55*	
D31	*specific subsidies on products 1)*									*0*	
B1g	**= Value added, gross**		**54 257**	**1 255**	**12 324**	**6 689**	**8 919**			**83 444**	
P6	- Consumption of fixed capital		5 084	780	4 415	1 962	3 435			15 676	
	of which terminal costs		*40*							*40*	
B1n	**= Value added, net**		**49 173**	**475**	**7 909**	**4 727**	**5 484**			**67 768**	
2. The Generation of Income Account											
B1g	= Value added, gross		54 257	1 255	12 324	6 689	8 919				83 444
D1	- Compensation of employees		802	343	2 752	530	992			5 419	
D29	- Other taxes on production and imports		15	11	130	27	99			282	
	of which specific other taxes 1)		*3*							*3*	
D39	- Other subsidies on production and imports		- 30		- 100		- 63			- 193	
	of which specific other subsidies 1)		*- 1*							*- 1*	
B2g	**= Operating surplus, gross**		**53 470**	**901**	**9 542**	**6 132**	**7 891**			**77 936**	
P6	- Consumption of fixed capital (cofc)		5 084	780	4 415	1 962	3 435			15 676	
	of which cofc on terminal costs		*40*							*40*	
B2n	**= Operating surplus, net**		**48 386**	**121**	**5 127**	**4 170**	**4 456**			**62 260**	
3. The Allocation of Primary Income Account											
B2g	Operating surplus, gross		53 470	901	9 542	6 132	7 891				77 936
D1	+ Compensation of employees								5 419		5 419
D21	+ Taxes on products							224			224
D29	*of which specific taxes on products*							*100*			100
D31	+ subsidies on products							- 55			- 55
	of which specific subsidies on products							*0*			
D29	+ Other taxes on production and imports							282			282
	of which specific other taxes on production and imports							*3*			3
D39	+ Other subsidies on production and imports							- 193			- 193
	of which specific other subsidies on production							*- 1*			- 1
D4	+ Property income		-5 000					5 000		5 000	5 000
D45	*of which rent*		*-5 000*					*5 000*		*5 000*	5 000
B.5g	**= National income, gross**		**48 470**	**901**	**9 542**	**6 132**	**7 891**	**5 258**	**5 419**	**83 613**	
P6	- Consumption of fixed capital (cofc)		5 084	780	4 415	1 962	3 435	0	0	15 676	
B.5n	**= National income, net**		**43 386**	**121**	**5 127**	**4 170**	**4 456**	**5 258**	**5 419**	**67 937**	
4. Gross fixed capital formation			4 721	604	4 300	1 500	1 941				
	of which Mineral exploration and evaluation		634								
	Terminal costs		100		200	50	300				

1) Taxes and subsidies specific for the mining industries.

Table 6.13 Production account and depletion-adjusted accounts for generation and allocation of income

		ISIC B		ISIC C	ISIC D			Govern-ment	House-holds	Total	
		05 - Mining of coal and lignite	06 - Extraction of crude petroleum and natural gas	19 - Manufac-ture of coke and refined petroleum products	351 - Electric power gene-ration, etc.	352 - Manufacture of gas; distri-bution, etc.	353 - Steam and air conditioning supply			Use	Ressour-ces
		Currency units									
1. The Production Account											
P1	Output		60 744	28 415	23 891	19 622	13 542				146 214
P2	- intermediate consumption		6 487	27 160	11 567	12 933	4 623			62 770	
D21	*of which non specific taxes on products*		*20*	*10*	*31*	*5*	*58*			*124*	
D21	*specific taxes on products 1)*		*100*							*100*	
D31	*non specific subsidies on products*		*- 52*							*- 52*	
D31	*specific subsidies on products 1)*										
B1g	**= Value added, gross**		**54 257**	**1 255**	**12 324**	**6 689**	**8 919**			**83 444**	
P6	- Consumption of fixed capital		5 084	780	4 415	1 962	3 435			15 676	
	of which terminal costs		*40*							*40*	
B1n	**= Value added, net**		**49 173**	**475**	**7 909**	**4 727**	**5 484**			**67 768**	
2. The Extended Generation of Income Account											
B1g	= Value added, gross		54 257	1 255	12 324	6 689	8 919				83 444
D1	- Compensation of employees		802	343	2 752	530	992			5 419	
D29	- Other taxes on production and imports		15	11	130	27	99			282	
	of which specific other taxes 1)		*3*							*3*	
D39	- Other subsidies on production and imports		- 30		- 100		- 63			- 193	
	of which specific other subsidies 1)		*- 1*							*- 1*	
B2g	**= Operating surplus, gross**		**53 470**	**901**	**9 542**	**6 132**	**7 891**			**77 936**	
P6	- Consumption of fixed capital (cofc)		5 084	780	4 415	1 962	3 435			15 676	
	of which cofc on terminal costs		*40*							*40*	
	- Depletion of energy resources		32 729								
B2n	**= Depletion adjusted operating surplus, net**		**15 657**	**121**	**5 127**	**4 170**	**4 456**			**29 531**	
	of which return to fixed capital		*5 519*	*121*	*5 127*	*4 170*	*4 456*			*19 393*	
	return to energy resources		*10 138*							*10 138*	
3. The Allocation of Primary Income Account											
B2g	Operating surplus, gross		53 470	901	9 542	6 132	7 891				77 936
D1	+ Compensation of employees								5 419		5 419
D21	+ Taxes on products							224			224
D29	*of which specific taxes on products*							*100*			100
D31	+ subsidies on products							- 52			- 52
	of which specific subsidies on products										
D29	+ Other taxes on production and imports							282			282
	of which specific other taxes on production and imports							*3*			3
D39	+ Other subsidies on production and imports							- 193			- 193
	of which specific other subsidies on production							*- 1*			- 1
D4	+ Property income		-5 000					5 000		5 000	5 000
D45	*of which rent*		*-5 000*					*5 000*		*5 000*	5 000
B.5g	**= National income, gross**		**48 470**	**901**	**9 542**	**6 132**	**7 891**	**5 261**	**5 419**	**83 616**	
P6	- Consumption of fixed capital (cofc)		5 084	780	4 415	1 962	3 435			15 676	
	- Depletion of energy resources		32 729							32 729	
B.5n	**= Depletion adjusted national income, net**		**10 657**	**121**	**5 127**	**4 170**	**4 456**	**5 261**	**5 419**	**35 211**	
4. Gross fixed capital formation			4 721	604	4 300	1 500	1 941				
	of which Mineral exploration and evaluation		634								
	Terminal costs		100		200	50	300				

Table 6.14 Taxes on production and subsidies related to energy production and use

	ISIC B				ISIC C		ISIC D						Other industries		Households		Government		Rest of the world		Total	
	05 - Mining of coal and lignite		06 - Extraction of crude petroleum and natural gas		19 - Manufac-ture of coke and refined petroleum products		351 - Electric power gene-ration, etc.		352 - Manufac-ture of gas; distri-bution, etc.		353 - Steam and air conditio-ning supply											
	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able
	Currency units																					
D2 Taxes on production and imports																						
D21 Taxes on products																						
Energy products			0		0		0		0		0		17		42			63	3		63	63
Other products			120		10		31		5		58							224			224	224
D29 Other taxes on production			15		11		130		27		99							282			282	282
D3 Subsidies																						
D.31 Subsidies on products																						
Energy products															7		8			1	8	8
Other products				52													52				52	52
D.39 Other subsidies on production				30				100				63					193				193	193
Total			**135**	**82**	**21**		**161**	**100**	**32**		**157**	**63**	**17**		**42.2**	**7**	**253**	**569**	**3**	**1**	**822**	**822**

Table 6.15 Property incomes, income taxes, social transfers and capital transfers related to energy

			S. 11 Non financial corporations		S.14 Households		S. 13 Government		S.2 Rest of the world		Total	
			Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able	Pay-able	Receiv-able
			Currency units									
D4	Property income											
	D45	Rent	5 000					5 000			5 000	5 000
D5	Current taxes on income, wealth, etc.											
	D51	Taxes on income	14 158					14 158			14 158	14 158
	Social contributions, benefits and transfers											
	D62	Social benefits other than social transfers in kind				330	330				330	330
	D63	Social transfers in kind				40	40				40	40
D7	Other current transfers											
	D74	Current international cooperation					600			600	600	600
D9	Capital transfers											
	D91	Capital taxes	50					50			50	50
	D92	Investment grants		410			410				410	410
	D99	Other capital transfers					100			100	100	100
Total			**19 208**	**410**		**370**	**1 480**	**19 208**		**700**	**20 688**	**20 688**

Table 6.17 National expenditure on environmental protection related to extraction of energy resources and production of energy

	Users/beneficiaries							
	ISIC B		ISIC C	ISIC D			Other industries [1]	Total
	05 - Mining of coal and lignite	06 - Extraction of crude petroleum and natural gas	19 - Manufac-ture of coke and refined petroleum products	351 - Electric power gene-ration, etc.	352 - Manufac-ture of gas; distri-bution, etc.	353 - Steam and air condi-tioning supply		
	Currency units							
Intermediate consumption								
Environmental protection services		450	200	100	75			825
Connected and adapted products		250	300	400	125	100		1 175
Gross fixed capital formation (GFCF)								
Environmental protection services		50		75	15	5		145
Connected and adapted products		50	30	25	10	20		135
Others GFCF for environmental protection		600	100	300	50	25		1 075
Specific transfers not included above								
Current		25	10	8	7	3		53
Capital		100		22				122
Total uses		1 525	640	930	282	153		3 530
Of which financed by the rest of the world				30				30
National expenditure for environmental protection		1 525	640	900	282	153		3 500

1) Environmental protection activiities related to other industries' production of energy can be recorded here.
These activities are assumed to be zero in the example tables in SEEA-E.

Table 6.18 Financing of national expenditure on environmental protection related to extraction of energy resources and production of energy

	Users/beneficiaries							
	ISIC B		ISIC C	ISIC D			Other industries [1]	Total
	05 - Mining of coal and lignite	06 - Extraction of crude petroleum and natural gas	19 - Manufac-ture of coke and refined petroleum products	351 - Electric power gene-ration, etc.	352 - Manufac-ture of gas; distri-bution, etc.	353 - Steam and air condi-tioning supply		
Financing units	Currency units							
Government		125	10	30	7	3		175
Corporations		1 400	630	570	200	130		2 930
Households incl. NPISH[2]				300	75	20		395
National Expenditure		1 525	640	900	282	153		3 500
Rest of the world				30				30
Uses of resident units		1 525	640	930	282	153		3 530

1) Environmental protection activiities related to other industries' production of energy can be recorded here.
These activities are assumed to be zero in the example tables in SEEA-E.
2) Non-profit institutions serving households

Table 6.20 National expenditure on energy resource use and management (CEA 13 and 15.4)

	Users/beneficiaries											
	ISIC B			ISIC C	ISIC D			Other industries	General Government	Households	Rest of the world	Total
	Mining and quarrying	*of which* 05 - Mining of coal and lignite	*of which* 06 - Extraction of crude petroleum and natural gas	19 - Manufacture of coke and refined petroleum products	351 - Electric power generation, etc.	352 - Manufacture of gas; distribution, etc.	353 - Steam and air conditioning supply					
	Currency units											
Intermediate consumption												
Ressource management and use services	5 266		5 163	1 183	880	885	226	4 000	2 000	200		14 538
Connected and adapted products	1 015		1 000	175	45	20	5	700		400		1 945
Gross fixed capital formation (GFCF)												
Ressource use and management services	1 085		4 010	35	23	20	103	300	1 000			4 491
Connected and adapted products	640		630				17	50	240			697
Others GFCF for ressource use and management	20		20	15	67			25	760			887
Specific transfers not included above												
Current	71		70	10	8	14	4	700		45		806
Capital	35		35					115				150
Total uses	11 100		10 928	1 418	1 023	939	355	5 890	4 000	645		20 554
Of which financed by the rest of the world	40		40		10							50
National expenditure for resource use and management	11 060		10 888	1 418	1 013	939	355	5 890	4 000	645		20 504

Table 6.21 Financing of national expenditure on energy resource use and management (CEA 13 and 15.4)

	Users/beneficiaries											
	Producers								General Government	Households	Rest of the world	Total
	ISIC B			ISIC C	ISIC D			Other industries				
	Mining and quarrying	*of which* 05 - Mining of coal and lignite	*of which* 06 - Extraction of crude petroleum and natural gas	19 - Manufacture of coke and refined petroleum products	351 - Electric power generation, etc.	352 - Manufacture of gas; distribution, etc.	353 - Steam and air conditioning supply					
Financing units	Currency units											
Government	300		295	67	120	85	64	1 975	4 000	125		
Corporations	10 760		10 593	1 351	603	719	204	2 950		20		20 504
Households incl. NPISH[1)]					290	135	87	965		500		
National Expenditure	11 060		10 888	1 418	1 013	939	355	5 890	4 000	645		20 504
Rest of the world	40		40		10							50
Uses of resident units	11 100		10 928	1 418	1 023	939	355	5 890	4 000	645		20 554

1) Non-profit institutions serving households

Annex 2. Classifications

This annex present the classifications that are relevant for the compilation of energy accounts. Tables are numbered using the same numbers as in the chapters where relevant.

Classifications of energy resources and fixed assets, etc.

Table 3.1 SEEA-E classification of energy resources and correspondence to the general SEEA classification of natural resources

SEEA-Energy classification of energy resources	SEEA Classification of natural resources
E Energy resources	EA.1 Natural resources
E.1 Oil and gas	EA.11 Mineral and energy resources
E.11 Natural gas	EA.111 Oil and gas
E.12 Crude oil and natural gas liquids	EA.111.1 Natural gas
E.13 Oil Shale	EA.111.2 Crude oil and natural gas liquids
E.14 Natural bitumen and extra heavy oil[1)]	EA.111.3 Oil Shale
E.2 Solid fossil energy resources	EA 111.4 Natural bitumen and extra heavy oil[1)]
E.21 Coal and lignite	EA.112 Non-metallic minerals and solid fossil energy resources
E.22 Peat	EA.112.1 Non-metallic minerals except for coal and peat
E.3 Other Energy resources	EA.112.2 Coal and lignite
E.23 Uranium and thorium ores	EA.112.3 Peat
E.24 Others	EA.113 Metallic minerals
	EA.113.1 Uranium and thorium ores
	EA.113.2 Other metallic minerals
	EA.12 Soil resources
	EA.13 Water resources
	EA.14 Biological resources

1) Includes oil extracted from oil sands, etc.

Table 3.2 Overall energy resource classification based on UNFC-2009

	SEEA-E Classes	Corresponding UNFC-2009 project categories		
		E **Economic and social viability**	**F** **Field Project Status and Feasibilty**	**G** **Geological knowledge**
Known Deposits	**A. Commercial Energy Resources** [1]	E1. Extraction and sale has been confirmed to be economically viable.	F1. Feasibility of extraction by a defined development project or mining operation has been confirmed.	Quantities associated with a known deposit that can be estimated with a high (G1), moderate (G2) or low (G3) level of confidence.
	B. Potential Commercial Energy Resources [2]	E2. Extraction and sale is expected to become economically viable in the foreseeable future. [3]	F2.1 Project activities are ongoing to justify development in the foreseeable future. or F2.2 Project activities are on hold and/or where justification as a commercial development may be subject to significant delay.	
	C. Non-Commercial and additional quantities in place [4]	E3.Extraction and sale is not expected to become economically viable in the foreseeable future or evaluation is at too early a stage to determine economic viability.	F2.2 Project activities are on hold and/or where justification as a commercial development may be subject to significant delay. or F2.3 There are no current plans to develop or to acquire additional data at the time due to limited potential. or F4. No development project or mining operation has been identified	
Potential deposits (not included in SEEA-E)	Exploration Projects and additional quantities in place	E3.Extraction and sale is not expected to become economically viable in the foreseeable future or evaluation is at too early a stage to determine economic viability.	F3. Feasibility of extraction by a defined development project or mining operation cannot be evaluated due to limited technical data. or F4. No development project or mining operation has been identified	Estimated quantities associated with a potential deposit, based primarily on indirect evidence (G4).

[1] Includes on-production projects, projects approved for development and projects justified for development

[2] Includes economic and marginal development projects pending, and development projects on hold

[3] Potential Commercial Projects may also satisfy the requirements for E1.

[4] Includes unclarified development projects, non-viable development projects, and additional quantities in place

Reference: UNFC-2009: United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009, ECE ENERGY SERIES No.39. United Nations, New York and Geneva, 2010, ECE/ENERGY/85. www.unece.org/se/pdfs/UNFC/UNFC2009_ECE_EnergySeries39.pdf

Table 4.11 Other assets[1] possibly used by the extraction industries

AN1 Produced non-financial assets

AN11 Fixed assets

AN111 Dwellings
AN112 Other buildings and structures
AN113 Machinery and equipment
AN114 Weapons systems
AN115 Cultivated biological resources
AN116 Costs of ownership transfer on non-produced assets
AN117 Intellectual property products
Of which AN1172 Mineral exploration and evaluation

AN2 Non-produced non-financial assets

AN21 Natural resources

AN211 Land
AN213 Non-cultivated biological resources
AN214 Water resources
AN215 Other natural resources

AN22 Contracts, leases and licences

AN221 Marketable operating leases
AN222 Permissions to use natural resources
AN223 Permissions to undertake specific activities
AN224 Entitlement to future goods and services on an exclusive basis

AN23 Purchases less sales of goodwill and marketing assets

1) Included are fixed assets and non-produced non-financial assets other than AN212 Mineral and energy. Not included are AN12 Inventories and AN13 Valuables.

Reference : SNA 2008 Annex 1 section B.4.

Classifications of energy products

Table 5.7 Standard International Energy Product Classification (SIEC) – top level

Classes of energy products
0 Coal
1 Peat and peat products
2 Oil shale / oil sands
3 Natural gas
4 Oil
5 Biofuels
6 Waste
7 Electricity
8 Heat
9 Nuclear fuels and other fuels n.e.c

Reference:See next Table

Standard International Energy Product Classification (SIEC) – detailed

SIEC Headings			Correspondences	
Section / Division / Group	**Class**		**CPC Ver.2**	**HS 2007**
0		**Coal**		
01		**Hard coal**		
011	0110	Anthracite	11010*	2701.11
012		Bituminous coal		
	0121	Coking coal	11010*	2701.19
	0129	Other bituminous coal	11010*	2701.12
02		**Brown coal**		
021	0210	Sub-bituminous coal	11030*	2702.10*
022	0220	Lignite	11030*	2702.10*
03		**Coal products**		
031		Coal coke		
	0311	Coke oven coke	33100*	2704*
	0312	Gas coke	33100*	2704*
	0313	Coke breeze	33100*	2704*
	0314	Semi cokes	33100*	2704*
032	0320	Patent fuel	11020	2701.20
033	0330	Brown coal briquettes (BKB)	11040	2702.20
034	0340	Coal tar	33200*	2706
035	0350	Coke oven gas	17200*	2705*
036	0360	Gas works gas (and other manufactured gases for distribution)	17200*	2705*
037		Recovered gases		
	0371	Blast furnace gas	17200*	2705*
	0372	Basic oxygen steel furnace gas	17200*	2705*
	0379	Other recovered gases	17200*	2705*
039	0390	Other coal products	33500*, 34540*	2707, 2708.10*, .20*, 2712.90*
1		**Peat and peat products**		
11		**Peat**		
111	1110	Sod peat	11050*	2703*
112	1120	Milled peat	11050*	2703*
12		**Peat products**		
121	1210	Peat briquettes	11050*	2703*
129	1290	Other peat products	11050*, 33100*, 33200*, 33500*	2703*, 2704*, 2706*, 2712.90*
2		**Oil shale / oil sands**		
20		**Oil shale / oil sands**		
200	2000	Oil shale / oil sands	12030	2714.10
3		**Natural gas**		
30		**Natural gas**		
300	3000	Natural gas	12020	2711.11, .21
4		**Oil**		
41		**Conventional crude oil**		
410	4100	Conventional crude oil	12010*	2709*
42		**Natural gas liquids (NGL)**		

420	4200	Natural gas liquids (NGL)	33420*	2711.14, .19*, .29*
43		**Refinery feedstocks**		
430	4300	Refinery feedstocks	a	a
44		**Additives and oxygenates**		
440	4400	Additives and oxygenates	34131*, 34139*, 34170*, others	2207.20*, 2905.11, 2909.19*, others
45		**Other hydrocarbons**		
450	4500	Other hydrocarbons	12010*, 34210*	2709*, 2804.10
46		**Oil products**		
461	4610	Refinery gas	33420*, 34210*	2711.29*, 2804.10
462	4620	Ethane	33420*	2711.19*, .29*
463	4630	Liquefied petroleum gases (LPG)	33410	2711.12, .13
464	4640	Naphtha	33330*	2710.11*
465		Gasolines		
	4651	Aviation gasoline	33310*	2710.11*
	4652	Motor gasoline	33310*	2710.11*
	4653	Gasoline-type jet fuel	33320	2710.11*
466		Kerosenes		
	4661	Kerosene-type jet fuel	33342	2710.19*
	4669	Other kerosene	33341	2710.19*
467		Gas oil / diesel oil and Heavy gas oil		
	4671	Gas oil / Diesel oil	33360*	2710.19*
	4672	Heavy gas oil	33360*	2710.19*
468	4680	Fuel oil	33370	2710.19*
469		Other oil products		
	4691	White spirit and special boiling point industrial spirits	33350	2710.11*
	4692	Lubricants	33380*	2710.19*
	4693	Paraffin waxes	33500*	2712.20*
	4694	Petroleum coke	33500*, 34540*	2713.11, .12, 2708.20*
	4695	Bitumen	33500*	2713.20
	4699	Other oil products n.e.c.	33330*, 33500*, 34540*	2708.10*, 2710.11*, 2712.10*, .20*,.90*, 2713.90
5		**Biofuels**		
51		**Solid biofuels**		
511		Fuelwood, wood residues and by-products		
	5111	Wood pellets	39280*	4401.30*
	5119	Other Fuelwood, wood residues and by-products	03130, 31230, 39280*	4401.10, 4401.21, .22, 4401.30*
512	5120	Bagasse	39140*	2303.20*
513	5130	Animal waste	34654*	3101*
514	5140	Black liquor	39230*	3804.00*
515	5150	Other vegetal material and residues	39120*, 39150*	2302*, 2308*, 0901.90*, 1802*
516	5160	Charcoal	34510	4402

52		**Liquid biofuels**		
521	5210	Biogasoline	34131*, 34139*, 34170*	2207.20*, 2905.11*, .13*, .14* 2909.19*
522	5220	Biodiesels	35490*	3824.90*
523	5230	Bio jet kerosene		
529	5290	Other liquid biofuels		
53		**Biogases**		
531		Biogases from anaerobic fermentation		
	5311	Landfill gas	33420*	2711.29*
	5312	Sewage sludge gas	33420*	2711.29*
	5319	Other biogases from anærobic fermentation	33420*	2711.29*
532	5320	Biogases from thermal processes		
6		**Waste**		
61		**Industrial waste**		
610	6100	Industrial waste	39120*, 39150*	0901.90*, 1802*, 2302*, 2308*
62		**Municipal waste**		
620	6200	Municipal waste	39910	3825.10
7		**Electricity**		
70		**Electricity**		
700	7000	Electricity	17100	2716
8		**Heat**		
80		**Heat**		
800	8000	Heat	17300	2201.90*
9		**Nuclear fuels and other fuels n.e.c.**		
91		**Uranium and plutonium**		
910	9100	Uranium and plutonium	13000*, 33610, 33620, 33710, 33720	2612.10, 2844.10, .20, .50, 8401.30
92		**Other nuclear fuels**		
920	9200	Other nuclear fuels	13000*, 33630*, 33690*	2612.20, 2844.30*, 2844.40*
99		**Other fuels n.e.c.**		
990	9900	Other fuels n.e.c.		

Note: “Coal Products” refer to the products derived from hard coal and brown coal. “Peat products” refer to products derived from peat. “Oil products” refer to products derived from the processing of conventional crude oil, NGLs, other Hydrocarbons, refinery feedstock, etc.

Descriptions and definitions of the CPC and HS codes can be accessed on the websites of their custodians, the United Nations Statistics Division (UNSD) and the World Customs Organization (WCO), respectively.

[a] Since the definition of feedstocks is primarily based on intended use, giving an explicit CPC/HS link could be misleading. Feedstocks may cover a wider range of products, including naphthas (HS 2710.11) and pyrolysis gasoline (HS 2707.50) among others.

Reference: International Recommendations for Energy Statistics (IRES). Draft version. Table 3.1

Classification of economic activities

Table 5.8 Broad structure of ISIC, rev. 4. (ISIC sections)

A	Agriculture, forestry and fishing
B	Mining and quarrying
C	Manufacturing
D	Electricity, gas, steam and air conditioning supply
E	Water supply; sewerage, waste management and remediation activities
F	Construction
G	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	Transportation and storage
I	Accommodation and food service activities
J	Information and communication
K	Financial and insurance activities
L	Real estate activities
M	Professional, scientific and technical activities
N	Administrative and support service activities
O	Public administration and defence; compulsory social security
P	Education
Q	Human health and social work activities
R	Arts, entertainment and recreation
S	Other service activities
T	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
U	Activities of extraterritorial organizations and bodies

Reference: International Standard Industrial Classification of All Economic Activities. Revision 4. Department of Economic and Social Affairs. Statistics Division. ST/ESA/STAT/SER.M/4/Rev.4. United Nations New York, 2008.

Classification of environmental protection, resource use and management activities

Table 6.16 Environmental protection activities - CEA classification

1 Protection of ambient air and climate
2 Wastewater management
3 Waste management
4 Protection and remediation of soil, groundwater and surface water
5 Noise and vibration abatement (excluding workplace protection)
6 Protection of biodiversity and landscapes
7 Protection against radiation (excluding external safety)
8 R&D for environmental protection
9 Other environmental protection activities for environmental protection
9.1 General environmental administration and
9.2 Education, training and information
9.3 Activities leading to indivisible expenditure
9.4 Activities not elsewhere classified

Reference: ??

Table 6.19 Excerpt of resource use and management activities within CEA with specific relevance for energy resources

13	**Use and management of fossil energy**
13.1	Reduction of the intake
13.2	Reduction of heat and energy losses, and energy savings
13.3	Direct management of the stocks of non-renewable energy sources
13.4	Measurement, control, laboratories and the like
13.5	Other activities
15	**Research and development activities for natural resource use and management**
15.4	Fossil energy

Annex 3. List of indicators.

Table 7.6 Examples of energy indicators, which can derived from SEEA-E

Area of interest[1]	Main Indicators	Sub-indicators	Information obtained from SEEA-E and national accounts, etc.
Energy use	**Energy use** **Energy use per capita**	By industries/households and by products	Total domestic end use of energy including transformation and distribution losses Population
Decoupling and Environment	**Energy use per GDP (decopupling)** **Share of renewable energy** **CO2 emissions from energy use**	By industries/households, By renewable/non-renewable energy	Use of renewable energy Energy related CO2 emissions
Energy efficiencies	**Energy intensity/efficiencies** **Efficiency of energy conversion and distribution** **Direct and indirect energy use by consumption groups**	By industries By consumption groups	End use incl. losses Losses of energy in transformation Direct and indirect energy use by consumption groups (production chain) IO-based
Trade and dependencies	**Energy trade balance** **Energy import dependency/self sufficiency** **Inventories of energy products**	By energy products	Imorts and exports expenditures Primary supply/end use incl. losses, imports in physical units Inventories of energy products
Government budget	**Government revenues releted to energy** **Energy taxes** **Energy subsidies**	By energy product and tax type	Revenues from energy related rent payments, energy taxes less subsidies, curent and capital transfers Energy taxes, including CO2 taxes Energy related subsidies
Industries	**Industries' energy costs, share of intermediate consumption** **Industries' energy costs, share of value added**	By industries	Households' total consumption expenditures and expendiures for energy Industries' expenditures for intermediate consumtion
Household and social issues	**Share of energy energy costs in households' total consumption expenditures** **Direct energy use by purpose**		Industries' value added
Resources and wealth	**Energy resource stock value, share of GDP** **Reserves to production ratio (R/P)** **Depeletion of energy resources, share of GDP**	By type of energy ressource	Commercial energy resources, physical stocks Extraction of energy, physical Opening stock value

[1] These areas are not mutually exclusive

Glossary

Th glossary explains terms used in SEEA-E and more generally some selected terms relevant for energy accounting, energy statistics and energy balances.

[so far only some of the energy relevant terms are included, more needs to be added – also some terms from the SEEA glossary should be included, once the SEEA glosaary is ready]

[The glossary below is based on the IEA glossary and the glossaries developed by the U.S. Energy Information Administration (http://eia.doe.gov/iea/glossary.html) and the Danish Energy Agency.]

Autoproducers	A term used in energy statistics and energy balances to refer to producers of electricity and/or district heating, whose primary activity is not transformation. The term is not used in SEEA-E.
Biodiesel	A renewable fuel synthesized from soybeans, other oil crops, or animal tallow that can substitute for petroleum diesel fuel.
Biofuel	fuel components produced from biomass. Biofuels can be used in either pure form or as a blend with standard automotive fuels. There are two main bio-components for fuels: ethanol and bio-esters. Using biofuels can lower overall carbon dioxide emissions.
Biogas	A medium Btu gas containing methane and carbon dioxide, produced from the anaerobic decomposition of organic material in a landfill. Also called biomass gas.
Biomass	Plant or animal material, including crop and agricultural waste, wood and wood waste, animal waste, municipal waste, and aquatic plants.
Bitumen:	A naturally occuring tar-like oil product, the heaviest part of the distillation residue in refining. Bitumen is used as a binding material for the stone material in road asphalt and as a sealing material in construction.
Border trade with oil products	Motor gasoline and other energy products purchased on one side of the border and consumed on the other side due to differences in energy prices. In SEEA-E border trade is included as imports and exports of the two countries involved.
Bunkering of fuels	Refueling of ships and aircrafts, both domestic and foreign. In energy statistics and energy balances the term "international bunker fuels" is used to denote the consumption of fuel for international transport activities of both domestic and foreign ships and aircrafts. In SEEA-E bunkering abroad means refueling in foreign countries of ships and aircrafts operated by residents.
Calorific value, gross and net	The amount of energy released when combustible matter is burned. A distinction is made between "net" and "gross" calorific values.The "gross" calorific value (GCV), or high heat value, measures the total (maximum) amount of heat that is produced by combustion. However, part of this heat will be locked up in the latent heat of evaporation of any water present in the fuel before combustion (moisture) or generated in the combustion process. the International Recommendation of Energy Statistics, IRES, recommends that, when expressing the energy content of energy products in terms of a common energy accounting unit, net calorific values (NCV) should be used in preference to gross calorific values (GCV).
Combined heat and	A plant designed to produce both heat and electricity simultaneously

power (CHP) plant	
Combined heat and power production (CHP)	Simultaneous production of electricity and heat.
Conversion Factor	A number that translates units of one measurement system into corresponding values of another measurement system.
Decommissioning	Dismantling of fixed capital used for extraction of energy resources or production of energy products , i.e. an oil rig.
Degree of self-sufficiency	Indicates to what extent the energy supply is covered by domestic sources of energy. Can be measured as production of primary energy in relation to total domestic energy use.
Depletion	A measure of the monetary value of extraction. In SEEA_E it is measured as the change in the value of the energy resource as a result of the physical removal and using up of the energy resource, i.e. due to the extraction. It should be noted that the value is to be recorded as the value before extraction i.e. in ground, and not as the value of the extracted products i.e. the sales value of the extracted resources.
Deposit	An underground pool of fossil energy resources. trapped within a geological formation and protected from evaporation by the overlying mineral strata.
Distribution losses	Losses of energy product during transportation (incl. losses of electricity in the grid) between the supplier and user of an energy product.
Domestic use of energy	All uses of energy by residents of a country. It is equal to the the total use of energy less exports of energy
End use of energy	All energy use except energy use for conversion of an energy product into another energy product
Energy	The ability to do work or the ability to move an object. The term is also used more broadly to indicate energy resources and energy products.
Energy Accounts	A systematic recording of energy data according to specific rules, formats and classifications. SEEA-E accounts are based on the genaral accounts of SEEA and SNA.
Energy Consumption	The use of energy as a source of heat or power or as a raw material input to a manufacturing process
Energy intensity	Measure of the use of energy in relation to some economic measure. Typically enery use in relation to gross domestic product (GDP) or gross value added (GVA) at constant prices.
Extraction of energy resources	The physical removal of energy resources from the energy deposits in which they naturally occur
Final energy use/consumption	Term used in energy statistics and energy balances. Incudes all energy use, except energy use for conversion into other energy products. The term is not used in SEEA-E, see end use of energy, instead.
Flaring	Gas disposed of by burning in flares usually at the production sites or at gas processing plants.
Fossil fuels	An energy source formed in the Earth's crust from decayed organic material. The common fossil fuels are petroleum, coal, and natural gas.
Geothermal Energy	Hot water or steam extracted from geothermal reservoirs in the Earth's crust. Water or stream extracted from geothermal reservoirs can be used for geothermal heat pumps, water heating, or electricity generation.
Giga	One billion (10^9).
ISIC	International Standard Industrial Classification
Joule	Unit of measurement of energy.
Mega	One million (10^6)
Non-energy use	Energy products included in the energy accounts, which are not used for energy purposes.
non-renewable energy	Energy that cannot be "renewed", such as oil, natural gas, and coal.
Own use of energy	Use of energy products within the same unit that produces the energy product without

	any economic transaction of the energy product.
Petroleum:	A broadly defined class of liquid hydrocarbon mixtures. Included are energy resources and energy products: Crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids.
Prmary Energy	Energy in the form that it is first accounted for in a statistical energy balance, before any transformation to secondary or tertiary forms of energy. For example, coal can be converted to synthetic gas, which can be converted to electricity; in this example, coal is primary energy, synthetic gas is secondary energy, and electricity is tertiary energy. See Primary energy production and Primary energy consumption.
Reference year	The calendar year to which the recorded stocks or flows of energy refer.
Reinjection (natural gas)	The forcing of gas under pressure into an oil reservoir in an attempt to increase recovery.
Renewable	Energy resources that are naturally replenishing. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Renewable energy resources include: biomass, hydro, geothermal, solar, wind, ocean thermal, wave action, and tidal action.
Renewables and Waste	Comprises solid biomass, liquid biomass, biogas, industrial waste and municipal waste.
Reserves, energy reserves	Quantities of energy sources, which is expected to be feasible to extract based on technically and economically assessments. The term is defined somewhat in different contexts. It is not used in SEEA-E.
Resources, energy resources	Naturally occuring energy that can be extracted from deposits (non-renewable energy) or caught from the environment (reneawble energy)
Statistical difference	The difference between calculations of energy stocks and flows based on different data sources, which theoretically ought to produce identical results.
Supply of energy	Includes domestic production and imports of energy
Transformation loss	Difference between total input and output of energy in the transformation process.
Transformation	Production of electricity, district heating and town gas from primary or secondary energy products
Underground gas storage	Underground gas storage: The use of sub-surface facilities for storing gas that has been transferred from its original location. The facilities are usually hollowed-out salt domes, geological reservoirs (depleted oil or gas fields) or water-bearing sands topped by an impermeable cap rock (aquifer).
Use of energy	Include intermediate consumption and final uses of energy. The latter includes use by households, changes in inventories and exports of energy.
Venting (natural gas)	Gas released into the air on the production site or at processing plants.
Wellhead	The point at which the crude (and/ornatural gas) exits the ground. Following historical precedent, the volume and price for crude oil production are labeled as "wellhead, "even though the cost and volume are now generally measured at the lease boundry. In the context of domestic crude price data, the term "wellhead" is the generic term used to reference the production site or lease property.