

Explanatory note on sector eligibility under section 4.11 of the draft CEEAG

This document provides an overview of the methodology and data used to determine the NACE-4 sectors that are eligible for reduced electricity levies under section 4.11 of the draft CEEAG. In order for a sector to be eligible, it needs to meet certain electro-intensity and trade intensity levels. For this purpose:

- **Electro-intensity** is defined as the total annual electricity consumption in a NACE-4 sector, multiplied by the average EU electricity price for industrial consumers and divided by the GVA (gross value added) of the NACE-4 sector.
- **Trade intensity** of a NACE-4 sector is calculated as exports plus imports vis-à-vis countries located outside the EU, divided by turnover in the EU and imports from countries located outside the EU.

Electricity consumption and GVA per NACE-4 sector come from the dataset used by the Commission for its revision of the ETS State aid guidelines for indirect cost compensation¹ and of the ETS Carbon Leakage list², which were both published for consultation and impact assessed. The dataset encompasses 245 NACE-4 sectors belonging to the fields of “mining and quarrying” and “manufacturing”.

Values used are averages over the 2013-15 period since no comprehensive, official and verified data on electricity consumption at NACE-4 level for the EU is currently available for more recent years. A single electricity price was assumed for all sectors, which corresponds to the average EU price for industrial consumers (consumption band “IB”, 20MWh-500MWh per year), all taxes and levies included, in the second semester of 2015.

Trade intensity levels have been calculated on the basis of the annual average of exports, imports and turnover for the 2013-15 period. This period was selected to be consistent with the latest available data for the calculation of electro-intensity levels. The same data was also used by the Commission in its revision of the ETS State aid guidelines and of the ETS Carbon Leakage list.

¹ C(2020) 6400 final of 21 September 2020

² Commission Delegated Decision (EU) 2019/708 of 15 February 2019

On this basis, the following levels of electro-intensity (EI) and trade intensity (TI) have been determined.

NACE	SECTOR DESCRIPTION	EI	TI
05.10	Mining of hard coal	18,5%	62,1%
05.20	Mining of lignite	143,6%	1,7%
06.10	Extraction of crude petroleum	0,1%	60,7%
06.20	Extraction of natural gas	9,7%	27,4%
07.10	Mining of iron ores	23,0%	86,4%
07.21	Mining of uranium and thorium ores	0,0%	0,0%
07.29	Mining of other non-ferrous metal ores	22,1%	83,7%
08.11	Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate	14,0%	35,3%
08.12	Operation of gravel and sand pits; mining of clays and kaolin	7,1%	8,0%
08.91	Mining of chemical and fertiliser minerals	12,2%	62,3%
08.92	Extraction of peat	2,2%	8,8%
08.93	Extraction of salt	21,7%	14,1%
08.99	Other mining and quarrying n.e.c.	11,9%	173,3%
09.10	Support activities for petroleum and natural gas extraction	0,7%	0,0%
09.90	Support activities for other mining and quarrying	28,3%	0,0%
10.11	Processing and preserving of meat	9,3%	13,1%
10.12	Processing and preserving of poultry meat	11,9%	6,5%
10.13	Production of meat and poultry meat products	7,5%	5,4%
10.20	Processing and preserving of fish, crustaceans and molluscs	5,4%	44,5%
10.31	Processing and preserving of potatoes	17,1%	12,2%
10.32	Manufacture of fruit and vegetable juice	10,5%	25,1%
10.39	Other processing and preserving of fruit and vegetables	10,8%	25,5%
10.41	Manufacture of oils and fats	17,9%	43,4%
10.42	Manufacture of margarine and similar edible fats	8,4%	14,9%
10.51	Operation of dairies and cheese making	11,9%	10,6%
10.52	Manufacture of ice cream	10,4%	5,0%
10.61	Manufacture of grain mill products	15,7%	10,2%
10.62	Manufacture of starches and starch products	44,5%	18,5%
10.71	Manufacture of bread; manufacture of fresh pastry goods and cakes	3,7%	1,2%
10.72	Manufacture of rusks and biscuits; manufacture of preserved pastry goods and cakes	7,3%	11,6%
10.73	Manufacture of macaroni, noodles, couscous and similar farinaceous products	9,7%	15,2%
10.81	Manufacture of sugar	17,6%	19,7%

NACE	SECTOR DESCRIPTION	EI	TI
10.82	Manufacture of cocoa, chocolate and sugar confectionery	6,8%	21,5%
10.83	Processing of tea and coffee	4,4%	22,7%
10.84	Manufacture of condiments and seasonings	4,2%	17,4%
10.85	Manufacture of prepared meals and dishes	9,6%	20,2%
10.86	Manufacture of homogenised food preparations and dietetic food	5,0%	57,8%
10.89	Manufacture of other food products n.e.c.	7,6%	21,6%
10.91	Manufacture of prepared feeds for farm animals	14,3%	4,8%
10.92	Manufacture of prepared pet foods	6,8%	11,6%
11.01	Distilling, rectifying and blending of spirits	1,8%	65,2%
11.02	Manufacture of wine from grape	2,0%	38,7%
11.03	Manufacture of cider and other fruit wines	4,4%	9,1%
11.04	Manufacture of other non-distilled fermented beverages	8,4%	25,9%
11.05	Manufacture of beer	5,0%	10,6%
11.06	Manufacture of malt	23,4%	32,7%
11.07	Manufacture of soft drinks; production of mineral waters and other bottled waters	7,9%	7,9%
12.00	Manufacture of tobacco products	3,4%	28,1%
13.10	Preparation and spinning of textile fibres	24,7%	46,5%
13.20	Weaving of textiles	10,4%	59,2%
13.30	Finishing of textiles	6,9%	65,9%
13.91	Manufacture of knitted and crocheted fabrics	7,5%	65,9%
13.92	Manufacture of made-up textile articles, except apparel	2,5%	58,9%
13.93	Manufacture of carpets and rugs	8,4%	36,0%
13.94	Manufacture of cordage, rope, twine and netting	5,3%	44,8%
13.95	Manufacture of non-wovens and articles made from non-wovens, except apparel	26,0%	38,5%
13.96	Manufacture of other technical and industrial textiles	6,0%	45,4%
13.99	Manufacture of other textiles n.e.c.	4,5%	35,7%
14.11	Manufacture of leather clothes	65,0%	83,0%
14.12	Manufacture of workwear	1,1%	57,4%
14.13	Manufacture of other outerwear	1,4%	97,2%
14.14	Manufacture of underwear	1,7%	92,5%
14.19	Manufacture of other wearing apparel and accessories	1,4%	114,8%
14.20	Manufacture of articles of fur	0,1%	85,7%
14.31	Manufacture of knitted and crocheted hosiery	5,8%	48,9%
14.39	Manufacture of other knitted and crocheted apparel	2,2%	91,0%
15.11	Tanning and dressing of leather; dressing and dyeing of fur	5,6%	52,4%

NACE	SECTOR DESCRIPTION	EI	TI
15.12	Manufacture of luggage, handbags and the like, saddlery and harness	0,8%	102,9%
15.20	Manufacture of footwear	3,0%	72,6%
16.10	Sawmilling and planing of wood	11,3%	27,6%
16.21	Manufacture of veneer sheets and wood-based panels	32,0%	23,6%
16.22	Manufacture of assembled parquet floors	12,8%	36,6%
16.23	Manufacture of other builders' carpentry and joinery	3,1%	7,4%
16.24	Manufacture of wooden containers	3,5%	8,5%
16.29	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials	9,8%	35,2%
17.11	Manufacture of pulp	50,1%	48,1%
17.12	Manufacture of paper and paperboard	69,1%	27,8%
17.21	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard	7,1%	6,0%
17.22	Manufacture of household and sanitary goods and of toilet requisites	20,3%	16,1%
17.23	Manufacture of paper stationery	5,7%	16,5%
17.24	Manufacture of wallpaper	9,1%	51,0%
17.29	Manufacture of other articles of paper and paperboard	5,0%	14,0%
18.11	Printing of newspapers	7,8%	5,3%
18.12	Other printing	5,6%	5,3%
18.13	Pre-press and pre-media services	1,8%	5,3%
18.14	Binding and related services	5,1%	5,3%
18.20	Reproduction of recorded media	7,0%	5,3%
19.10	Manufacture of coke oven products	-4,6%	108,9%
19.20	Manufacture of refined petroleum products	38,8%	25,8%
20.11	Manufacture of industrial gases	707,0%	6,0%
20.12	Manufacture of dyes and pigments	21,0%	48,5%
20.13	Manufacture of other inorganic basic chemicals	63,3%	54,0%
20.14	Manufacture of other organic basic chemicals	18,3%	49,0%
20.15	Manufacture of fertilisers and nitrogen compounds	25,9%	31,8%
20.16	Manufacture of plastics in primary forms	31,6%	36,0%
20.17	Manufacture of synthetic rubber in primary forms	28,7%	55,1%
20.20	Manufacture of pesticides and other agrochemical products	4,4%	55,6%
20.30	Manufacture of paints, varnishes and similar coatings, printing ink and mastics	3,2%	27,0%
20.41	Manufacture of soap and detergents, cleaning and polishing preparations	3,9%	26,0%

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20.42	Manufacture of perfumes and toilet preparations	2,0%	65,7%
20.51	Manufacture of explosives	6,7%	27,4%
20.52	Manufacture of glues	6,1%	30,4%
20.53	Manufacture of essential oils	2,4%	86,3%
20.59	Manufacture of other chemical products n.e.c:	7,7%	58,0%
20.60	Manufacture of man-made fibres	29,7%	44,1%
21.10	Manufacture of basic pharmaceutical products	7,6%	88,6%
21.20	Manufacture of pharmaceutical preparations	2,3%	82,7%
22.11	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres	7,4%	47,4%
22.19	Manufacture of other rubber products	7,6%	37,7%
22.21	Manufacture of plastic plates, sheets, tubes and profiles	13,6%	25,7%
22.22	Manufacture of plastic packing goods	18,8%	15,5%
22.23	Manufacture of builders' ware of plastic	4,0%	12,6%
22.29	Manufacture of other plastic products	9,0%	24,1%
23.11	Manufacture of flat glass	29,4%	23,7%
23.12	Shaping and processing of flat glass	15,0%	20,6%
23.13	Manufacture of hollow glass	27,9%	24,7%
23.14	Manufacture of glass fibres	34,1%	28,4%
23.19	Manufacture and processing of other glass, including technical glassware	9,3%	48,5%
23.20	Manufacture of refractory products	10,6%	44,2%
23.31	Manufacture of ceramic tiles and flags	25,7%	41,1%
23.32	Manufacture of bricks, tiles and construction products, in baked clay	18,5%	4,8%
23.41	Manufacture of ceramic household and ornamental articles	4,9%	63,3%
23.42	Manufacture of ceramic sanitary fixtures	6,1%	42,0%
23.43	Manufacture of ceramic insulators and insulating fittings	13,7%	55,5%
23.44	Manufacture of other technical ceramic products	9,3%	62,5%
23.49	Manufacture of other ceramic products	6,6%	41,3%
23.51	Manufacture of cement	62,5%	10,1%
23.52	Manufacture of lime and plaster	26,7%	4,9%
23.61	Manufacture of concrete products for construction purposes	3,6%	3,8%
23.62	Manufacture of plaster products for construction purposes	7,3%	6,8%
23.63	Manufacture of ready-mixed concrete	2,9%	0,1%
23.64	Manufacture of mortars	5,1%	3,3%
23.65	Manufacture of fibre cement	7,7%	11,9%
23.69	Manufacture of other articles of concrete, plaster and cement	4,3%	9,7%

NACE	SECTOR DESCRIPTION	EI	TI
23.70	Cutting, shaping and finishing of stone	1,6%	39,8%
23.91	Production of abrasive products	5,2%	52,2%
23.99	Manufacture of other non-metallic mineral products n.e.c.	31,7%	19,4%
24.10	Manufacture of basic iron and steel and of ferro-alloys	66,4%	25,7%
24.20	Manufacture of tubes, pipes, hollow profiles and related fittings, of steel	13,2%	48,5%
24.31	Cold drawing of bars	17,1%	37,0%
24.32	Cold rolling of narrow strip	16,8%	13,6%
24.33	Cold forming or folding	6,2%	8,6%
24.34	Cold drawing of wire	21,8%	26,6%
24.41	Precious metals production	4,7%	90,9%
24.42	Aluminium production	141,5%	35,2%
24.43	Lead, zinc and tin production	95,9%	30,6%
24.44	Copper production	33,5%	35,1%
24.45	Other non-ferrous metal production	13,1%	83,5%
24.46	Processing of nuclear fuel	14,8%	36,3%
24.51	Casting of iron	33,8%	41,0%
24.52	Casting of steel	18,9%	4,3%
24.53	Casting of light metals	16,5%	4,3%
24.54	Casting of other non-ferrous metals	10,1%	4,3%
25.11	Manufacture of metal structures and parts of structures	2,1%	13,0%
25.12	Manufacture of doors and windows of metal	1,4%	6,6%
25.21	Manufacture of central heating radiators and boilers	2,9%	22,3%
25.29	Manufacture of other tanks, reservoirs and containers of metal	3,3%	21,1%
25.30	Manufacture of steam generators, except central heating hot water boilers	2,1%	25,9%
25.40	Manufacture of weapons and ammunition	2,7%	90,5%
25.50	Forging, pressing, stamping and roll-forming of metal; powder metallurgy	11,6%	37,9%
25.61	Treatment and coating of metals	8,3%	37,9%
25.62	Machining	3,6%	37,9%
25.71	Manufacture of cutlery	5,6%	86,8%
25.72	Manufacture of locks and hinges	3,3%	42,4%
25.73	Manufacture of tools	4,1%	47,3%
25.91	Manufacture of steel drums and similar containers	7,5%	24,0%
25.92	Manufacture of light metal packaging	11,5%	15,7%
25.93	Manufacture of wire products, chain and springs	7,3%	28,6%

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25.94	Manufacture of fasteners and screw machine products	7,0%	60,1%
25.99	Manufacture of other fabricated metal products n.e.c.	3,7%	45,8%
26.11	Manufacture of electronic components	8,0%	84,4%
26.12	Manufacture of loaded electronic boards	4,3%	40,1%
26.20	Manufacture of computers and peripheral equipment	1,5%	103,4%
26.30	Manufacture of communication equipment	1,4%	107,8%
26.40	Manufacture of consumer electronics	2,7%	62,8%
26.51	Manufacture of instruments and appliances for measuring, testing and navigation	2,0%	77,5%
26.52	Manufacture of watches and clocks	2,0%	133,2%
26.60	Manufacture of irradiation, electromedical and electrotherapeutic equipment	1,2%	97,4%
26.70	Manufacture of optical instruments and photographic equipment	1,8%	83,2%
26.80	Manufacture of magnetic and optical media	3,6%	102,1%
27.11	Manufacture of electric motors, generators and transformers	3,1%	67,6%
27.12	Manufacture of electricity distribution and control apparatus	1,1%	55,8%
27.20	Manufacture of batteries and accumulators	15,1%	61,5%
27.31	Manufacture of fibre optic cables	13,2%	57,8%
27.32	Manufacture of other electronic and electric wires and cables	9,7%	39,0%
27.33	Manufacture of wiring devices	2,6%	67,3%
27.40	Manufacture of electric lighting equipment	3,3%	51,8%
27.51	Manufacture of electric domestic appliances	3,9%	52,2%
27.52	Manufacture of non-electric domestic appliances	2,8%	40,7%
27.90	Manufacture of other electrical equipment	7,8%	66,5%
28.11	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines	4,1%	55,2%
28.12	Manufacture of fluid power equipment	2,8%	47,7%
28.13	Manufacture of other pumps and compressors	2,9%	74,4%
28.14	Manufacture of other taps and valves	2,8%	63,8%
28.15	Manufacture of bearings, gears, gearing and driving elements	6,2%	52,8%
28.21	Manufacture of ovens, furnaces and furnace burners	1,7%	72,6%
28.22	Manufacture of lifting and handling equipment	1,6%	45,3%
28.23	Manufacture of office machinery and equipment (except computers and peripheral equipment)	2,8%	105,3%
28.24	Manufacture of power-driven hand tools	2,7%	79,4%
28.25	Manufacture of non-domestic cooling and ventilation equipment	1,9%	46,4%

NACE	SECTOR DESCRIPTION	EI	TI
28.29	Manufacture of other general-purpose machinery n.e.c.	1,7%	65,7%
28.30	Manufacture of agricultural and forestry machinery	2,4%	38,6%
28.41	Manufacture of metal forming machinery	1,9%	55,8%
28.49	Manufacture of other machine tools	1,9%	58,5%
28.91	Manufacture of machinery for metallurgy	4,5%	43,2%
28.92	Manufacture of machinery for mining, quarrying and construction	2,1%	75,8%
28.93	Manufacture of machinery for food, beverage and tobacco processing	4,6%	53,4%
28.94	Manufacture of machinery for textile, apparel and leather production	2,4%	75,1%
28.95	Manufacture of machinery for paper and paperboard production	2,0%	61,9%
28.96	Manufacture of plastic and rubber machinery	1,6%	60,0%
28.99	Manufacture of other special-purpose machinery n.e.c.	1,8%	70,0%
29.10	Manufacture of motor vehicles	2,8%	41,4%
29.20	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers	3,4%	18,6%
29.31	Manufacture of electrical and electronic equipment for motor vehicles	3,6%	37,2%
29.32	Manufacture of other parts and accessories for motor vehicles	6,8%	28,0%
30.11	Building of ships and floating structures	3,8%	83,2%
30.12	Building of pleasure and sporting boats	1,8%	66,1%
30.20	Manufacture of railway locomotives and rolling stock	2,6%	25,2%
30.30	Manufacture of air and spacecraft and related machinery	2,1%	100,4%
30.40	Manufacture of military fighting vehicles	1,7%	4,4%
30.91	Manufacture of motorcycles	7,1%	55,5%
30.92	Manufacture of bicycles and invalid carriages	1,9%	58,2%
30.99	Manufacture of other transport equipment n.e.c.	14,0%	48,2%
31.01	Manufacture of office and shop furniture	2,6%	14,4%
31.02	Manufacture of kitchen furniture	3,6%	8,8%
31.03	Manufacture of mattresses	3,0%	10,2%
31.09	Manufacture of other furniture	4,7%	36,8%
32.11	Striking of coins	2,7%	56,3%
32.12	Manufacture of jewellery and related articles	1,2%	145,4%
32.13	Manufacture of imitation jewellery and related articles	0,3%	99,1%
32.20	Manufacture of musical instruments	1,1%	83,5%
32.30	Manufacture of sports goods	2,6%	74,6%

NACE	SECTOR DESCRIPTION	EI	TI
32.40	Manufacture of games and toys	2,2%	55,1%
32.50	Manufacture of medical and dental instruments and supplies	1,6%	78,8%
32.91	Manufacture of brooms and brushes	3,0%	59,8%
32.99	Other manufacturing n.e.c.	3,5%	76,6%
33.11	Repair of fabricated metal products	0,8%	0,0%
33.12	Repair of machinery	0,5%	0,0%
33.13	Repair of electronic and optical equipment	2,5%	0,0%
33.14	Repair of electrical equipment	0,6%	0,0%
33.15	Repair and maintenance of ships and boats	3,7%	0,0%
33.16	Repair and maintenance of aircraft and spacecraft	1,8%	0,0%
33.17	Repair and maintenance of other transport equipment	2,3%	0,0%
33.19	Repair of other equipment	0,6%	0,0%
33.20	Installation of industrial machinery and equipment	0,7%	0,0%