

Reporting of used parameters and variables included in Annex 1, part 2, of the Energy Union Governance as															
All parameters and variables highlighted in green are already currently requested under existing legislation (MMR, RES Directive, or Energy Efficiency Directive), see e.g.															
All energy related parameters and variables highlighted in red might require to rely on complementary tools than standard energy system models															
All variables highlighted in orange correspond to indicators to be computed on the basis of parameters and variables already available elsewhere in the excel file															
		Unit	Statistics	2005	2010	2015	2020	2025	2030	2035	2040	Comments MS	Source statistics	measuring output or exogenous assumption?	Comments Commission
<b>1. General parameters and variables</b>															
1 Population	million			16.31	16.57	16.90	17.38	17.73	18.03			KEV2019/MONIT (PBL)	CBS	Assumption	
2 GDP	EUR million			550883	639187	690008	826759	961437	1119263			Projections based on KEV 2019 (PBL) , based on real prices	CBS	Assumption	
3 Sectoral gross value added	EUR million			547670	593181	620835	687685	741834	801068			KEV2019/MONIT (PBL), Including mineral extraction, water, Euro 2015 prices	CBS	Assumption	
Agriculture	EUR million			10254	11224	11898	12093	12541	13006			KEV2019/MONIT (PBL), Agriculture, forestry and fishing, Euro 2015 prices	CBS	Assumption	
Construction	EUR million			28407	27370	26394	33275	33279	33314			KEV2019/MONIT (PBL), Euro 2015 prices	CBS	Assumption	
Services	EUR million			413459	456237	483452	535745	583905	637288			KEV2019/MONIT (PBL) Trade, transportation, commercial services, government,	CBS	Assumption	
Energy Sector	EUR million			7351	7917	9321	9736	9866	10410			KEV2019/MONIT (PBL) includingg refinery, Euro 2015 prices	CBS	Assumption	
Industry	EUR million			69113	69612	73029	85125	90555	95188			KEV2019/MONIT (PBL), excl Refinery sector, Euro 2015 prices	CBS	Assumption	
4 Number of households	million			7,1	7,4	8,0	8,3	8,5				KEV2019/MONIT (PBL)	CBS	Assumption	
5 Households size	Inhabitants/household			2,3	2,2	2,2	2,1	2,1				KEV2019/MONIT (PBL)	CBS	Assumption	
6 Disposable income of households (yearly)	EUR													Please specify the definition applied	
7 Number of passenger-kilometers	million pkm			184451	185902	188345	201363	206190	214882			KEV2019/MONIT (PBL), Includes bicycles, pedestrians, and other	CBS	modelling output	
Public road transport	million pkm			7300	6700	5400	5593	5748	5903			KEV2019/MONIT (PBL)	CBS	modelling output	
Private cars	million pkm			137000	136500	137500	148031	150871	157578			KEV2019/MONIT (PBL)	CBS	modelling output	
Motorcycles	million pkm														
Rail	million pkm			15200	17100	18500	20486	21907	23329			KEV2019/MONIT (PBL)	CBS	modelling output	
Aviation	million pkm														
Inland navigation	million pkm														
8 Freight transport tonnes-kilometres	million tkm			109756	108860	114006	119389	124168	132649			KEV2019/MONIT (PBL)	CBS	modelling output	
Trucks	million tkm			60776	56343	58926	62755	65059	68966			KEV2019/MONIT (PBL)	CBS	modelling output	
Rail	million tkm			5914	5925	6545	6807	7472	8525			KEV2019/MONIT (PBL)	CBS	modelling output	
Inland navigation	million tkm			43066	46592	48535	49827	51637	55158			KEV2019/MONIT (PBL)	CBS	modelling output	
9 International Fuel prices	EUR/GJ or EUR/toe													Please specify if Commission's proposal or other source was applied and in the latter case specify methodology	
Oil	EUR 2018/barrel			56,00	68,00	50,00	53,00	81,00	88,00			Projections source: KEV 2019 (PBL) / Brent Crude futures (2020) / IEA WEO (2020)	CBS	assumption	
Gas (NCV)	EUR 2018/m3				0,21	0,22	0,19	0,23	0,25			For 2005 no statistics available. Projections source: KEV 2019 (PBL) / TTF future	CBS	assumption	
Coal	EUR 2018/ton			68,00	78,00	62,00	66,00	72,00	75,00			KEV 2019 (PBL) / Rotterdam coal futures (ARA) (2020) / IEA WEO (2025,2030)	CBS	assumption	
10 Carbon price ETS sectors	EUR 2018/ton CO2				16,00	8,00	22,00	33,00	47,00			KEV 2019 (PBL) / CO2 futures (2020) / PBL (2025,2030)	CBS	assumption	
11 Exchange rate to EUR and to US dollar	USD/Euro			1,24	1,33	1,11	1,20	1,18	1,18			KEV2019 (PBL)	CBS	assumption	
12 Heating degree days						2686	2710	2661	2612			2014 2030 scenario KNMI (Royal Netherlands Meteorological Institute)	KNMI	Assumption	
13 Cooling degree days						95	119	126	133			2015 2030 scenario KNMI (Royal Netherlands Meteorological Institute)	KNMI	Assumption	
14 Technology cost assumptions (see specific excel file circulated with technology cost assumptions as used in EU Reference Scenario 2016 for suggestions on what could be relevant to report														Please specify if Commission's proposal or other source was applied and in the latter case specify methodology	
<b>2. energy balances and indicators</b>															
<b>2.1 energy supply</b>															
1 Production (incl.recovery of products)	ktoe			62459	71124	47935	35414	27212	24901			Primary production all products	Eurostat	modelling output	
Solids	ktoe			0	0	0	0	0	0			Primary production solid fossil fuels	Eurostat	modelling output	
Oil	ktoe			2546	1636	2038	1024	1624	1367			Primary production oil and petroleum products	Eurostat	modelling output	
Natural gas	ktoe			56177	64718	39447	25173	13380	9449			Primary production natural gas	Eurostat	modelling output	
Nuclear	ktoe			1031	917	937	1049	1049	1017			Primary production nuclear	Eurostat	modelling output	
Renewable energy sources	ktoe			1987	3129	4866	7377	10347	12254			Primary production renewables and biofuels	Eurostat	modelling output	
Other	ktoe			718	725	647	791	811	814			Primary production non - renewable waste	Eurostat	modelling output	
2 Net Imports (ktoe)	ktoe			37527	28282	42671	51729	58424	57421			Import - Export all products	Eurostat	modelling output	
Solids	ktoe			8197	7645	10535	6755	6633	3091			Import - Export solid fossil fuel	Eurostat	modelling output	
Oil	ktoe			48403	44483	42847	42270	41722	41632			Import - Export oil and petroleum products	Eurostat	modelling output	
Natural gas	ktoe			-20940	-24209	-10494	1064	11001	13451			Import - Export natural gas	Eurostat	modelling output	
Electricity	ktoe			1573	239	752	1349	-1238	-1052			Import - Export electricity	Eurostat	modelling output	
Other	ktoe			295	125	-969	292	306	299			Import - Export renewables and non renewable waste	Eurostat	modelling output	
3 Import Dependency	%			38%	28%	49%	60%	69%	70%			Net energy imports divided by gross inland energy consumption plus fuel supplied to international markets		calculation	
4 Main import sources for energy carriers															
Main country (please specify here) of origin of Electricity Purchases	% of total imports														
1st main country (please specify here) of origin of Gas Purchases	% of total imports														
2nd main country (please specify here) of origin of Gas Purchases	% of total imports														
3rd main country (please specify here) of origin of Gas Purchases	% of total imports													If more countries to be reported please add rows	
5 Gross Inland Consumption	ktoe			83696	86090	76015	75785	73935	70655			gross inland consumption all products (Europe 2020-2030 definition)	Eurostat	modelling output	
Solids	ktoe			8094	7541	10915	6755	6633	3091			gross inland consumption - solid fossil fuels	Eurostat	modelling output	
Oil	ktoe			34690	33351	30360	32343	32106	31951			gross inland consumption - oil and petroleum products	Eurostat	modelling output	
Natural gas	ktoe			35325	40066	28629	26154	24275	22770			gross inland consumption - natural gas	Eurostat	modelling output	
Nuclear	ktoe			1031	917	937	1049	1049	1017			gross inland consumption - nuclear heat	Eurostat	modelling output	
Electricity	ktoe			1573	239	752	1349	-1238							





non-dairy cattle	1000 heads	1209	1250	1169	1241	1241	1241			CBS	assumption	
pigs	1000 heads	6749	7131	7005	6756	6412	6412	Excl. piglets		CBS	assumption	
sheep	1000 heads	952	923	934	845	845	845	Other livestock		CBS	assumption	
poultry	1000 heads	95190	103371	108558	100990	100990	100990			CBS	assumption	
b Nitrogen input from application of synthetic fertilizers	kt nitrogen	280	222	268	259	254	250			CBS	assumption	
c Nitrogen input from application of manure	kt nitrogen	292	297	311	320	324	324	Manure from stable and stock		CBS	assumption	
d Nitrogen fixed by N-fixing crops	kt nitrogen											
e Nitrogen in crop residues returned to soils	kt nitrogen			45,9	47,6	46,9	46,1			CBS	assumption	
f Area of cultivated organic soils	hectares			338467	333562	327662	321762			CBS	assumption	
g Municipal solid waste (MSW) generation	t			9409256	8000000	7500000	7000000			CBS	assumption	
h Municipal solid waste (MSW) going to landfills	t			86420	70000	65000	60000			CBS	assumption	
i Share of CH4 recovery in total CH4 generation from landfills	%			13,4	13,0	13,0	12,0			CBS	assumption	