

## **APPENDIX 5**

### **DATA USED FOR SECTORAL ANALYSIS STUDY**

Table 1. International Standards Industrial Classification ( ISIC, 3.Rev )  
Manufacturing Industry

<b>Code</b>	
<b>15</b>	Manufacture of food products and beverages
<b>151</b>	Production, processing and preservation of meat, fish, fruit, vegetables, oils and fats
<b>1511</b>	Production, processing and preserving of meat and meat products
<b>1512</b>	Processing and preserving of fish and fish products
<b>1513</b>	Processing and preserving of fruit and vegetables
<b>1514</b>	Manufacture of vegetable and animal oils and fats
<b>152</b>	Manufacture of dairy products
<b>1520</b>	Manufacture of dairy products
<b>153</b>	Manufacture of grain mill products, starches and starch products, and prepared animal feeds
<b>1531</b>	Manufacture of grain mill products
<b>1532</b>	Manufacture of starches and starch products
<b>1533</b>	Manufacture of prepared animal feeds
<b>154</b>	Manufacture of other food products
<b>1541</b>	Manufacture of bakery products
<b>1542</b>	Manufacture of sugar
<b>1543</b>	Manufacture of cocoa, chocolate and sugar confectionery
<b>1544</b>	Manufacture of macaroni, noodles, couscous and similar farinaceous products
<b>1549</b>	Manufacture of other food products n.e.c.
<b>155</b>	Manufacture of beverages
<b>1551</b>	Distilling, rectifying and blending of spirits; ethyl alcohol production from fermented materials
<b>1552</b>	Manufacture of wines
<b>1553</b>	Manufacture of malt liquors and malt
<b>1554</b>	Manufacture of soft drinks; production of mineral waters
<b>16</b>	Manufacture of tobacco products
<b>160</b>	Manufacture of tobacco products
<b>1600</b>	Manufacture of tobacco products
<b>17</b>	Manufacture of textiles
<b>171</b>	Spinning, weaving and finishing of textiles
<b>1711</b>	Preparation and spinning of textile fibres; weaving of textiles
<b>1712</b>	Finishing of textiles
<b>172</b>	Manufacture of other textiles
<b>1721</b>	Manufacture of made-up textile articles, except apparel
<b>1722</b>	Manufacture of carpets and rugs
<b>1723</b>	Manufacture of cordage, rope, twine and netting
<b>1729</b>	Manufacture of other textiles n.e.c
<b>173</b>	Manufacture of knitted and crocheted fabrics and articles
<b>1730</b>	Manufacture of knitted and crocheted fabrics and articles
<b>18</b>	Manufacture of wearing apparel ; dressing and dyeing of fur

Table 1. International Standards Industrial Classification ( ISIC, 3.Rev )  
Manufacturing Industry

<b>Code</b>	
181	Manufacture of wearing apparel, except fur apparel
1810	Manufacture of wearing apparel, except fur apparel
19	Tanning and dressing of leather ; Manufacture of luggage, handbags,
191	Tanning and dressing of leather ; Manufacture of luggage, handbags, saddlery and harness
1911	Tanning and dressing of leather
1912	Manufacture of luggage, handbags and the like, saddlery and harness
192	Manufacture of footwear
1920	Manufacture of footwear
20	Manufacture of wood and of products of wood and cork, except furniture; Manufacture of articles of straw and plaiting materials
201	Sawmilling and planing of wood
2010	Sawmilling and planing of wood
202	Manufacture of products of wood, cork, straw and plaiting materials
2021	Manufacture of veneer sheets; Manufacture of plywood, laminboard, particle board and other panels and boards
2022	Manufacture of builders carpentry and joinery
2023	Manufacture of wooden containers
2029	Manufacture of other products of wood; Manufacture of articles of cork, straw and plaiting materials
21	Manufacture of paper and paper products
210	Manufacture of paper and paper products
2101	Manufacture of pulp, paper and paperboard
2102	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
2109	Manufacture of other articles of paper and paperboard
22	Publishing, printing and reproduction of recorded media
221	Publishing
2211	Publishing of books, brochures, musical books and other publications
2212	Publishing of newspapers, journals and periodicals
2213	Publishing of recorded media
2219	Other publishing
222	Printing and service activities related to printing
2221	Printing
2222	Service activities related to printing
223	Reproduction of recorded media
2230	Reproduction of recorded media
23	Manufacture of coke, refined petroleum products
231	Manufacture of coke oven products
2310	Manufacture of coke oven products
232	Manufacture of refined petroleum products
2320	Manufacture of refined petroleum products
233	Processing of nuclear fuel

Table 1. International Standards Industrial Classification ( ISIC, 3.Rev )  
Manufacturing Industry

Code	
2330	Processing of nuclear fuel
24	Manufacture of chemicals and chemical products
241	Manufacture of basic chemicals
2411	Manufacture of basic chemicals, except fertilizers and nitrogen compounds
2412	Manufacture of fertilizers and nitrogen compounds
2413	Manufacture of plastics in primary forms and of synthetic rubber
2320	Manufacture of refined petroleum products
233	Processing of nuclear fuel
2330	Processing of nuclear fuel
24	Manufacture of chemicals and chemical products
241	Manufacture of basic chemicals
2411	Manufacture of basic chemicals, except fertilizers and nitrogen compounds
2412	Manufacture of fertilizers and nitrogen compounds
2413	Manufacture of plastics in primary forms and of synthetic rubber
2413	Manufacture of plastics in primary forms and of synthetic rubber
242	Manufacture of other chemical products
2421	Manufacture of pesticides and other agro-chemical products
2422	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
2423	Manufacture of pharmaceuticals, medicinal chemicals and botanical products
2424	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
243	Manufacture of man-made fibers
2430	Manufacture of man-made fibers
25	Manufacture of rubber and plastics products
251	Manufacture of rubber products
2511	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
2519	Manufacture of other rubber products
252	Manufacture of plastics products
2520	Manufacture of plastics products
26	Manufacture of other non-metallic mineral products
261	Manufacture of glass and glass products
269	Manufacture of non-metallic mineral products not elsewhere classified
2691	Manufacture of non-structural non-refractory ceramic ware
2692	Manufacture of refractory ceramic products
2693	Manufacture of structural non-refractory clay and ceramic products
2694	Manufacture of cement, lime and plaster
2695	Manufacture of articles of concrete, cement and plaster
2696	Cutting, shaping and finishing of stone
2699	Manufacture of other non-metallic mineral products not elsewhere classified

Table 1. International Standards Industrial Classification ( ISIC, 3.Rev )  
Manufacturing Industry

<b>Code</b>	
<b>27</b>	Manufacture of basic metals
<b>271</b>	Manufacture of basic iron and steel
<b>2710</b>	Manufacture of basic iron and steel
<b>272</b>	Manufacture of basic precious and non-ferrous metals
<b>273</b>	Casting of metals
<b>2731</b>	Casting of iron and steel
<b>2732</b>	Casting of non-ferrous metals
<b>28</b>	Manufacture of fabricated metal products, except machinery and equipment
<b>281</b>	Manufacture of structural metal products, tanks, reservoirs and steam generators
<b>2811</b>	Manufacture of structural metal products
<b>2812</b>	Manufacture of tanks, reservoirs and containers of metal
<b>2813</b>	Manufacture of steam generators, except central heating hot water boilers
<b>289</b>	Manufacture of other fabricated metal products; metal working service activities
<b>2891</b>	Forging, pressing, stamping and roll-forming of metal, powder metallurgy
<b>2892</b>	Treatment and coating of metals; general mechanical engineering
<b>2893</b>	Manufacture of cutlery, hand tools and general hardware
<b>2899</b>	Manufacture of other fabricated metal products not elsewhere classified
<b>29</b>	Manufacture of machinery and equipment not elsewhere classified
<b>291</b>	Manufacture of general purpose machinery
<b>2911</b>	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
<b>2912</b>	Manufacture of pumps, compressors, taps and valves
<b>2913</b>	Manufacture of bearings, gears, gearing and driving elements
<b>2914</b>	Manufacture of ovens, furnaces and furnace burners
<b>2915</b>	Manufacture of lifting and handling equipment
<b>2919</b>	Manufacture of other general purpose machinery
<b>292</b>	Manufacture of special purpose machinery
<b>2921</b>	Manufacture of agricultural and forestry machinery
<b>2922</b>	Manufacture of machine-tools
<b>2923</b>	Manufacture of machinery for metallurgy
<b>2924</b>	Manufacture of machinery for mining, quarrying and construction
<b>2925</b>	Manufacture of machinery for food, beverage and tobacco products
<b>2926</b>	Manufacture of machinery for textile, apparel and leather production
<b>2927</b>	Manufacture of weapons and ammunition
<b>2929</b>	Manufacture of other special purpose machinery
<b>293</b>	Manufacture of domestic appliances not elsewhere classified
<b>30</b>	Manufacture of office, accounting and computing machinery

Table 1. International Standards Industrial Classification ( ISIC, 3.Rev )  
Manufacturing Industry

Code	
31	Manufacture of electrical machinery and apparatus not elsewhere classified
311	Manufacture of electric motors, generators and transformers
312	Manufacture of electricity distribution and control apparatus
313	Manufacture of insulated wire and cable
314	Manufacture of accumulators, primary cells and primary batteries
315	Manufacture of electric lamps and lighting equipment
319	Manufacture of other electrical equipment not elsewhere classified
32	Manufacture of radio, television and communication equipment and apparatus
323	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods
3230	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods
33	Manufacture of medical, precision and optical instruments, watches and clocks
3311	Manufacture of medical and surgical equipment and orthopaedic appliances
3312	Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment
3313	Manufacture of industrial process control equipment
332	Manufacture of optical instruments and photographic equipment
33	Manufacture of watches and clocks
34	Manufacture of motor vehicles, trailers and semi-trailers
341	Manufacture of motor vehicles
342	Manufacture of bodies ( coachwork ) for motor vehicles, manufacture of trailers and semi-trailers
343	Manufacture of parts and accessories for motor vehicles and their engines
35	Manufacture of other transport equipment
351	Building and repairing of ships and boats
3511	Building and repairing of ships
3512	Building and repairing of pleasure and sporting boats
352	Manufacture of railway and tramway locomotives and rolling stock
353	Manufacture of aircraft and spacecraft
359	Manufacture of transport equipment not elsewhere classified
3591	Manufacture of motorcycles
3592	Manufacture of bicycles and invalid carriages
3599	Manufacture of other transport equipment not elsewhere classified
36	Manufacture of furniture, Manufacturing not elsewhere classified

Table 2. Water Consumption of Manufacturing Industry (2004)<sup>1</sup>

Main industry group		Water consumption ('000 m <sup>3</sup> /year)
15	Manufacture of food products and beverages	13,293
16	Manufacture of tobacco products	294
17	Manufacture of textiles	9,356
18	Manufacture of wearing apparel ;	1,955
19	Tanning and dressing of leather	167
20	Manufacture of wood and of products of wood and cork, except furniture	227
21	Manufacture of paper and paper products	1,799
22	Publishing, printing and reproduction of recorded media	119
23	Manufacture of coke, refined petroleum products and nuclear fuel	2,330
24	Manufacture of chemicals and chemical products	8,830
25	Manufacture of rubber and plastics products	663
26	Manufacture of other non-metallic mineral products	3,432
27	Manufacture of basic metals	75,501
28	Manufacture of fabricated metal products, except machinery and equipment	389
29	Manufacture of machinery and equipment not elsewhere classified	2,380
30	Manufacture of office, accounting and computing machinery	3
31	Manufacture of electrical machinery and apparatus not elsewhere classified	274
32	Manufacture of radio, television and communication equipment and apparatus	203
33	Manufacture of medical, precision and optical instruments, watches and clocks	17
34	Manufacture of motor vehicles, trailers and semi-trailers	540
35	Manufacture of other transport equipment	174
36	Manufacture of furniture, Manufacturing not elsewhere classified	416

<sup>1</sup> TSI Environmental Statistics, 2005 [http://TÜİK.gov.tr/VeriBilgi.do?tb\\_id=10&ust\\_id=3](http://TÜİK.gov.tr/VeriBilgi.do?tb_id=10&ust_id=3)

Table 3. Energy Consumption of Manufacturing Industry Sub-sectors (2001)<sup>2</sup>

Main Industry Group		Energy consumption (TEP/year)
15	Manufacture of food products and beverages	1,208,275
16	Manufacture of tobacco products	33,296
17	Manufacture of textiles	1,770,411
18	Manufacture of wearing apparel ;	80,747
19	Tanning and dressing of leather	11,227
20	Manufacture of wood and of products of wood and cork, except furniture	152,646
21	Manufacture of paper and paper products	480,800
22	Publishing, printing and reproduction of recorded media	142,008
23	Manufacture of coke, refined petroleum products and nuclear fuel	940,708
24	Manufacture of chemicals and chemical products	1,453,321
25	Manufacture of rubber and plastics products	288,347
26	Manufacture of other non-metallic mineral products	3,382,067
27	Manufacture of basic metals	4,318,276
28	Manufacture of fabricated metal products, except machinery and equipment	196,116
29	Manufacture of machinery and equipment not elsewhere classified	109,540
30	Manufacture of office, accounting and computing machinery	— *
31	Manufacture of electrical machinery and apparatus not elsewhere classified	91,703
32	Manufacture of radio, television and communication equipment and apparatus	52,082
33	Manufacture of medical, precision and optical instruments, watches and clocks	507
34	Manufacture of motor vehicles, trailers and semi-trailers	261,884
35	Manufacture of other transport equipment	26,595
36	Manufacture of furniture, Manufacturing not elsewhere classified	18,475

\* (—) : zero or negligible

<sup>2</sup> TSI Environmental Statistics, 2001 [http://TÜİK.gov.tr/VeriBilgi.do?tb\\_id=11&ust\\_id=3](http://TÜİK.gov.tr/VeriBilgi.do?tb_id=11&ust_id=3)

Table 4. Waste Water Discharge Amounts of Manufacturing Industry S(2004)<sup>3</sup>

Main Industry Group		Wastewater Discharged ('000 m <sup>3</sup> /year)
15	Manufacture of food products and beverages	80,284
16	Manufacture of tobacco products	1,680
17	Manufacture of textiles	76,724
18	Manufacture of wearing apparel ;	17,774
19	Tanning and dressing of leather	1,189
20	Manufacture of wood and of products of wood and cork, except furniture	1,128
21	Manufacture of paper and paper products	13,158
22	Publishing, printing and reproduction of recorded media	1,050
23	Manufacture of coke, refined petroleum products and nuclear fuel	12,163
24	Manufacture of chemicals and chemical products	56,516
25	Manufacture of rubber and plastics products	4,462
26	Manufacture of other non-metallic mineral products	10,378
27	Manufacture of basic metals	323,657
28	Manufacture of fabricated metal products, except machinery and equipment	2,916
29	Manufacture of machinery and equipment not elsewhere classified	21,861
30	Manufacture of office, accounting and computing machinery	30
31	Manufacture of electrical machinery and apparatus not elsewhere classified	2,374
32	Manufacture of radio, television and communication equipment and apparatus	1,773
33	Manufacture of medical, precision and optical instruments, watches and clocks	152
34	Manufacture of motor vehicles, trailers and semi-trailers	3,608
35	Manufacture of other transport equipment	933
36	Manufacture of furniture, Manufacturing not elsewhere classified	3,946

\* (—) : zero or negligible

<sup>3</sup> TSI Environmental Statistics, 2005 [http://TÜİK.gov.tr/VeriBilgi.do?tb\\_id=10&ust\\_id=3](http://TÜİK.gov.tr/VeriBilgi.do?tb_id=10&ust_id=3)

Table 5. Solid Waste Generated by Manufacturing Industry (2004)<sup>4</sup>

Main Industry Group		Solid Waste (‘000 m <sup>3</sup> /year)
15	Manufacture of food products and beverages	3511679
16	Manufacture of tobacco products	19765
17	Manufacture of textiles	364432
18	Manufacture of wearing apparel ;	129183
19	Tanning and dressing of leather	11531
20	Manufacture of wood and of products of wood and cork, except furniture	111324
21	Manufacture of paper and paper products	176053
22	Publishing, printing and reproduction of recorded media	42813
23	Manufacture of coke, refined petroleum products and nuclear fuel	124218
24	Manufacture of chemicals and chemical products	1496256
25	Manufacture of rubber and plastics products	91267
26	Manufacture of other non-metallic mineral products	1692660
27	Manufacture of basic metals	7764699
28	Manufacture of fabricated metal products, except machinery and equipment	717358
29	Manufacture of machinery and equipment not elsewhere classified	586291
30	Manufacture of office, accounting and computing machinery	—
31	Manufacture of electrical machinery and apparatus not elsewhere classified	137254
32	Manufacture of radio, television and communication equipment and apparatus	13433
33	Manufacture of medical, precision and optical instruments, watches and clocks	9268
34	Manufacture of motor vehicles, trailers and semi-trailers	310191
35	Manufacture of other transport equipment	38542
36	Manufacture of furniture, Manufacturing not elsewhere classified	149265

\* (—) : zero or negligible

<sup>4</sup> TSI Environmental Statistics, 2005 [http://TÜİK.gov.tr/VeriBilgi.do?tb\\_id=10&ust\\_id=3](http://TÜİK.gov.tr/VeriBilgi.do?tb_id=10&ust_id=3)

Table 6. Hazardous Waste Generated by Manufacturing Industry (2004)<sup>5</sup>

Main Industry Group		Hazardous Waste (‘000 m <sup>3</sup> /year)
15	Manufacture of food products and beverages	262,284
16	Manufacture of tobacco products	7,918
17	Manufacture of textiles	4,945
18	Manufacture of wearing apparel ;	1,625
19	Tanning and dressing of leather	1
20	Manufacture of wood and of products of wood and cork, except furniture	443
21	Manufacture of paper and paper products	3,232
22	Publishing, printing and reproduction of recorded media	209
23	Manufacture of coke, refined petroleum products and nuclear fuel	114,128
24	Manufacture of chemicals and chemical products	289,110
25	Manufacture of rubber and plastics products	2,763
26	Manufacture of other non-metallic mineral products	33,630
27	Manufacture of basic metals	327,986
28	Manufacture of fabricated metal products, except machinery and equipment	5,951
29	Manufacture of machinery and equipment not elsewhere classified	814
30	Manufacture of office, accounting and computing machinery	---
31	Manufacture of electrical machinery and apparatus not elsewhere classified	64,594
32	Manufacture of radio, television and communication equipment and apparatus	4,669
33	Manufacture of medical, precision and optical instruments, watches and clocks	26
34	Manufacture of motor vehicles, trailers and semi-trailers	71,792
35	Manufacture of other transport equipment	144
36	Manufacture of furniture, Manufacturing not elsewhere classified	140

\* (—) : Sifir veya ihmal edilebilir

<sup>5</sup> TSI Environmental Statistics, 2005 [http://TÜİK.gov.tr/VeriBilgi.do?tb\\_id=10&ust\\_id=3](http://TÜİK.gov.tr/VeriBilgi.do?tb_id=10&ust_id=3)

Table 7. Greenhouse Gases Emissions form Manufacturing Industry

Main Industry Group	Energy consumption (TJ/year)	Emissions originated from energy consumption* (tC/year)			Emissions originated from industrial processes** (tC/year)	Total emission (tC/year)
		CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O		
Manufacture of food products and beverages	52,863	1,057,259	2,220	26,220	-***	1,085,699
Manufacture of tobacco products	764	15,288	32	379	-	15,700
Manufacture of textiles	41,183	823,653	1,730	20,427	-	845,809
Manufacture of wearing apparel ;	3,195	63,892	134	1,585	-	65,610
Tanning and dressing of leather	176	3,527	7	87	-	3,622
Manufacture of wood and of products of wood and cork, except furniture	4,541	90,815	191	2,252	-	93,258
Manufacture of paper and paper products	17,917	358,340	753	8,887	-	367,980
Publishing, printing and reproduction of recorded media	4,787	95,735	201	2,374	-	98,310
Manufacture of coke, refined petroleum products and nuclear fuel	57,016	1,140,315	2,395	28,280	-	1,170,989
Manufacture of chemicals and chemical products	66,339	1,326,774	2,786	32,904	2,368,000	1,362,464
Manufacture of rubber and plastics products	6,981	139,624	293	3,463	-	143,380
Manufacture of other non-metallic mineral products	125,505	2,510,090	5,271	62,250	19,328,000	2,577,612
Manufacture of basic metals	151,943	3,038,868	6,382	75,364	460,000	3,120,614
Manufacture of fabricated metal products, except machinery and equipment	4,645	92,907	195	2,304	-	95,406
Manufacture of machinery and equipment not elsewhere classified	5,432	108,638	228	2,694	-	111,561
Manufacture of office, accounting and computing machinery	-	-	-	-	-	0
Manufacture of electrical machinery and apparatus not elsewhere classified	1,110	22,208	47	551	-	22,805
Manufacture of radio, television and communication equipment and apparatus	835	16,708	35	414	-	17,157
Manufacture of medical, precision and optical instruments, watches and clocks	484	9,675	20	240	-	9,935
Manufacture of motor vehicles, trailers and semi-trailers	6,077	121,532	255	3,014	-	124,801
Manufacture of other transport equipment	1,161	23,229	49	576	-	23,854
Manufacture of furniture, Manufacturing not elsewhere classified	328	6,564	14	163	-	6,740

\* Emission factors are used for the calculation of emission values. Emission factors are as followa;

CO<sub>2</sub>: 20 tC/TJ (1 TJ fuel for energy causes 20 tC emission)

CH<sub>4</sub>: 2 KG CH<sub>4</sub> /TJ = 0,042 tC/TJ

N<sub>2</sub>O: 0,6 KG N<sub>2</sub>O/TJ = 0,496 tC/ TJ

\*\* Greenhouse gases originated from industrial processes are taken from Turkey Greenhouse Gas Inventory – National Inventory Report.

\*\*\* Zero or negligible

Table 8. Employment of Manufacturing Industries (2001)<sup>6</sup>

Main Industry Group		Employment ( person)
15	Manufacture of food products and beverages	149,734
16	Manufacture of tobacco products	16,097
17	Manufacture of textiles	219,719
18	Manufacture of wearing apparel ;	153,011
19	Tanning and dressing of leather	16,430
20	Manufacture of wood and of products of wood and cork, except furniture	10,706
21	Manufacture of paper and paper products	21,063
22	Publishing, printing and reproduction of recorded media	12,094
23	Manufacture of coke, refined petroleum products and nuclear fuel	7,331
24	Manufacture of chemicals and chemical products	58,592
25	Manufacture of rubber and plastics products	40,692
26	Manufacture of other non-metallic mineral products	68,087
27	Manufacture of basic metals	56,795
28	Manufacture of fabricated metal products, except machinery and equipment	50,197
29	Manufacture of machinery and equipment not elsewhere classified	67,637
30	Manufacture of office, accounting and computing machinery	1,212
31	Manufacture of electrical machinery and apparatus not elsewhere classified	31,643
32	Manufacture of radio, television and communication equipment and apparatus	15,919
33	Manufacture of medical, precision and optical instruments, watches and clocks	5,541
34	Manufacture of motor vehicles, trailers and semi-trailers	47,493
35	Manufacture of other transport equipment	12,920
36	Manufacture of furniture, Manufacturing not elsewhere classified	30,280

<sup>6</sup> TSI Yearly Manufacturing Industry Statistics, 2001

Table 9. Export Values of Manufacturing Industry (2008)<sup>7</sup>

Main Industry Group		Export ( '000\$ /year)
15	Manufacture of food products and beverages	6,475,836
16	Manufacture of tobacco products	276,802
17	Manufacture of textiles	11,323,038
18	Manufacture of wearing apparel ;	11,503,751
19	Tanning and dressing of leather	606,793
20	Manufacture of wood and of products of wood and cork, except furniture	534,955
21	Manufacture of paper and paper products	1,051,948
22	Publishing, printing and reproduction of recorded media	145,155
23	Manufacture of coke, refined petroleum products and nuclear fuel	7,325,096
24	Manufacture of chemicals and chemical products	4,994,803
25	Manufacture of rubber and plastics products	4,749,916
26	Manufacture of other non-metallic mineral products	4,321,013
27	Manufacture of basic metals	22,569,898
28	Manufacture of fabricated metal products, except machinery and equipment	5,531,449
29	Manufacture of machinery and equipment not elsewhere classified	9,763,363
30	Manufacture of office, accounting and computing machinery	135,240
31	Manufacture of electrical machinery and apparatus not elsewhere classified	4,975,080
32	Manufacture of radio, television and communication equipment and apparatus	2,276,648
33	Manufacture of medical, precision and optical instruments, watches and clocks	404,334
34	Manufacture of motor vehicles, trailers and semi-trailers	19,361,877
35	Manufacture of other transport equipment	3,360,386
36	Manufacture of furniture, Manufacturing not elsewhere classified	3,500,277

<sup>7</sup> TSI Foreign Trade Statistics, 2008 [http://TÜİK.gov.tr/VeriBilgi.do?tb\\_id=12&ust\\_id=4](http://TÜİK.gov.tr/VeriBilgi.do?tb_id=12&ust_id=4)

Table 10. Suitability of Sectors to Cleaner (Sustainable) Production<sup>8</sup>

Main Industry Group		Ranking**	Score
15	Manufacture of food products and beverages	2	21
16	Manufacture of tobacco products	17-18-19-20-21-22	3,5
17	Manufacture of textiles	5	18
18	Manufacture of wearing apparel ;	9	14
19	Tanning and dressing of leather	10	13
20	Manufacture of wood and of products of wood and cork, except furniture	16	7
21	Manufacture of paper and paper products	14	9
22	Publishing, printing and reproduction of recorded media	15	8
23	Manufacture of coke, refined petroleum products and nuclear fuel	17-18-19-20-21-22	3,5
24	Manufacture of chemicals and chemical products	6	17
25	Manufacture of rubber and plastics products	12	11
26	Manufacture of other non-metallic mineral products	13	10
27	Manufacture of basic metals	3-4	19,5
28	Manufacture of fabricated metal products, except machinery and equipment	3-4	19,5
29	Manufacture of machinery and equipment not elsewhere classified	17-18-19-20-21-22	3,5
30	Manufacture of office, accounting and computing machinery	17-18-19-20-21-22	3,5
31	Manufacture of electrical machinery and apparatus not elsewhere classified	1	22
32	Manufacture of radio, television and communication equipment and apparatus	17-18-19-20-21-22	3,5
33	Manufacture of medical, precision and optical instruments, watches and clocks	17-18-19-20-21-22	3,5
34	Manufacture of motor vehicles, trailers and semi-trailers	7-8	15,5
35	Manufacture of other transport equipment	7-8	15,5
36	Manufacture of furniture, Manufacturing not elsewhere classified	11	12

\* 6 sectors have the same importance.

\*\* Scores corresponding to this ranking is given as it is explained in Section 6.3.1.1

<sup>8</sup> Green Competitiveness in the Mediterranean: Finding Business Opportunities through Cleaner Production

Table 11. MCDM Matrix for Sectoral Prioritization\*

Main Industry Group	Employment	Export	Water Consumption	Energy consumption	Wastewater	Solid waste	Hazardous waste	Air emissions	Suitability to CP
Manufacture of food products and beverages	0,137	0,052	0,109	0,080	0,126	0,201	0,219	0,202	0,083
Manufacture of tobacco products	0,015	0,002	0,002	0,002	0,003	0,001	0,007	0,001	0,014
Manufacture of textiles	0,201	0,090	0,076	0,118	0,120	0,021	0,004	0,020	0,071
Manufacture of wearing apparel ;	0,140	0,092	0,016	0,005	0,028	0,007	0,001	0,007	0,055
Tanning and dressing of leather	0,015	0,005	0,001	0,001	0,002	0,001	0,000	0,001	0,051
Manufacture of wood and of products of wood and cork, except furniture	0,010	0,004	0,002	0,010	0,002	0,006	0,000	0,006	0,028
Manufacture of paper and paper products	0,019	0,008	0,015	0,032	0,021	0,010	0,003	0,010	0,036
Publishing, printing and reproduction of recorded media	0,011	0,001	0,001	0,009	0,002	0,002	0,000	0,002	0,032
Manufacture of coke, refined petroleum products and nuclear fuel	0,007	0,059	0,019	0,063	0,019	0,007	0,095	0,013	0,014
Manufacture of chemicals and chemical products	0,054	0,040	0,072	0,097	0,089	0,086	0,242	0,096	0,067
Manufacture of rubber and plastics products	0,037	0,038	0,005	0,019	0,007	0,005	0,002	0,005	0,043
Manufacture of other non-metallic mineral products	0,062	0,035	0,028	0,225	0,016	0,097	0,028	0,092	0,040
Manufacture of basic metals	0,052	0,180	0,617	0,288	0,507	0,444	0,274	0,433	0,077
Manufacture of fabricated metal products, except machinery and equipment	0,046	0,044	0,003	0,013	0,005	0,041	0,005	0,039	0,077
Manufacture of machinery and equipment not elsewhere classified	0,062	0,078	0,019	0,007	0,034	0,034	0,001	0,031	0,014
Manufacture of office, accounting and computing machinery	0,001	0,001	0,000	0,000	0,000	0,000	0,000	0,000	0,014
Manufacture of electrical machinery and apparatus not elsewhere classified	0,029	0,040	0,002	0,006	0,004	0,008	0,054	0,011	0,087
Manufacture of radio, television and communication equipment and apparatus	0,015	0,018	0,002	0,003	0,003	0,001	0,004	0,001	0,014
Manufacture of medical, precision and optical instruments, watches and clocks	0,005	0,003	0,000	0,000	0,000	0,001	0,000	0,000	0,014
Manufacture of motor vehicles, trailers and semi-trailers	0,043	0,155	0,004	0,017	0,006	0,018	0,060	0,020	0,061
Manufacture of other transport equipment	0,012	0,027	0,001	0,002	0,001	0,002	0,000	0,002	0,061
Manufacture of furniture, Manufacturing not elsewhere classified	0,028	0,028	0,003	0,001	0,006	0,009	0,000	0,008	0,047

\* Values in this matrix normalized form of the data given in Table 2- Table 10 (Formula 6.1 is used for normalization)

Table 12. Criteria Ranking for Cleaner (Sustainable) Production

Criteria	Rank
Number of people employed	
Export share	
Water consumption	
Energy consumption	
Wastewater discharged	
Solid waste generated	
Hazardous waste generated	
Air emissions	
Suitability of sectors to cleaner production	

Table 13. Criteria Weighting Matrix with Eigenvalue Method

	Employment	Export share	Water Consumption	Energy Consumption	Wastewater	Solid waste	Hazardous waste	Air emissions	Suitability to CP
Employment	1								
Export share		1							
Water Consumption			1						
Energy Consumption				1					
Wastewater					1				
Solid waste						1			
Hazardous waste							1		
Air emissions								1	
Suitability to CP									1