

Supplementary Materials: External Knowledge Sourcing and Green Innovation Growth with Environmental and Energy Regulations: Evidence from Manufacturing in China

Jian Hou, Heng Chen and Jianzhong Xu

Table S1. The comprehensive index of environmental pollution.

Manufacturing	2008	2009	2010	2011	2012	2013	2014	Mean
Processing of Food from Agricultural Products	0.0283	0.0279	0.0276	0.0280	0.0294	0.0226	0.0258	0.0271
Foods	0.0111	0.0125	0.0128	0.0111	0.0112	0.0092	0.0106	0.0112
Liquor, Beverages and Refined Tea	0.0138	0.0146	0.0153	0.0135	0.0132	0.0107	0.0118	0.0133
Tobacco	0.0014	0.0012	0.0010	0.0009	0.0011	0.0012	0.0012	0.0012
Textile	0.0316	0.0326	0.0319	0.0296	0.0283	0.0205	0.0230	0.0282
Textile, Apparel and Accessories	0.0020	0.0019	0.0017	0.0025	0.0020	0.0016	0.0021	0.0020
Leather, Fur, Feather and Related Products and Shoes	0.0031	0.0031	0.0030	0.0031	0.0031	0.0022	0.0027	0.0029
Processing of Timbers and Manufacture of Wood, Bamboo, Rattan, Palm and Straw	0.0041	0.0048	0.0051	0.0093	0.0082	0.0068	0.0068	0.0064
Furniture	0.0006	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004	0.0005
Paper and Paper Products	0.0572	0.0568	0.0589	0.0607	0.0495	0.0414	0.0397	0.0521
Printing, Reproduction of Recording Media	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004
Artworks, and Articles for Culture, Education, Sports and Recreation	0.0002	0.0002	0.0002	0.0004	0.0004	0.0003	0.0003	0.0003
Processing of Petroleum, Coking and Processing of Nuclear Fuel	0.0604	0.0541	0.0567	0.0547	0.0560	0.0466	0.0506	0.0542
Chemical Raw Material and Chemical Products	0.1218	0.1223	0.1258	0.1467	0.1462	0.1362	0.1486	0.1354
Medicines	0.0089	0.0093	0.0094	0.0096	0.0106	0.0070	0.0095	0.0092
Chemical Fiber	0.0102	0.0105	0.0097	0.0083	0.0072	0.0058	0.0070	0.0084
Rubber and Plastic	0.0053	0.0051	0.0052	0.0058	0.0058	0.0055	0.0058	0.0055
Non-metallic Mineral Products	0.2505	0.2514	0.2291	0.1949	0.2059	0.1828	0.1885	0.2147
Ferrous Metals	0.2874	0.2873	0.2950	0.3029	0.3037	0.3874	0.3466	0.3158
Non-ferrous Metals	0.0651	0.0633	0.0716	0.0758	0.0770	0.0763	0.0808	0.0728
Metal Products	0.0068	0.0073	0.0063	0.0113	0.0107	0.0113	0.0107	0.0092
General Purpose Machinery	0.0072	0.0072	0.0079	0.0041	0.0033	0.0027	0.0029	0.0051
Special Purpose Machinery	0.0027	0.0064	0.0045	0.0033	0.0028	0.0021	0.0022	0.0034
Transport Equipment	0.0098	0.0092	0.0091	0.0115	0.0095	0.0074	0.0081	0.0092

Electrical Machinery and Equipment	0.0023	0.0022	0.0023	0.0020	0.0024	0.0022	0.0024	0.0023
Computer, Communication and Other Electronic Equipment	0.0059	0.0060	0.0076	0.0072	0.0084	0.0067	0.0080	0.0071
Measuring Instrument and Meters	0.0011	0.0010	0.0009	0.0003	0.0004	0.0002	0.0003	0.0006
Other Manufacturing	0.0008	0.0009	0.0007	0.0018	0.0028	0.0024	0.0030	0.0018

Table S2. Distribution of best practice manufacturing in Green innovation growth (2008–2014).

Year	Best Practice Industry
2008	Tobacco; Leather, Fur, Feather and Related Products and Shoes; Furniture; Artworks, and Articles for Culture, Education, Sports and Recreation; Processing of Petroleum, Coking and Processing of Nucleus Fuel; Ferrous Metals; Transport Equipment; Electrical Machinery and Equipment; Computer, Communication and Other Electronic Equipment; Measuring Instrument and Meters
2009	Tobacco; Leather, Fur, Feather and Related Products and Shoes; Furniture; Artworks, and Articles for Culture, Education, Sports and Recreation; Transport Equipment; Electrical Machinery and Equipment; Computer, Communication and Other Electronic Equipment; Measuring Instrument and Meters
2010–2012	Tobacco; Furniture; Artworks, and Articles for Culture, Education, Sports and Recreation; Transport Equipment; Electrical Machinery and Equipment; Computer, Communication and Other Electronic Equipment; Measuring Instrument and Meters
2013–2014	Tobacco; Artworks, and Articles for Culture, Education, Sports and Recreation; Transport Equipment; Electrical Machinery and Equipment; Computer, Communication and Other Electronic Equipment; Measuring Instrument and Meters

Table S3. Distribution of manufacturing in different threshold intervals each year.

	2008	2009	2010	2011	2012	2013	2014
LEV ≤ 0.001	3	2	2	2	2	2	2
0.001 < LEV ≤ 0.007	17	17	17	18	17	17	17
LEV > 0.007	8	9	9	8	9	9	9