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Evaluation of Process- and Input-Output-based Life Cycle Inventory Data with regard to Truncation and Aggregation Issues

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Industrial Ecology Programme

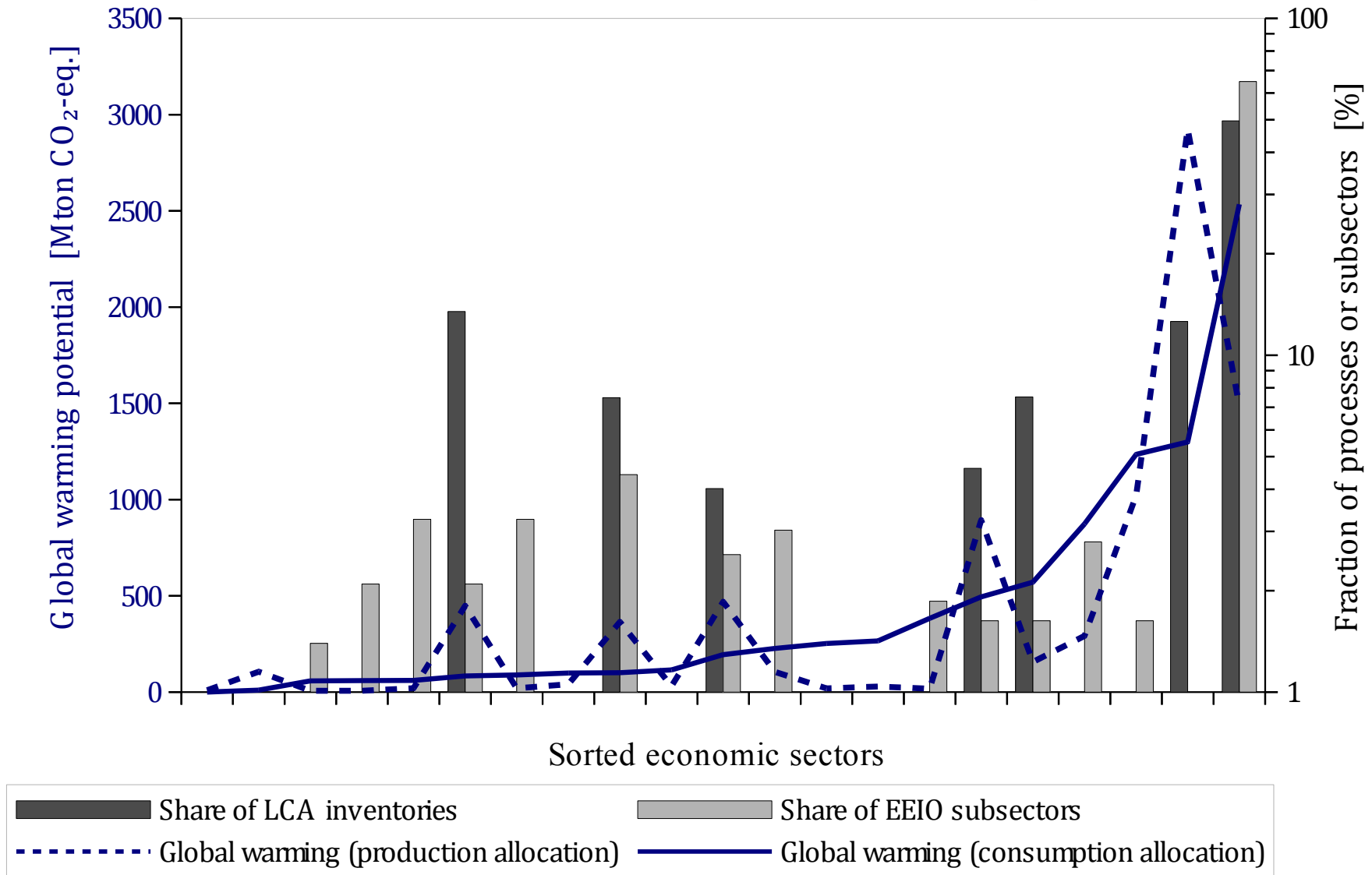
BEA Economic sector	Number of		Ratio
	processes	subsectors	
51 -- Information	0	14	0
50 -- Government Industries	0	12	0
71 -- Arts, Entertainment, and Recreation	0	9	0
62 -- Health Care and Social Assistance	0	8	0
53 -- Real Estate and Rental and Leasing	0	7	0
52 -- Finance and Insurance	0	6	0
72 -- Accommodation and Food Services	0	3	0
61 -- Educational Services	0	3	0
55 -- Management of Companies and Enterprises	0	1	0
4A -- Retail Trade	0	1	0
42 -- Wholesale Trade	0	1	0
54 -- Professional, Scientific, and Technical Services	2	14	0.14
81 -- Other Services (except Public Administration)	20	13	1.5
31,32,33 -- Manufacturing	1619	279	5.8
11 -- Agriculture, Forestry, Fishing and Hunting	232	19	12
48,49 -- Transportation and Warehousing	158	10	16
21 -- Mining	196	11	18
23 -- Construction	254	7	36
56 -- Administrative and Support and Waste Management	451	9	50
22 -- Utilities	948	3	320

Inventory Effort Correlations

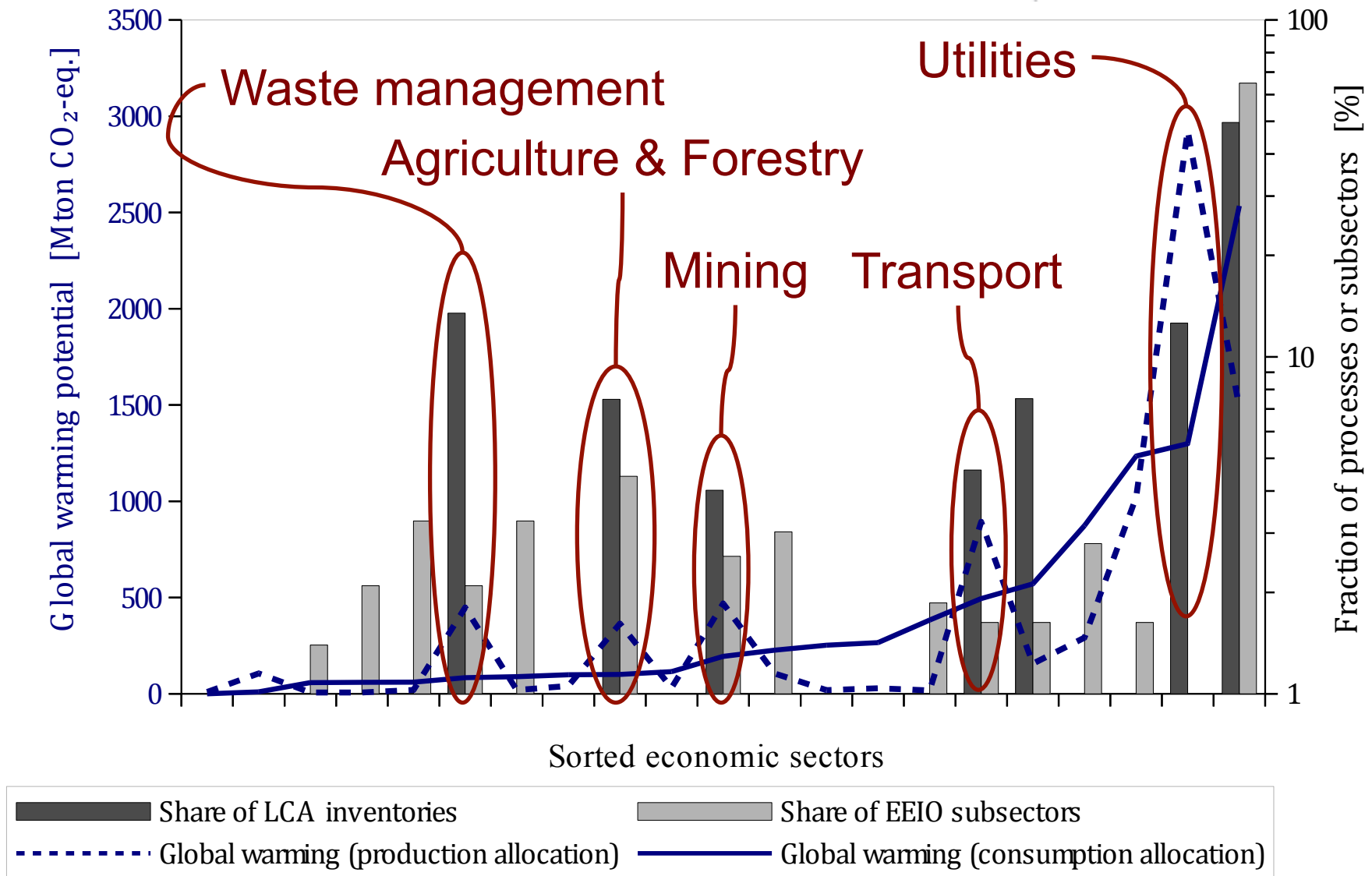
Indicators of importance of economic sector [†]	Coefficients of determination (R ²) [♦]	
	All countries	One-region World
Global warming (producer perspective)	0.61	0.07
Global warming (consumer perspective)	0.52	0.06
Global warming intensity	0.18	0.09
Total value added	0.21	5.0x10 ⁻²
Direct backward linkage	5.4x10 ⁻²	2.2x10 ⁻²
Indirect backward linkage	5.0x10 ⁻²	2.6x10 ⁻²
Direct forward linkage	5.9x10 ⁻⁴	4.2x10 ⁻⁵
Indirect forward linkage	3.4x10 ⁻⁴	1.4x10 ⁻³

†: BEA, US economy in 2002, 6-digit resolution; ♦: 179 degrees of freedom

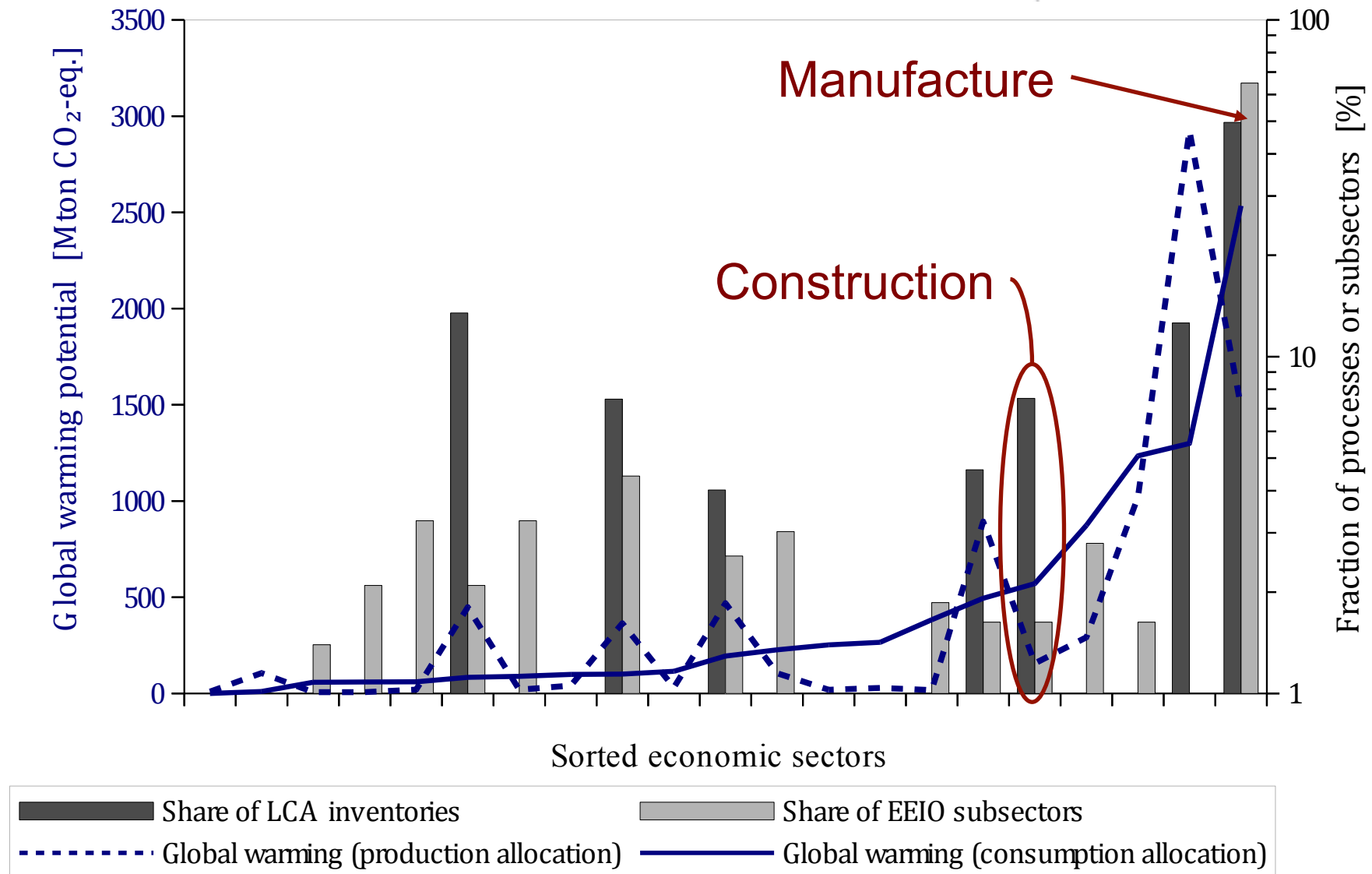
Aggregated Inventory Profiles



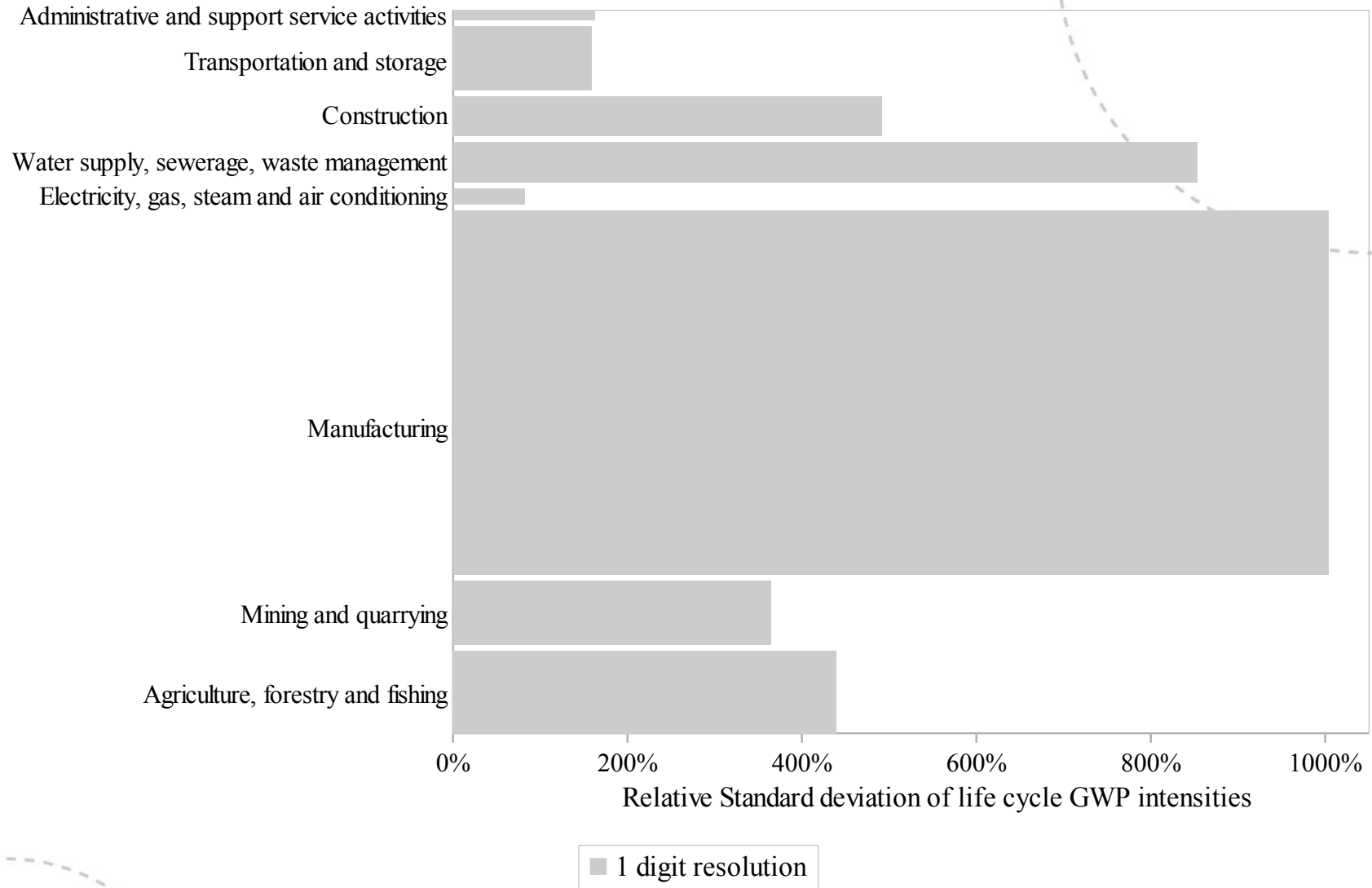
Aggregated Inventory Profiles



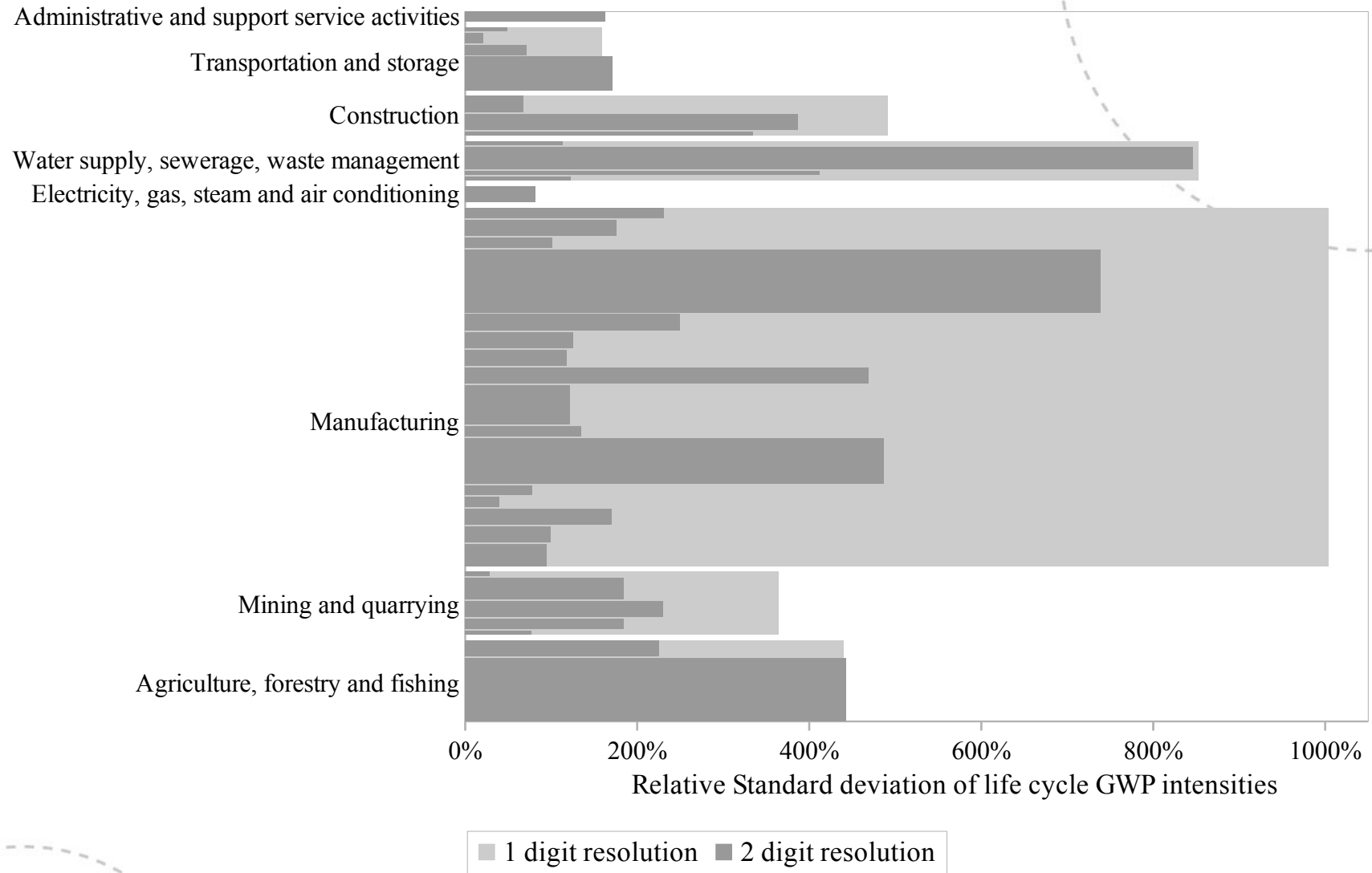
Aggregated Inventory Profiles



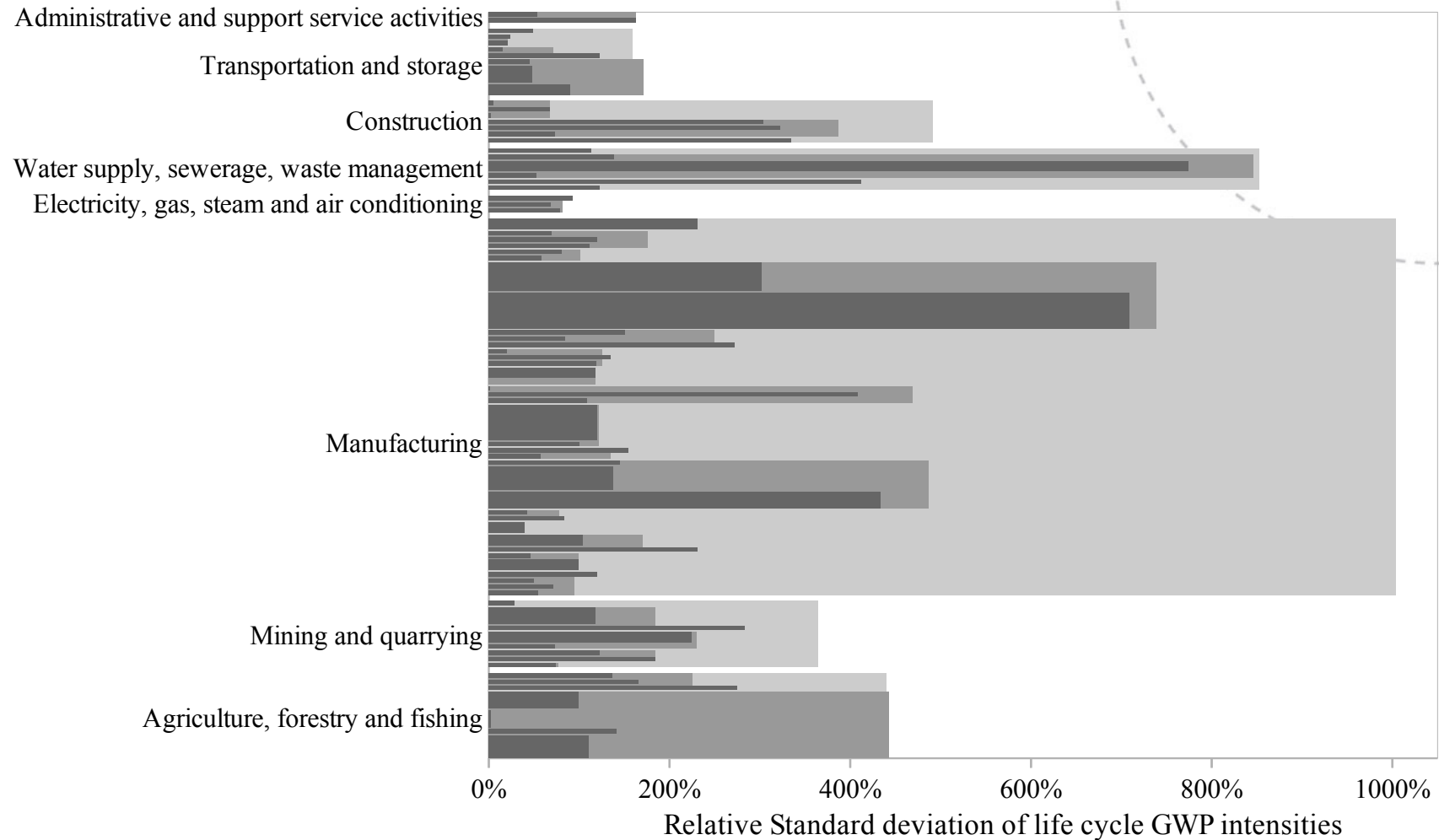
Environmental Homogeneity



Environmental Homogeneity

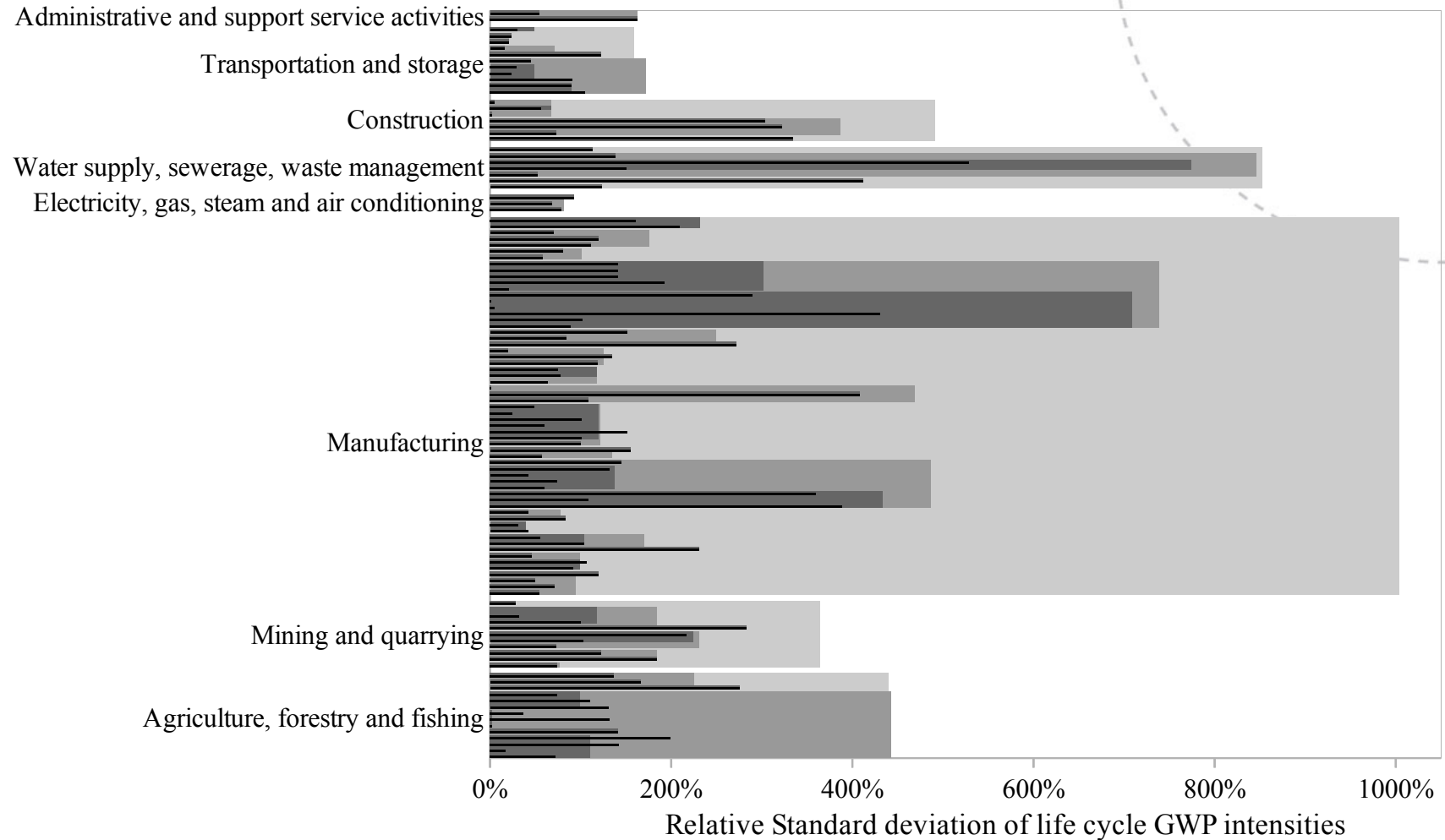


Environmental Homogeneity



■ 1 digit resolution ■ 2 digit resolution ■ 3 digit resolution

Environmental Homogeneity



■ 1 digit resolution ■ 2 digit resolution ■ 3 digit resolution ■ 4 digit resolution