

Supplement to:

Grant, Don, Andrew K. Jorgenson, and Wesley Longhofer. 2018. "Pathways to Carbon Pollution: The Interactive Effects of Global, Political, and Organizational Factors on Power Plants' CO₂ Emissions." *Sociological Science* 5: 58-92.

Appendix A. Frequencies and Consistencies of Configurations.

Set	Freq.	<u>Y-Consistency vs. Set Value (.800)</u>			Ncons	F	P	Common Sets
		YCons	F	P				
cnpda	827	0.868	353.83	0.000				N
cnPda	228	0.947	2035.56	0.000				N
cNpda	8	0.997	238916.04	0.000				N
cNPda	78	0.983	8170.36	0.000				N
Cnpda	1802	0.943	10482.92	0.000	.937	59.73	0.000	Y
CnPda	1151	0.980	66221.53	0.000				N
CNpda	1824	0.945	13440.67	0.000				N
CNPda	2620	0.927	9408.75	0.000				N
cnpDa	793	0.875	332.99	0.000				N
cnPDA	99	0.969	2449.74	0.000				N
cNpDa	40	0.997	190347.36	0.000				N
cNPDA	31	0.995	37318.73	0.000				N
CnpDa	498	0.986	49792.98	0.000	.980	111.85	0.000	Y
CnPDA	198	0.996	238512.59	0.000	.994	.88	0.003	Y
CNpDa	421	0.990	96431.48	0.000				N
CNPDA	498	0.979	28569.22	0.000				N
cnpdA	268	0.942	1229.35	0.000				N
cnPdA	72	0.977	3032.04	0.000				N
cNpdA	1	0.999	611558.73	0.000				N
cNPdA	40	0.988	8741.40	0.000				N
CnpdA	835	0.969	24666.47	0.000	.959	198.08	0.000	Y
CnPdA	1549	0.984	93680.17	0.000	.978	37.90	0.000	Y
CNpdA	676	0.982	57207.08	0.000				N
CNPdA	2969	0.913	6520.44	0.000				N
cnpDA	457	0.908	656.16	0.000	.900	46.89	0.000	Y
cnPDA	115	0.960	1648.77	0.000				N
cNpDA	4	1.000	2.09e+06	0.000	.999	9.48	0.002	Y
cNPDA	39	0.992	21763.85	0.000				N
CnpDA	396	0.985	37928.05	0.000	.978	165.25	0.000	Y
CnPDA	325	0.995	212174.30	0.000	.990	83.83	0.000	Y
CNpDA	513	0.992	138602.66	0.000	.988	93.44	0.000	Y
CNPDA	571	0.976	25826.25	0.000	.975	8.30	0.004	Y

Minimum Configuration Reduction Set

Cnp CnD CnA pDA CDA

C = Core
 N = Normative Engagement
 P = Political Checks and Balances
 D = Dominant Utility
 A = Plant Age

Appendix B. Scores on Configurations/Polluter Profiles by Country.											
	\bar{x}	min	max		\bar{x}	min	max		\bar{x}	min	max
Afghanistan (32)				Austria (99)				Belgium (203)			
Cnp	0	0	0	Cnp	.25	.25	.25	Cnp	.02	.02	.02
CnD	0	0	0	CnD	.36	.22	.60	CnD	.08	.08	.08
pDA	.22	.08	.89	pDA	.21	.08	.25	pDA	.02	.02	.02
CDA	0	0	0	CDA	.29	.08	.82	CDA	.27	.08	.96
Albania (4)				Azerbaijan (16)				Benin (12)			
Cnp	0	0	0	Cnp	0	0	0	Cnp	0	0	0
CnD	0	0	0	CnD	0	0	0	CnD	0	0	0
pDA	.12	.08	.15	pDA	.45	.09	.98	pDA	.10	.08	.13
CDA	0	0	0	CDA	0	0	0	CDA	0	0	0
Algeria (59)				Bahamas (30)				Bolivia (16)			
Cnp	.03	.03	.03	Cnp	0	0	0	Cnp	0	0	0
CnD	.16	.16	.16	CnD	0	0	0	CnD	0	0	0
pDA	.03	.03	.03	pDA	.44	.08	.52	pDA	.27	.08	.35
CDA	.15	.08	.16	CDA	0	0	0	CDA	0	0	0
Angola (34)				Bahrain (12)				Brazil (158)			
Cnp	0	0	0	Cnp	.16	.16	.16	Cnp	.31	.31	.31
CnD	0	0	0	CnD	.16	.16	.16	CnD	.32	.22	.40
pDA	.19	.08	.88	pDA	.44	.11	.89	pDA	.22	.08	.31
CDA	0	0	0	CDA	.15	.11	.16	CDA	.29	.08	.83
Argentina (419)				Bangladesh (105)				Bulgaria (31)			
Cnp	.38	.38	.38	Cnp	.16	.16	.16	Cnp	.10	.10	.10
CnD	.36	.22	.38	CnD	.16	.16	.16	CnD	.32	.22	.47
pDA	.16	.08	.57	pDA	.24	.08	.73	pDA	.10	.08	.10
CDA	.16	.08	.57	CDA	.13	.08	.16	CDA	.25	.08	.87
Armenia (2)				Barbados (4)				Burkina Faso (41)			
Cnp	0	0	0	Cnp	0	0	0	Cnp	0	0	0
CnD	0	0	0	CnD	0	0	0	CnD	0	0	0
pDA	.20	.20	.20	pDA	.44	.30	.60	pDA	.30	.08	.60
CDA	0	0	0	CDA	0	0	0	CDA	0	0	0
Australia (443)				Belarus (35)				Burundi (1)			
Cnp	.22	.22	.22	Cnp	.16	.16	.16	Cnp	0	0	0
CnD	.22	.22	.22	CnD	.16	.16	.16	CnD	0	0	0
pDA	.25	.08	.45	pDA	.55	.08	.98	pDA	.20	.20	.20
CDA	.26	.08	.72	CDA	.14	.08	.16	CDA	0	0	0

Appendix B. Scores on Configurations/Polluter Profiles by Country (Continued).

	\bar{x}	min	max		\bar{x}	min	max		\bar{x}	min	max
Cambodia (32)				China (1134)				Cuba (48)			
Cnp	0	0	0	Cnp	.55	.55	.55	Cnp	0	0	0
CnD	0	0	0	CnD	.41	.22	.55	CnD	0	0	0
pDA	.16	.08	.67	pDA	.23	.08	.67	pDA	.27	.08	.98
CDA	0	0	0	CDA	.23	.08	.67	CDA	0	0	0
Cameroon (10)				Columbia (65)				Cyprus (8)			
Cnp	0	0	0	Cnp	.16	.16	.16	Cnp	.14	.14	.14
CnD	0	0	0	CnD	.16	.16	.16	CnD	.16	.16	.16
pDA	.46	.08	.97	pDA	.22	.08	.33	pDA	.14	.14	.14
CDA	0	0	0	CDA	.13	.08	.16	CDA	.16	.15	.16
Canada (460)				Comoros (10)				Czech Rep. (76)			
Cnp	.30	.30	.30	Cnp	0	0	0	Cnp	.19	.19	.19
CnD	.27	.22	.30	CnD	0	0	0	CnD	.19	.19	.19
pDA	.34	.08	.62	pDA	.45	.08	.77	pDA	.22	.08	.35
CDA	.34	.08	.73	CDA	0	0	0	CDA	.34	.08	.99
Cape Verde (26)				Congo, D.R. (35)				Denmark (372)			
Cnp	0	0	0	Cnp	0	0	0	Cnp	.10	.10	.10
CnD	0	0	0	CnD	0	0	0	CnD	.16	.16	.16
pDA	.13	.08	.49	pDA	.03	.03	.03	pDA	.10	.08	.10
CDA	0	0	0	CDA	0	0	0	CDA	.34	.08	.88
Central A.R. (15)				Costa Rica (7)				Djibouti (5)			
Cnp	0	0	0	Cnp	.16	.16	.16	Cnp	0	0	0
CnD	0	0	0	CnD	.16	.16	.16	CnD	0	0	0
pDA	.83	.55	.92	pDA	.19	.17	.20	pDA	.23	.08	.65
CDA	0	0	0	CDA	.16	.16	.16	CDA	0	0	0
Chad (13)				Cote d'Ivoire (6)				Domin. Rep. (53)			
Cnp	0	0	0	Cnp	.16	.16	.16	Cnp	0	0	0
CnD	0	0	0	CnD	.16	.16	.16	CnD	0	0	0
pDA	.15	.08	.91	pDA	.57	.25	.88	pDA	.22	.08	.32
CDA	0	0	0	CDA	.16	.16	.16	CDA	0	0	0
Chile (61)				Croatia (19)				Ecuador (94)			
Cnp	.10	.10	.10	Cnp	.16	.16	.16	Cnp	0	0	0
CnD	.16	.16	.16	CnD	.16	.16	.16	CnD	0	0	0
pDA	.09	.08	.10	pDA	.27	.22	.28	pDA	.25	.08	.84
CDA	.13	.08	.16	CDA	.16	.16	.16	CDA	0	0	0

Appendix B. Scores on Configurations/Polluter Profiles by Country (Continued).

	\bar{x}	min	max		\bar{x}	min	max		\bar{x}	min	max
Egypt (78)				Gabon (31)				Guinea (13)			
Cnp	.56	.56	.56	Cnp	0	0	0	Cnp	0	0	0
CnD	.53	.22	.86	CnD	0	0	0	CnD	0	0	0
pDA	.32	.08	.56	pDA	.36	.08	.47	pDA	.34	.08	.83
CDA	.38	.08	.97	CDA	0	0	0	CDA	0	0	0
El Salvador (12)				Gambia (8)				Guinea-Biss. (3)			
Cnp	0	0	0	Cnp	0	0	0	Cnp	0	0	0
CnD	0	0	0	CnD	0	0	0	CnD	0	0	0
pDA	.26	.08	.81	pDA	.15	.08	.59	pDA	.24	.08	.56
CDA	0	0	0	CDA	0	0	0	CDA	0	0	0
Equa. Guinea (2)				Georgia (7)				Guyana (19)			
Cnp	0	0	0	Cnp	0	0	0	Cnp	0	0	0
CnD	0	0	0	CnD	0	0	0	CnD	0	0	0
pDA	.13	.13	.13	pDA	.42	.08	.76	pDA	.21	.08	.38
CDA	0	0	0	CDA	0	0	0	CDA	0	0	0
Ethiopia (45)				Germany (1072)				Haiti (13)			
Cnp	0	0	0	Cnp	.19	.19	.19	Cnp	0	0	0
CnD	0	0	0	CnD	.35	.22	.44	CnD	0	0	0
pDA	.32	.08	.36	pDA	.15	.08	.19	pDA	.30	.08	.83
CDA	0	0	0	CDA	.26	.08	.91	CDA	0	0	0
Fiji (17)				Ghana (9)				Honduras (26)			
Cnp	0	0	0	Cnp	.16	.16	.16	Cnp	0	0	0
CnD	0	0	0	CnD	.16	.16	.16	CnD	0	0	0
pDA	.50	.08	.81	pDA	.16	.08	.29	pDA	.22	.08	.67
CDA	0	0	0	CDA	.12	.08	.16	CDA	0	0	0
Finland (121)				Greece (92)				Hungary (74)			
Cnp	.10	.10	.10	Cnp	.18	.18	.18	Cnp	.30	.30	.30
CnD	.12	.12	.12	CnD	.18	.18	.18	CnD	.27	.22	.30
pDA	.09	.08	.10	pDA	.24	.08	.31	pDA	.23	.08	.46
CDA	.35	.08	.93	CDA	.52	.08	.99	CDA	.24	.08	.85
France (528)				Guatemala (15)				Iceland (3)			
Cnp	.05	.05	.05	Cnp	0	0	0	Cnp	0	0	0
CnD	.05	.05	.05	CnD	0	0	0	CnD	0	0	0
pDA	.15	.08	.15	pDA	.10	.10	.10	pDA	.15	.15	.15
CDA	.25	.08	.81	CDA	0	0	0	CDA	0	0	0

Appendix B. Scores on Configurations/Polluter Profiles by Country (Continued).

	\bar{x}	min	max		\bar{x}	min	max		\bar{x}	min	max
India (745)				Jamaica (15)				Lebanon (18)			
Cnp	.89	.89	.89	Cnp	0	0	0	Cnp	0	0	0
CnD	.31	.22	.84	CnD	0	0	0	CnD	0	0	0
pDA	.22	.08	.84	pDA	.26	.08	.34	pDA	.20	.08	.34
CDA	.22	.08	.84	CDA	0	0	0	CDA	0	0	0
Indonesia (534)				Japan (2199)				Liberia (3)			
Cnp	.66	.66	.66	Cnp	.15	.15	.15	Cnp	0	0	0
CnD	.34	.22	.66	CnD	.23	.22	.30	CnD	0	0	0
pDA	.26	.08	.94	pDA	.15	.08	.15	pDA	.35	.12	.83
CDA	.26	.08	.94	CDA	.26	.08	.99	CDA	0	0	0
Iran (140)				Jordan (15)				Libya (60)			
Cnp	.88	.88	.88	Cnp	0	0	0	Cnp	.16	.16	.16
CnD	.52	.22	.87	CnD	0	0	0	CnD	.16	.16	.16
pDA	.30	.08	.87	pDA	.38	.08	.94	pDA	.47	.08	.96
CDA	.30	.08	.87	CDA	0	0	0	CDA	.15	.08	.16
Iraq (23)				Kenya (24)				Lithuania (9)			
Cnp	0	0	0	Cnp	.16	.16	.16	Cnp	.08	.08	.08
CnD	0	0	0	CnD	.16	.16	.16	CnD	.16	.16	.16
pDA	.35	.08	.88	pDA	.13	.08	.17	pDA	.08	.08	.08
CDA	0	0	0	CDA	.12	.08	.16	CDA	.15	.08	.16
Ireland (38)				Kuwait (19)				Luxemburg (58)			
Cnp	.19	.19	.19	Cnp	.16	.16	.16	Cnp	.15	.15	.15
CnD	.19	.19	.19	CnD	.16	.16	.16	CnD	.26	.22	.51
pDA	.20	.08	.24	pDA	.38	.08	.72	pDA	.14	.09	.14
CDA	.28	.08	.98	CDA	.15	.08	.16	CDA	.24	.09	.31
Israel (25)				Laos (39)				Macedonia (6)			
Cnp	.06	.06	.06	Cnp	0	0	0	Cnp	0	0	0
CnD	.16	.16	.16	CnD	0	0	0	CnD	0	0	0
pDA	.06	.06	.06	pDA	.44	.29	.95	pDA	.23	.08	.26
CDA	.16	.08	.16	CDA	0	0	0	CDA	0	0	0
Italy (569)				Latavia (30)				Madagascar (122)			
Cnp	.10	.10	.10	Cnp	.08	.08	.08	Cnp	0	0	0
CnD	.10	.10	.10	CnD	.16	.16	.16	CnD	0	0	0
pDA	.20	.08	.22	pDA	.08	.08	.08	pDA	.12	.08	.83
CDA	.33	.08	.98	CDA	.15	.08	.16	CDA	0	0	0

Appendix B. Scores on Configurations/Polluter Profiles by Country (Continued).

	\bar{x}	min	max		\bar{x}	min	max		\bar{x}	min	max
Malawi (9)				Moldova (13)				Nicaragua (26)			
Cnp	0	0	0	Cnp	0	0	0	Cnp	0	0	0
CnD	0	0	0	CnD	0	0	0	CnD	0	0	0
pDA	.46	.08	.65	pDA	.18	.08	.39	pDA	.24	.08	.82
CDA	0	0	0	CDA	0	0	0	CDA	0	0	0
Malaysia (162)				Mongolia (25)				Niger (11)			
Cnp	.42	.42	.42	Cnp	0	0	0	Cnp	0	0	0
CnD	.39	.22	.62	CnD	0	0	0	CnD	0	0	0
pDA	.30	.08	.41	pDA	.27	.08	.47	pDA	.13	.08	.15
CDA	.36	.08	.91	CDA	0	0	0	CDA	0	0	0
Mali (21)				Morocco (18)				Nigeria (106)			
Cnp	0	0	0	Cnp	.05	.05	.05	Cnp	.16	.16	.16
CnD	0	0	0	CnD	.50	.24	.55	CnD	.16	.16	.16
pDA	.09	.08	.09	pDA	.05	.05	.05	pDA	.21	.08	.63
CDA	0	0	0	CDA	.50	.08	.96	CDA	.13	.08	.16
Malta (5)				Mozambique (88)				North Korea (15)			
Cnp	.16	.16	.16	Cnp	0	0	0	Cnp	.16	.16	.16
CnD	.16	.16	.16	CnD	0	0	0	CnD	.16	.16	.16
pDA	.38	.23	.51	pDA	.49	.10	.60	pDA	.38	.08	.92
CDA	.16	.16	.16	CDA	0	0	0	CDA	.13	.08	.16
Mauritania (27)				Nepal (9)				Norway (24)			
Cnp	0	0	0	Cnp	0	0	0	Cnp	.11	.11	.11
CnD	0	0	0	CnD	0	0	0	CnD	.17	.17	.17
pDA	.19	.08	.87	pDA	.10	.08	.11	pDA	.10	.08	.11
CDA	0	0	0	CDA	0	0	0	CDA	.22	.08	.73
Mauritius (9)				Netherlands (602)				Oman (98)			
Cnp	0	0	0	Cnp	.03	.03	.03	Cnp	0	0	0
CnD	0	0	0	CnD	.05	.05	.05	CnD	0	0	0
pDA	.32	.10	.47	pDA	.03	.03	.03	pDA	.18	.18	.18
CDA	0	0	0	CDA	.29	.08	.75	CDA	0	0	0
Mexico (179)				New Zealand (49)				Pakistan (118)			
Cnp	.39	.39	.39	Cnp	.26	.26	.26	Cnp	.82	.82	.82
CnD	.34	.22	.39	CnD	.33	.22	.68	CnD	.30	.22	.84
pDA	.43	.08	.75	pDA	.20	.08	.26	pDA	.24	.08	.82
CDA	.49	.08	.98	CDA	.23	.08	.80	CDA	.24	.08	.84

Appendix B. Scores on Configurations/Polluter Profiles by Country (Continued).												
	\bar{x}	min	max		\bar{x}	min	max		\bar{x}	min	max	
Panama (80)				Romania (55)				Slovenia (28)				
Cnp	.16	.16	.16	Cnp	.32	.32	.32	Cnp	.16	.16	.16	
CnD	.16	.16	.16	CnD	.45	.22	.62	CnD	.16	.16	.16	
pDA	.12	.08	.25	pDA	.25	.08	.32	pDA	.32	.08	.89	
CDA	.10	.08	.16	CDA	.40	.08	.74	CDA	.14	.08	.16	
Papua N.G. (36)				Russia (548)				Solomon Isl. (11)				
Cnp	0	0	0	Cnp	.49	.49	.49	Cnp	0	0	0	
CnD	0	0	0	CnD	.42	.22	.49	CnD	0	0	0	
pDA	.05	.05	.05	pDA	.32	.08	.56	pDA	.49	.26	.79	
CDA	0	0	0	CDA	.40	.08	.94	CDA	0	0	0	
Peru (317)				Rwanda (5)				Somalia (4)				
Cnp	.16	.16	.16	Cnp	0	0	0	Cnp	0	0	0	
CnD	.16	.16	.16	CnD	0	0	0	CnD	0	0	0	
pDA	.14	.08	.75	pDA	.24	.08	.76	pDA	.08	.08	.08	
CDA	.10	.08	.16	CDA	0	0	0	CDA	0	0	0	
Phillipines (283)				Saudi Arabia (208)				South Africa (46)				
Cnp	.16	.16	.16	Cnp	.97	.97	.97	Cnp	0	0	0	
CnD	.16	.16	.16	CnD	.62	.22	.97	CnD	0	0	0	
pDA	.21	.08	.43	pDA	.46	.08	.96	pDA	.24	.08	.30	
CDA	.13	.08	.16	CDA	.46	.08	.96	CDA	0	0	0	
Poland (288)				Senegal (53)				South Korea (214)				
Cnp	.20	.20	.20	Cnp	0	0	0	Cnp	.25	.25	.25	
CnD	.20	.20	.20	CnD	0	0	0	CnD	.31	.22	.72	
pDA	.19	.08	.20	pDA	.15	.08	.89	pDA	.21	.08	.25	
CDA	.29	.08	.93	CDA	0	0	0	CDA	.24	.08	.72	
Portugal (197)				Sierra Leone (16)				Spain (502)				
Cnp	.18	.18	.18	Cnp	0	0	0	Cnp	.14	.14	.14	
CnD	.18	.18	.18	CnD	0	0	0	CnD	.14	.14	.14	
pDA	.22	.08	.33	pDA	.32	.08	.39	pDA	.26	.08	.68	
CDA	.25	.08	.97	CDA	0	0	0	CDA	.26	.08	.81	
Qatar (15)				Singapore (40)				Sri Lanka (25)				
Cnp	0	0	0	Cnp	.96	.96	.96	Cnp	.16	.16	.16	
CnD	0	0	0	CnD	.30	.22	.90	CnD	.16	.16	.16	
pDA	.27	.08	.67	pDA	.24	.08	.89	pDA	.24	.09	.76	
CDA	0	0	0	CDA	.24	.08	.89	CDA	.15	.09	.16	

Appendix B. Scores on Configurations/Polluter Profiles by Country (Continued).

	\bar{x}	min	max		\bar{x}	min	max		\bar{x}	min	max
Sudan (38)				Tunisia (23)				Uruguay (3)			
Cnp	0	0	0	Cnp	.16	.16	.16	Cnp	.16	.16	.16
CnD	0	0	0	CnD	.16	.16	.16	CnD	.16	.16	.16
pDA	.27	.08	.97	pDA	.53	.12	.98	pDA	.20	.20	.20
CDA	0	0	0	CDA	.15	.12	.16	CDA	.16	.16	.16
Suriname (14)				Turkey (306)				Venezuela (51)			
Cnp	0	0	0	Cnp	.41	.41	.41	Cnp	.16	.16	.16
CnD	0	0	0	CnD	.28	.22	.64	CnD	.16	.16	.16
pDA	.10	.08	.20	pDA	.20	.08	.41	pDA	.36	.08	.77
CDA	0	0	0	CDA	.22	.08	.85	CDA	.14	.08	.16
Sweden (69)				Turkmenistan (10)				Vietnam (45)			
Cnp	.12	.12	.12	Cnp	0	0	0	Cnp	.16	.16	.16
CnD	.12	.12	.12	CnD	0	0	0	CnD	.16	.16	.16
pDA	.13	.08	.14	pDA	.42	.10	.98	pDA	.25	.08	.87
CDA	.38	.08	.93	CDA	0	0	0	CDA	.14	.08	.16
Switzerland (38)				Uganda (14)				Yemen (31)			
Cnp	.12	.12	.12	Cnp	0	0	0	Cnp	0	0	0
CnD	.12	.12	.12	CnD	0	0	0	CnD	0	0	0
pDA	.25	.08	.32	pDA	.17	.08	.21	pDA	.45	.08	.86
CDA	.29	.08	.84	CDA	0	0	0	CDA	0	0	0
Taiwan (120)				Ukraine (48)				Zambia (14)			
Cnp	.16	.16	.16	Cnp	.20	.20	.20	Cnp	0	0	0
CnD	.16	.16	.16	CnD	.63	.22	.84	CnD	0	0	0
pDA	.27	.08	.65	pDA	.17	.08	.20	pDA	.29	.08	.74
CDA	.15	.08	.16	CDA	.54	.08	.99	CDA	0	0	0
Tajikistan (1)				United A.E. (72)				Zimbabwe (6)			
Cnp	0	0	0	Cnp	.95	.95	.95	Cnp	.16	.16	.16
CnD	0	0	0	CnD	.42	.22	.91	CnD	.16	.16	.16
pDA	.81	.81	.81	pDA	.34	.08	.91	pDA	.31	.08	.38
CDA	0	0	0	CDA	.34	.08	.91	CDA	.14	.08	.16
Thailand (94)				U.K. (835)							
Cnp	.28	.28	.28	Cnp	0	0	0				
CnD	.36	.22	.87	CnD	0	0	0				
pDA	.21	.08	.28	pDA	.21	.08	.36				
CDA	.27	.08	.94	CDA	.22	.08	.86				
Togo (4)				U. S. (2592)							
Cnp	0	0	0	Cnp	.35	.35	.35				
CnD	0	0	0	CnD	.38	.22	.72				
pDA	.33	.08	.91	pDA	.27	.08	.35				
CDA	0	0	0	CDA	.32	.08	.72				