



## **Online-Appendix zu**

# „Opportunities and Challenges in Commissioning Materiality-Driven Sustainability Reporting Towards the SDGs: The Case of Cadeler A/S“

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## APPENDIX

Table 1 GRI Standards Framework incl. G4 Aggregation Layer and Disclosures (based on GRI, 2020a)

Category	Subcategory	Standard	Topic	Disclosure	Description		
Economic	GRI 201	Economic Performance		201-1	Direct economic value generated and distributed		
				201-2	Financial implications and other risks and opportunities due to climate change		
				201-3	Defined benefit plan obligations and other retirement plans		
				201-4	Financial assistance received from government		
	GRI 202	Market Presence			202-1	Ratios of standard entry level wage by gender compared to local minimum wage	
					202-2	Proportion of senior management hired from the local community	
	GRI 203	Indirect Economic Impacts			203-1	Infrastructure investments and services supported	
					203-2	Significant indirect economic impacts	
	GRI 204	Procurement Practices			204-1	Proportion of spending on local suppliers	
	GRI 205	Anti-Corruption			205-1	Operations assessed for risks related to corruption	
					205-2	Communication and training about anti-corruption policies and procedures	
					205-3	Confirmed incidents of corruption and actions taken	
	GRI 206	Anti-Corruptive Behavior			206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	
	GRI 207	Tax			207-1	Approach to tax	
					207-2	Tax governance, control, and risk management	
					207-3	Stakeholder engagement and management of concerns related to tax	
					207-4	Country-by-country reporting	
	Environmental	GRI 301	Materials		301-1	Materials used by weight or volume	
					301-2	Recycled input material used	
					301-3	Reclaimed products and their packaging materials	
		GRI 302	Energy			302-1	Energy consumption within the organization
						302-2	Energy consumption outside the organization
						302-3	Energy intensity
						302-4	Reduction of energy consumption
						302-5	Reductions in energy requirements or products and services
		GRI 303	Water & Effluents			303-1	Interactions with water as a shared resource
						303-2	Management of water discharge-related impacts
303-3						Water withdrawal	
303-4						Water discharge	
303-5						Water consumption	
GRI 304		Biodiversity			304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	
					304-2	Significant impacts of activities on products, and services on biodiversity	
					304-3	Habitats protected or restored	
					304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	
GRI 305		Emissions			305-1	Direct (Scope 1) GHG emissions	
					305-2	Energy indirect (Scope 2) GHG emissions	
					305-3	Other indirect (Scope 3) GHG emissions	
					305-4	GHG emissions intensity	
					305-5	Reduction of GHG emissions	
					305-6	Emissions of ozone-depleting substances (ODS)	
					305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	
GRI 306		Waste			306-1	Waste generation and significant waste-related impacts	
					306-2	Management of significant waste-related impacts	
					306-3	Waste generated	
					306-4	Waste diverted from disposal	
					306-5	Wasted directed to disposal	
GRI 307		Environmental Compliance			307-1	Non-compliance with environmental laws and regulations	
GRI 308		Supplier Environmental Assessment			308-1	New suppliers that were screened using environmental criteria	
	308-2				Negative environmental impacts in the supply chain and actions taken		
Social	Labor Practices and Decent Work	GRI 401	Employment		401-1	New employee hires and employee turnover	
					401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	
					401-3	Parental leave	
	GRI 402	Labor/Management Relations			402-1	Minimum notice period regarding operational changes	
	GRI 403	Occupational Health & Safety			403-1	Occupational health and safety management system	
					403-2	Hazard identification, risk assessment, and incident investigation	
					403-3	Occupational health services	
					403-4	Worker participation, consultation, and communication on occupational health and safety	
					403-5	Worker training on occupational health and safety	
					403-6	Promotion of worker health	
					403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
					403-8	Workers covered by an occupational health and safety management system	
					403-9	Work-related injuries	
					403-10	Work-related ill health	
	GRI 404	Training and Education			404-1	Average hours of training per year per employee	
					404-2	Programs for upgrading employee skills and translation assistance programs	
					404-3	Percentage of employees receiving regular performance and career development reviews	

		GRI 405	Diversity and Equal Opportunity	405-1	Diversity and governance bodies and employees
				405-2	Ratio of basic salary and remuneration of women to men
Social	Human Rights	GRI 406	Non-Discrimination	406-1	Incidents of discrimination and corrective actions taken
<i>Table 1 (continued)</i>					
		GRI 407	Freedom of Association and Collective Bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk
		GRI 408	Child Labor	408-1	Child Labor and suppliers at significant risk for incidents of child labor
		GRI 409	Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor
		GRI 410	Security Practices	410-1	Security personnel trained in human rights policies and procedures
		GRI 411	Rights of Indigenous People	411-1	Incidents of violations involving rights of indigenous people
		GRI 412	Human Rights Assessment	412-1	Operations that have been subject to human rights reviews or impact assessments
				412-2	Employee training on human rights policies or procedures
				412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening
Social	Society	GRI 413	Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs
				413-2	Operations with significant actual and potential negative impacts on local communities
		GRI 414	Supplier Social Assessment	414-1	New suppliers that were screened using social criteria
				414-2	Negative social impacts in the supply chain and actions taken
		GRI 415	Public Policy	415-1	Political contributions
Social	Product Responsibility	GRI 416	Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories
					416-2
		GRI 417	Marketing and Labeling	417-1	Requirements for product and service information and labeling
				417-2	Incidents of non-compliance concerning product and service information and labeling
				417-3	Incidents of non-compliance concerning marketing communications
		GRI 418	Customer Privacy	418-1	Substantiated complaints concerning breaches privacy and losses of customer data
		GRI 419	Socioeconomic Compliance	419-1	Non-compliance with laws and regulations in the social and economic area

Table 2 – Triangular Fuzzy Conversion Scale at  $\alpha = 0.5$  (Chang, 1996; Lee, 2010)

Linguistic Scale	Triangular Fuzzy Conversion Scale	Triangular Fuzzy Reciprocal Scale
Equally important	(1, 1, 1)	(1, 1, 1)
Weakly More important	(1, 3/2, 2)	(1/2, 2/3, 1)
Moderately More important	(3/2, 2, 5/2)	(2/5, 1/2, 2/3)
Strongly More important	(2, 5/2, 3)	(1/3, 2/5, 1/2)
Extremely More important	(5/2, 3, 7/2)	(2/7, 1/3, 2/5)

Table 3 – RI of 500,000 Random Matrices (Alonso & Lamata, 2006)

$n$	3	4	5	6	7	8	9	10	11	12
RI( $n$ )	0.5245	0.8815	1.1086	1.2479	1.3417	1.4057	1.4499	1.4854	1.5140	1.5365

Table 4 –  $\lambda_{max}$  contingent on consistency ratio tolerance  $CR_{max}$  (Alonso & Lamata, 2006)

$\alpha \setminus n$	3	4	5	6	7	8	9	10	11	12
0.05	3.0479	4.1364	5.2249	6.3134	7.4019	8.4904	9.5789	10.6674	11.7559	12.8444
0.10	3.0958	4.2728	5.4498	6.6268	7.8038	8.9808	10.1578	11.3348	12.5118	13.6888
0.15	3.1438	4.4092	5.6747	6.9402	8.2057	9.4712	10.7367	12.0022	13.2676	14.5331
0.20	3.1917	4.5457	5.8996	7.2536	8.6076	9.9616	11.3156	12.6695	14.0235	15.3775

Table 5 – Pairwise Comparison Sets: Scopes and Quantity of Preference Sets collected in Cadeler A/S (own work)

Branch	Subcategories	# Sets	Total	Topics	# Sets	Total	Disclosures	# Sets	Total	Grand Total
Economic	n/a	n/a	n/a	21	3	63	17	1	17	80
Environmental	n/a	n/a	n/a	28	3	84	61	1	61	145

<b>Social</b>	6	4	24	n/a	n/a	n/a	n/a	n/a	n/a	24
LPDW	n/a	n/a	n/a	10	4	40	52	2	104	144
HR	n/a	n/a	n/a	21	3	63	3	1	3	66
SOC	n/a	n/a	n/a	3	3	9	2	1	2	11
PR	n/a	n/a	n/a	6	3	18	4	1	4	22
<b>Total</b>			<b>24</b>			<b>277</b>			<b>191</b>	<b>492</b>

Table 6 – Illustrative Perspective on Environmental Topics

GRI Topic	Extremely More	Strongly More	Moderately More	Weakly More	Equally	Weakly Less	Moderately Less	Strongly Less	Extremely Less	GRI Topic
Materials							X			Energy
Materials					X					Water & Effluents
Materials					X					Biodiversity
Materials							X			Emissions
Materials						X				Waste
Materials							X			Environmental Compliance
Materials						X				Supplier Environmental Assessment
Energy			X							Water & Effluents
Energy							X			Biodiversity
Energy					X					Emissions
Energy				X						Waste
Energy					X					Environmental Compliance
Energy						X				Supplier Environmental Assessment
Water & Effluents							X			Biodiversity
Water & Effluents							X			Emissions
Water & Effluents							X			Waste
Water & Effluents							X			Environmental Compliance
Water & Effluents					X					Supplier Environmental Assessment
Biodiversity							X			Emissions
Biodiversity							X			Waste
Biodiversity							X			Environmental Compliance
Biodiversity					X					Supplier Environmental Assessment
Emissions				X						Waste
Emissions						X				Environmental Compliance
Emissions				X						Supplier Environmental Assessment
Waste							X			Environmental Compliance
Waste				X						Supplier Environmental Assessment
Environmental Compliance			X							Supplier Environmental Assessment

Table 7 – Illustrative Perspective on Environmental Disclosures within "Materials" (GRI 301)

GRI Disclosure	Extremely More	Strongly More	Moderately More	Weakly More	Equally	Weakly Less	Moderately Less	Strongly Less	Extremely Less	GRI Disclosure
Materials used by weight or volume			X							Recycled input material used
Materials used by weight or volume			X							Reclaimed products and their packaging materials
Recycled input material used					X					Reclaimed products and their packaging materials

Table 8 – Overall Results of the Economic Category

Standard	Topic	Disclosure	Local Weight	Global Weight		CV	Disclosure
				Topic	S.D.		
GRI 201	Economic Performance	GRI 201-1	32.93%	18.46%	6.21%	0.34	6.08%
		GRI 201-2	39.47%				7.28%
		GRI 201-3	12.04%				2.22%
		GRI 201-4	15.56%				2.87%
GRI 202	Market Presence	GRI 202-1	50.00%	10.54%	2.86%	0.27	5.27%
		GRI 202-2	50.00%				5.27%
GRI 203	Indirect Economic Impacts	GRI 203-1	50.00%	12.64%	1.39%	0.11	6.32%
		GRI 203-2	50.00%				6.32%
GRI 204	Procurement Practices	GRI 204-1	100.00%	12.33%	3.76%	0.30	12.33%
GRI 205	Anti-Corruption	GRI 205-1	32.30%	16.82%	5.78%	0.34	5.43%
		GRI 205-2	18.16%				3.05%
		GRI 205-3	49.54%				8.33%
GRI 206	Anti-Corruptive Behavior	GRI 206-1	100.00%	16.29%	5.37%	0.33	16.29%
GRI 207	Tax	GRI 207-1	33.87%	12.93%	5.95%	0.46	4.38%
		GRI 207-2	33.87%				4.38%
		GRI 207-3	21.17%				2.74%
		GRI 207-4	11.09%				1.43%

Table 9 – Overall Results of the Environmental Category

Standard	Topic	Disclosure	Local Weight	Global Weight		CV	Disclosure
				Topic	S.D.		
GRI 301	Materials	GRI 301-1	49.06%	8.03%	2.51%	0.31	3.94%
		GRI 301-2	25.47%				2.05%
		GRI 301-3	25.47%				2.05%
GRI 302	Energy	GRI 302-1	22.65%	15.36%	1.18%	0.08	3.48%
		GRI 302-2	10.28%				1.58%
		GRI 302-3	28.09%				4.32%
		GRI 302-4	24.29%				3.73%
		GRI 302-5	14.68%				2.26%
GRI 303	Water & Effluents	GRI 303-1	15.42%	10.50%	1.65%	0.16	1.62%
		GRI 303-2	28.02%				2.94%
		GRI 303-3	16.44%				1.73%
		GRI 303-4	25.55%				2.68%
		GRI 303-5	14.56%				1.53%
GRI 304	Biodiversity	GRI 304-1	12.59%	8.22%	2.56%	0.31	1.04%
		GRI 304-2	36.03%				2.96%
		GRI 304-3	26.44%				2.17%
		GRI 304-4	24.93%				2.05%
GRI 305	Emissions	GRI 305-1	16.54%	14.87%	1.72%	0.12	2.46%
		GRI 305-2	8.24%				1.22%
		GRI 305-3	11.73%				1.74%
		GRI 305-4	21.95%				3.26%
		GRI 305-5	17.26%				2.57%
		GRI 305-6	12.15%				1.81%
		GRI 305-7	12.15%				1.81%
GRI 306	Waste	GRI 306-1	14.14%	11.82%	1.22%	0.10	1.67%
		GRI 306-2	16.62%				1.97%
		GRI 306-3	25.42%				3.01%
		GRI 306-4	25.42%				3.01%
		GRI 306-5	18.40%				2.17%
GRI 307	Environmental Compliance	GRI 307-1	100.00%	22.87%	4.30%	0.19	22.87%
GRI 308	Supplier Environmental Assessment	GRI 308-1	50.00%	8.32%	1.99%	0.24	4.16%
		GRI 308-2	50.00%				4.16%



Table 10 – Overall Results on the Social Category

Subcategory	Standard	Topic	Disclosure	Local Weight		Global Weight									
				Topic	Disclosure	Subcategory	S.D.	CV	Topic	S.D.	CV	Disclosure			
Labor Practices and Decent Work	GRI 401	Employment	GRI 401-1	23.33%	46.64%	30.37%	13.79%	0.45	7.08%	2.76%	0.39	3.30%			
			GRI 401-2		26.86%							1.90%			
			GRI 401-3		26.50%							1.88%			
	GRI 402	Labor/ Management Relations	GRI 402-1	14.09%	100.00%							4.28%	1.89%	0.44	4.28%
	GRI 403	Occupational Health & Safety	GRI 403-1	27.75%	8.34%							8.43%	5.27%	0.63	0.70%
			GRI 403-2		11.28%							0.95%			
			GRI 403-3		7.19%							0.61%			
			GRI 403-4		8.22%							0.69%			
			GRI 403-5		10.83%							0.91%			
			GRI 403-6		7.13%							0.60%			
			GRI 403-7		11.31%							0.95%			
			GRI 403-8		8.10%							0.68%			
			GRI 403-9		14.00%							1.18%			
			GRI 403-10		13.60%							1.15%			
	GRI 404	Training and Education	GRI 404-1	17.56%	36.10%							5.33%	1.84%	0.34	1.93%
GRI 404-2				31.83%	1.70%										
GRI 404-3				32.07%	1.71%										
GRI 405	Diversity and Equal Opportunity	GRI 405-1	17.28%	46.43%	5.25%	2.03%	0.39	2.44%							
		GRI 405-2		53.57%	2.81%										
Human Rights	GRI 406	Non-Discrimination	GRI 406-1	15.10%	100.00%	31.32%	9.13%	0.29	4.73%	1.68%	0.35	4.73%			
	GRI 407	Freedom of Association and Collective Bargaining	GRI 407-1	9.21%	100.00%	2.88%	0.36%	0.12	2.88%						
	GRI 408	Child Labor	GRI 408-1	20.65%	100.00%	6.47%	3.42%	0.53	6.47%						
	GRI 409	Forced or Compulsory Labor	GRI 409-1	18.77%	100.00%	5.88%	3.15%	0.54	5.88%						
	GRI 410	Security Practices	GRI 410-1	12.67%	100.00%	3.97%	1.05%	0.26	3.97%						
	GRI 411	Rights of Indigenous People	GRI 411-1	11.31%	100.00%	3.54%	1.25%	0.35	3.54%						
	GRI 412	Human Rights Assessment	GRI 412-1	12.30%	29.33%	3.85%	1.50%	0.39	1.13%						
			GRI 412-2		29.33%	1.13%									
			GRI 412-3		41.35%	1.59%									
	Society	GRI 413	Local Communities	GRI 413-1	30.14%	41.67%	20.74%	3.98%	0.19	6.25%	1.97%	0.32	2.60%		
				GRI 413-2		58.33%	3.65%								
		GRI 414	Supplier Social Assessment	GRI 414-1	34.77%	34.29%	7.21%	1.25%	0.17	2.47%					
GRI 414-2					65.71%	4.74%									
GRI 415		Public Policy	GRI 415-1	35.09%	100.00%	7.28%	1.50%	0.21	7.28%						
Product Responsibility	GRI 416	Customer Health and Safety	GRI 416-1	43.35%	29.17%	17.57%	3.31%	0.19	7.62%	2.93%	0.38	2.22%			
			GRI 416-2		70.83%	5.40%									
	GRI 417	Marketing and Labeling	GRI 417-1	20.35%	17.08%	3.58%	0.13%	0.04	0.61%						
			GRI 417-2		41.46%	1.48%									
			GRI 417-3		41.46%	1.48%									
	GRI 418	Customer Privacy	GRI 418-1	17.23%	100.00%	3.03%	0.62%	0.20	3.03%						
GRI 419	Socioeconomic Compliance	GRI 419-1	19.08%	100.00%	3.35%	0.12%	0.04	3.35%							



Table 11 – Recurring Economic Topics in Stakeholder Groups

GRI Topic	Direct Competitors (n = 6)	OEMs (n = 3)	Windfarm Developers (n = 10)	Stakeholder Audience (n = 19)
GRI 201	0	0	18	18
GRI 202	0	0	4	4
GRI 203	0	0	6	6
GRI 204	0	1	7	8
GRI 205	6	2	12	20
GRI 206	6	2	11	19
GRI 207	1	0	4	5
$r_s$	0.5268	0.3482	0.8125	0.7500
T stat	1.3858	0.8306	3.1165	2.5355
p-value	0.2244	0.4440	<b>0.0264</b>	<b>0.0522</b>

Table 12 – Recurring Environmental Topics in Stakeholder Groups

GRI Topic	Direct Competitors (n = 6)	OEMs (n = 3)	Windfarm Developers (n = 10)	Stakeholder Audience (n = 19)
GRI 301	5	3	15	23
GRI 302	14	2	40	56
GRI 303	7	3	20	30
GRI 304	6	2	21	29
GRI 305	15	6	43	64
GRI 306	6	4	23	33
GRI 307	11	3	19	33
GRI 308	5	5	31	41
$r_s$	0.8095	0.0893	0.3571	0.6845
T stat	3.3776	0.2196	0.9366	2.3001
p-value	<b>0.0149</b>	0.8335	0.3851	<b>0.0611</b>

Table 12 – Recurring Social Topics in Stakeholder Groups

GRI Topic	Direct Competitors (n = 6)	OEMs (n = 3)	Windfarm Developers (n = 10)	Stakeholder Audience (n = 19)
GRI 401	3	2	16	21
GRI 402	2	2	10	14
GRI 403	11	4	44	59
GRI 404	4	0	20	24
GRI 405	6	2	17	25
GRI 406	7	1	15	23
GRI 407	5	1	8	14
GRI 408	4	1	9	14
GRI 409	3	1	9	13
GRI 410	3	1	8	12
GRI 411	3	1	8	12
GRI 412	4	1	10	15
GRI 413	2	3	11	16
GRI 414	4	2	11	17
GRI 415	1	0	3	4
GRI 416	1	1	8	10
GRI 417	0	0	4	4
GRI 418	0	0	4	4
GRI 419	0	0	4	4
$r_s$	0.2193	0.4763	0.4382	0.3873
T stat	0.9267	2.2335	2.0098	1.7320
p-value	0.3670	<b>0.0392</b>	<b>0.0606</b>	0.1014



Table 14 – Corresponding SDGs and SDG Targets for Material Economic Topics (based on GRI, 2020b)

Rank	GRI Topic	SDG	SDG Targets
1	GRI 201	13, 8, 9	13.1, 8.1, 8.2, 9.4, 9.5
2	GRI 205	16	16.5
3	GRI 206	16	16.3
4	GRI 207	17, 10, 1	17.1, 17.3, 10.4, 1.3, 1.1
5	GRI 203	9, 8, 5, 3, 1	9.1, 9.4, 8.2, 8.3, 8.4, 8.5, 5.4, 1.4
6	GRI 204	8	8.3
7	GRI 202	8, 5, 1	8.5, 5.1, 1.2

Table 15 – Corresponding SDGs and SDG Targets for Material Environmental Topics (based on GRI, 2020b)

Rank	GRI Topic	SDG	SDG Targets
1	GRI 307	16 (12)	16.3 (12.4)
2	GRI 302	7, 8, 12, 13	7.2, 7.3, 8.4, 12.2, 13.1
3	GRI 305	15, 14, 13, 12, 3	15.2, 14.3, 13.1, 12.4, 3.9
4	GRI 306	12, 11, 3, 6	12.4, 12.5, 11.6, 3.9, 6.3
5	GRI 303	6, 7, 12	6.3, 6.4, 6.A, 6.B, 7.2, 12.4
6	GRI 308	n/a	n/a
7	GRI 304	6, 14, 15	6.6, 14.2, 15.1, 15.5
8	GRI 301	8, 12	8.4, 12.2, 12.5

Table 16 – Corresponding SDGs and SDG Targets for Material Social Topics (based on GRI, 2020b)

Rank	GRI Topic	SDG	SDG Targets
1	GRI 403	8, 16, 3	8.8, 16.1, 16.7, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9
2	GRI 416	16 (8)	16.3, (8.8)
3	GRI 415	16	16.5
4	GRI 414	5, 8, 16	5.2, 8.8, 16.1
5	GRI 401	5, 8, 10, 3	5.1, 5.4, 8.5, 8.6, 10.3, 3.2
6	GRI 408	8, 16	8.7, 16.2
7	GRI 413	1, 2	1.4, 2.3
8	GRI 409	8	8.7
9	GRI 404	4, 5, 8, 10	4.3, 4.4, 4.5, 5.1, 8.2, 8.5, (8.6), 10.3
10	GRI 405	5, 8, 10	5.1, 5.8, 8.5, 10.3
11	GRI 406	5, 8	5.1, 8.8
12	GRI 402	8	8.8
13	GRI 410	16	16.1
14	GRI 412	n/a	n/a
15	GRI 417	16, 12	16.3, 12.8
16	GRI 411	2	2.3
17	GRI 419	16	16.3
18	GRI 418	16	16.1, 16.3
19	GRI 407	8	8.8

Table 17 – Sensitivity Analysis on Economic Topics (Global Weights)

	$\lambda = 0$							$\lambda = 0.5$							$\lambda = 1$						
	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$
GRI 201	18.69%	18.77%	18.82%	18.83%	18.83%	18.84%	18.90%	18.69%	18.65%	18.54%	18.46%	18.36%	18.12%	17.86%	18.69%	18.56%	18.38%	18.27%	18.15%	17.89%	17.63%
GRI 202	10.20%	10.22%	10.33%	10.43%	10.55%	10.91%	11.45%	10.20%	10.25%	10.41%	10.54%	10.71%	11.20%	12.01%	10.20%	10.27%	10.46%	10.60%	10.78%	11.29%	12.13%
GRI 203	12.56%	12.51%	12.47%	12.45%	12.45%	12.45%	12.51%	12.56%	12.57%	12.61%	12.64%	12.67%	12.76%	12.87%	12.56%	12.62%	12.69%	12.73%	12.77%	12.85%	12.95%
GRI 204	12.35%	12.28%	12.18%	12.11%	12.03%	11.83%	11.51%	12.35%	12.35%	12.34%	12.33%	12.31%	12.27%	12.17%	12.35%	12.40%	12.43%	12.43%	12.43%	12.40%	12.32%
GRI 205	16.88%	16.80%	16.68%	16.61%	16.53%	16.32%	16.02%	16.88%	16.88%	16.85%	16.82%	16.79%	16.67%	16.46%	16.88%	16.93%	16.94%	16.93%	16.90%	16.79%	16.55%
GRI 206	16.28%	16.18%	16.06%	15.98%	15.91%	15.72%	15.48%	16.28%	16.28%	16.29%	16.29%	16.28%	16.24%	16.11%	16.28%	16.36%	16.42%	16.44%	16.44%	16.40%	16.25%
GRI 207	13.03%	13.24%	13.46%	13.58%	13.70%	13.93%	14.13%	13.03%	13.02%	12.97%	12.93%	12.88%	12.75%	12.52%	13.03%	12.85%	12.69%	12.61%	12.53%	12.37%	12.17%

Table 18 – Sensitivity Analysis on Economic Disclosures (Global Weights)

	$\lambda = 0$							$\lambda = 0.5$							$\lambda = 1$						
	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$
GRI 201-1	6.19%	6.25%	6.28%	6.30%	6.31%	6.34%	6.39%	6.19%	6.17%	6.12%	6.08%	6.03%	5.90%	5.72%	6.19%	6.12%	6.02%	5.96%	5.89%	5.73%	5.54%
GRI 201-2	7.52%	7.63%	7.70%	7.72%	7.73%	7.72%	7.68%	7.52%	7.48%	7.37%	7.28%	7.18%	6.92%	6.58%	7.52%	7.36%	7.15%	7.04%	6.90%	6.61%	6.26%
GRI 201-3	2.12%	2.10%	2.11%	2.12%	2.14%	2.21%	2.33%	2.12%	2.14%	2.18%	2.22%	2.27%	2.42%	2.66%	2.12%	2.17%	2.24%	2.29%	2.35%	2.51%	2.79%
GRI 201-4	2.86%	2.79%	2.72%	2.68%	2.64%	2.56%	2.49%	2.86%	2.86%	2.87%	2.87%	2.88%	2.89%	2.89%	2.86%	2.92%	2.97%	2.99%	3.01%	3.04%	3.05%
GRI 202-1	5.10%	5.11%	5.17%	5.21%	5.28%	5.45%	5.72%	5.10%	5.12%	5.21%	5.27%	5.35%	5.60%	6.00%	5.10%	5.14%	5.23%	5.30%	5.39%	5.65%	6.06%
GRI 202-2	5.10%	5.11%	5.17%	5.21%	5.28%	5.45%	5.72%	5.10%	5.12%	5.21%	5.27%	5.35%	5.60%	6.00%	5.10%	5.14%	5.23%	5.30%	5.39%	5.65%	6.06%
GRI 203-1	6.28%	6.25%	6.23%	6.23%	6.22%	6.23%	6.25%	6.28%	6.29%	6.30%	6.32%	6.34%	6.38%	6.43%	6.28%	6.31%	6.35%	6.36%	6.38%	6.43%	6.47%
GRI 203-2	6.28%	6.25%	6.23%	6.23%	6.22%	6.23%	6.25%	6.28%	6.29%	6.30%	6.32%	6.34%	6.38%	6.43%	6.28%	6.31%	6.35%	6.36%	6.38%	6.43%	6.47%
GRI 204-1	12.35%	12.28%	12.18%	12.11%	12.03%	11.83%	11.51%	12.35%	12.35%	12.34%	12.33%	12.31%	12.27%	12.17%	12.35%	12.40%	12.43%	12.43%	12.43%	12.40%	12.32%
GRI 205-1	5.42%	5.33%	5.22%	5.17%	5.11%	4.99%	4.87%	5.42%	5.42%	5.43%	5.43%	5.43%	5.43%	5.39%	5.42%	5.51%	5.57%	5.60%	5.62%	5.63%	5.59%
GRI 205-2	2.94%	2.90%	2.88%	2.88%	2.89%	2.92%	2.99%	2.94%	2.96%	3.01%	3.05%	3.10%	3.23%	3.39%	2.94%	3.01%	3.11%	3.17%	3.23%	3.38%	3.55%
GRI 205-3	8.52%	8.58%	8.58%	8.56%	8.53%	8.40%	8.17%	8.52%	8.49%	8.40%	8.33%	8.25%	8.01%	7.67%	8.52%	8.41%	8.26%	8.16%	8.05%	7.77%	7.41%
GRI 206-1	16.28%	16.18%	16.06%	15.98%	15.91%	15.72%	15.48%	16.28%	16.28%	16.29%	16.29%	16.28%	16.24%	16.11%	16.28%	16.36%	16.42%	16.44%	16.44%	16.40%	16.25%
GRI 207-1	4.45%	4.54%	4.63%	4.68%	4.72%	4.80%	4.85%	4.45%	4.44%	4.41%	4.38%	4.35%	4.26%	4.13%	4.45%	4.36%	4.27%	4.22%	4.18%	4.07%	3.94%
GRI 207-2	4.45%	4.54%	4.63%	4.68%	4.72%	4.80%	4.85%	4.45%	4.44%	4.41%	4.38%	4.35%	4.26%	4.13%	4.45%	4.36%	4.27%	4.22%	4.18%	4.07%	3.94%
GRI 207-3	2.73%	2.74%	2.76%	2.77%	2.78%	2.81%	2.83%	2.73%	2.73%	2.74%	2.74%	2.74%	2.73%	2.72%	2.73%	2.73%	2.73%	2.73%	2.73%	2.74%	2.73%
GRI 207-4	1.40%	1.41%	1.44%	1.46%	1.48%	1.53%	1.60%	1.40%	1.40%	1.42%	1.43%	1.45%	1.49%	1.54%	1.40%	1.40%	1.42%	1.43%	1.45%	1.49%	1.55%

Table – 19 Sensitivity Analysis on Environmental Topics (Global Weights)

	$\lambda = 0$							$\lambda = 0.5$							$\lambda = 1$						
	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$
GRI 301	7.84%	7.85%	7.93%	7.99%	8.08%	8.31%	8.68%	7.84%	7.87%	7.96%	8.03%	8.13%	8.39%	8.78%	7.84%	7.88%	7.98%	8.06%	8.15%	8.41%	8.81%
GRI 302	15.45%	15.37%	15.25%	15.18%	15.10%	14.92%	14.75%	15.45%	15.43%	15.39%	15.36%	15.32%	15.20%	15.01%	15.45%	15.49%	15.48%	15.46%	15.42%	15.29%	15.08%
GRI 303	10.42%	10.50%	10.62%	10.69%	10.79%	11.02%	11.36%	10.42%	10.44%	10.47%	10.50%	10.54%	10.65%	10.83%	10.42%	10.39%	10.39%	10.40%	10.43%	10.52%	10.69%
GRI 304	7.90%	7.90%	7.99%	8.07%	8.17%	8.47%	8.90%	7.90%	7.95%	8.10%	8.22%	8.37%	8.78%	9.39%	7.90%	7.99%	8.17%	8.30%	8.46%	8.89%	9.52%
GRI 305	15.02%	14.96%	14.84%	14.76%	14.66%	14.41%	14.09%	15.02%	15.00%	14.92%	14.87%	14.79%	14.59%	14.28%	15.02%	15.03%	14.98%	14.92%	14.86%	14.65%	14.33%
GRI 306	11.85%	11.69%	11.49%	11.37%	11.22%	10.83%	10.24%	11.85%	11.84%	11.83%	11.82%	11.81%	11.75%	11.62%	11.85%	11.96%	12.04%	12.07%	12.08%	12.07%	11.98%
GRI 307	23.47%	23.66%	23.72%	23.70%	23.64%	23.41%	22.98%	23.47%	23.38%	23.09%	22.87%	22.60%	21.87%	20.83%	23.47%	23.16%	22.71%	22.43%	22.11%	21.32%	20.28%
GRI 308	8.05%	8.06%	8.16%	8.24%	8.34%	8.61%	9.00%	8.05%	8.09%	8.22%	8.32%	8.44%	8.78%	9.25%	8.05%	8.11%	8.26%	8.36%	8.49%	8.84%	9.32%

Table 20 – Sensitivity Analysis on Environmental Disclosures (Global Weights)

	$\lambda = 0$							$\lambda = 0.5$							$\lambda = 1$						
	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$
GRI 301-1	3.92%	3.94%	3.96%	3.97%	3.99%	4.02%	4.06%	3.92%	3.92%	3.93%	3.94%	3.95%	3.98%	4.03%	3.92%	3.91%	3.91%	3.91%	3.92%	3.95%	4.00%
GRI 301-2	1.96%	1.96%	1.99%	2.01%	2.04%	2.14%	2.31%	1.96%	1.97%	2.01%	2.05%	2.09%	2.20%	2.37%	1.96%	1.98%	2.04%	2.07%	2.12%	2.23%	2.40%
GRI 301-3	1.96%	1.96%	1.99%	2.01%	2.04%	2.14%	2.31%	1.96%	1.97%	2.01%	2.05%	2.09%	2.20%	2.37%	1.96%	1.98%	2.04%	2.07%	2.12%	2.23%	2.40%
GRI 302-1	3.51%	3.50%	3.49%	3.48%	3.48%	3.47%	3.47%	3.51%	3.50%	3.49%	3.48%	3.47%	3.42%	3.36%	3.51%	3.50%	3.49%	3.48%	3.46%	3.41%	3.33%
GRI 302-2	1.51%	1.50%	1.51%	1.52%	1.53%	1.58%	1.66%	1.51%	1.52%	1.55%	1.58%	1.61%	1.70%	1.84%	1.51%	1.54%	1.58%	1.61%	1.65%	1.75%	1.89%
GRI 302-3	4.47%	4.45%	4.37%	4.31%	4.24%	4.04%	3.77%	4.47%	4.45%	4.37%	4.32%	4.24%	4.05%	3.79%	4.47%	4.45%	4.37%	4.32%	4.25%	4.06%	3.79%
GRI 302-4	3.77%	3.78%	3.80%	3.80%	3.81%	3.83%	3.86%	3.77%	3.76%	3.75%	3.73%	3.71%	3.66%	3.57%	3.77%	3.75%	3.72%	3.69%	3.67%	3.60%	3.50%
GRI 302-5	2.19%	2.14%	2.08%	2.06%	2.04%	2.01%	1.99%	2.19%	2.20%	2.23%	2.26%	2.28%	2.36%	2.45%	2.19%	2.25%	2.32%	2.36%	2.40%	2.48%	2.57%
GRI 303-1	1.57%	1.62%	1.69%	1.75%	1.81%	1.96%	2.19%	1.57%	1.58%	1.60%	1.62%	1.64%	1.71%	1.82%	1.57%	1.55%	1.54%	1.55%	1.57%	1.63%	1.73%
GRI 303-2	3.01%	3.02%	3.00%	2.98%	2.95%	2.87%	2.73%	3.01%	3.00%	2.97%	2.94%	2.91%	2.82%	2.70%	3.01%	2.99%	2.95%	2.92%	2.89%	2.81%	2.69%
GRI 303-3	1.70%	1.70%	1.72%	1.74%	1.76%	1.82%	1.91%	1.70%	1.70%	1.72%	1.73%	1.74%	1.77%	1.80%	1.70%	1.70%	1.71%	1.72%	1.73%	1.75%	1.78%
GRI 303-4	2.70%	2.70%	2.69%	2.68%	2.68%	2.66%	2.63%	2.70%	2.70%	2.69%	2.68%	2.68%	2.65%	2.62%	2.70%	2.70%	2.69%	2.68%	2.67%	2.65%	2.62%
GRI 303-5	1.44%	1.46%	1.51%	1.55%	1.59%	1.72%	1.91%	1.44%	1.46%	1.50%	1.53%	1.57%	1.69%	1.88%	1.44%	1.45%	1.49%	1.52%	1.56%	1.68%	1.87%
GRI 304-1	0.96%	0.95%	0.97%	0.98%	1.00%	1.07%	1.17%	0.96%	0.97%	1.01%	1.04%	1.07%	1.17%	1.33%	0.96%	0.98%	1.03%	1.07%	1.11%	1.22%	1.38%
GRI 304-2	2.92%	2.92%	2.93%	2.94%	2.95%	2.97%	2.99%	2.92%	2.92%	2.95%	2.96%	2.98%	3.04%	3.12%	2.92%	2.93%	2.95%	2.97%	2.99%	3.06%	3.15%
GRI 304-3	2.08%	2.09%	2.13%	2.16%	2.20%	2.31%	2.47%	2.08%	2.10%	2.14%	2.17%	2.22%	2.33%	2.49%	2.08%	2.10%	2.15%	2.18%	2.22%	2.33%	2.48%
GRI 304-4	1.94%	1.94%	1.96%	1.99%	2.02%	2.12%	2.28%	1.94%	1.96%	2.01%	2.05%	2.10%	2.24%	2.46%	1.94%	1.98%	2.04%	2.09%	2.14%	2.29%	2.52%
GRI 305-1	2.49%	2.52%	2.54%	2.55%	2.56%	2.59%	2.61%	2.49%	2.49%	2.47%	2.46%	2.44%	2.39%	2.31%	2.49%	2.46%	2.43%	2.41%	2.39%	2.33%	2.24%
GRI 305-2	1.15%	1.13%	1.12%	1.12%	1.13%	1.15%	1.19%	1.15%	1.16%	1.20%	1.22%	1.26%	1.36%	1.51%	1.15%	1.19%	1.24%	1.28%	1.32%	1.43%	1.59%
GRI 305-3	1.72%	1.72%	1.73%	1.73%	1.74%	1.76%	1.79%	1.72%	1.73%	1.74%	1.74%	1.75%	1.78%	1.82%	1.72%	1.73%	1.74%	1.75%	1.76%	1.79%	1.83%
GRI 305-4	3.40%	3.37%	3.29%	3.23%	3.16%	2.97%	2.72%	3.40%	3.38%	3.31%	3.26%	3.20%	3.03%	2.79%	3.40%	3.39%	3.33%	3.28%	3.22%	3.05%	2.80%
GRI 305-5	2.63%	2.55%	2.43%	2.36%	2.28%	2.08%	1.83%	2.63%	2.62%	2.59%	2.57%	2.54%	2.45%	2.33%	2.63%	2.67%	2.68%	2.67%	2.65%	2.58%	2.45%
GRI 305-6	1.81%	1.84%	1.86%	1.88%	1.89%	1.93%	1.98%	1.81%	1.81%	1.81%	1.81%	1.80%	1.79%	1.77%	1.81%	1.79%	1.78%	1.77%	1.76%	1.74%	1.72%
GRI 305-7	1.81%	1.84%	1.86%	1.88%	1.89%	1.93%	1.98%	1.81%	1.81%	1.81%	1.81%	1.80%	1.79%	1.77%	1.81%	1.79%	1.78%	1.77%	1.76%	1.74%	1.72%
GRI 306-1	1.62%	1.61%	1.61%	1.62%	1.63%	1.64%	1.65%	1.62%	1.63%	1.65%	1.67%	1.70%	1.76%	1.84%	1.62%	1.64%	1.67%	1.70%	1.73%	1.80%	1.89%
GRI 306-2	1.91%	1.92%	1.95%	1.96%	1.98%	2.02%	2.05%	1.91%	1.92%	1.95%	1.97%	1.99%	2.06%	2.16%	1.91%	1.92%	1.94%	1.96%	1.99%	2.06%	2.18%
GRI 306-3	3.09%	3.04%	2.94%	2.88%	2.81%	2.61%	2.33%	3.09%	3.08%	3.04%	3.01%	2.96%	2.85%	2.66%	3.09%	3.11%	3.10%	3.07%	3.04%	2.93%	2.75%
GRI 306-4	3.09%	3.04%	2.94%	2.88%	2.81%	2.61%	2.33%	3.09%	3.08%	3.04%	3.01%	2.96%	2.85%	2.66%	3.09%	3.11%	3.10%	3.07%	3.04%	2.93%	2.75%
GRI 306-5	2.13%	2.09%	2.05%	2.03%	2.00%	1.95%	1.88%	2.13%	2.14%	2.16%	2.17%	2.19%	2.24%	2.30%	2.13%	2.18%	2.23%	2.26%	2.29%	2.35%	2.42%

GRI 307-1	23.47%	23.66%	23.72%	23.70%	23.64%	23.41%	22.98%	23.47%	23.38%	23.09%	22.87%	22.60%	21.87%	20.83%	23.47%	23.16%	22.71%	22.43%	22.11%	21.32%	20.28%
GRI 308-1	4.02%	4.03%	4.08%	4.12%	4.17%	4.31%	4.50%	4.02%	4.05%	4.11%	4.16%	4.22%	4.39%	4.63%	4.02%	4.06%	4.13%	4.18%	4.25%	4.42%	4.66%
GRI 308-2	4.02%	4.03%	4.08%	4.12%	4.17%	4.31%	4.50%	4.02%	4.05%	4.11%	4.16%	4.22%	4.39%	4.63%	4.02%	4.06%	4.13%	4.18%	4.25%	4.42%	4.66%

Table 21 – Sensitivity Analysis on Social Subcategories (Global Weights)

	$\lambda = 0$							$\lambda = 0.5$							$\lambda = 1$						
	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$
LPDW	30.92%	30.76%	30.40%	30.13%	29.79%	28.90%	27.64%	30.92%	30.83%	30.57%	30.37%	30.13%	29.49%	28.65%	30.92%	30.89%	30.69%	30.52%	30.31%	29.76%	29.00%
HR	31.40%	31.52%	31.64%	31.70%	31.77%	31.95%	32.26%	31.40%	31.39%	31.35%	31.32%	31.28%	31.22%	31.22%	31.40%	31.28%	31.15%	31.08%	31.02%	30.90%	30.86%
SOC	20.42%	20.41%	20.51%	20.59%	20.71%	21.02%	21.45%	20.42%	20.47%	20.63%	20.74%	20.88%	21.23%	21.67%	20.42%	20.52%	20.71%	20.83%	20.98%	21.33%	21.75%
PR	17.25%	17.30%	17.46%	17.58%	17.73%	18.13%	18.66%	17.25%	17.30%	17.46%	17.57%	17.71%	18.05%	18.46%	17.25%	17.31%	17.46%	17.57%	17.70%	18.01%	18.39%

Table 22 – Sensitivity Analysis on Social Topics (Global Weights)

	$\lambda = 0$							$\lambda = 0.5$							$\lambda = 1$						
	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$
<b>LPDW</b>																					
GRI 401	7.28%	7.26%	7.18%	7.11%	7.03%	6.81%	6.51%	7.28%	7.25%	7.15%	7.08%	7.00%	6.78%	6.48%	7.28%	7.24%	7.14%	7.07%	6.98%	6.76%	6.48%
GRI 402	4.24%	4.22%	4.20%	4.19%	4.17%	4.15%	4.13%	4.24%	4.25%	4.26%	4.28%	4.30%	4.36%	4.47%	4.24%	4.27%	4.31%	4.33%	4.36%	4.45%	4.58%
GRI 403	8.62%	8.58%	8.48%	8.40%	8.30%	8.03%	7.65%	8.62%	8.59%	8.50%	8.43%	8.34%	8.11%	7.78%	8.62%	8.60%	8.51%	8.45%	8.36%	8.14%	7.83%
GRI 404	5.43%	5.39%	5.30%	5.24%	5.16%	4.96%	4.66%	5.43%	5.42%	5.37%	5.33%	5.29%	5.17%	5.01%	5.43%	5.44%	5.41%	5.39%	5.36%	5.26%	5.13%
GRI 405	5.35%	5.31%	5.24%	5.19%	5.12%	4.94%	4.68%	5.35%	5.33%	5.28%	5.25%	5.20%	5.08%	4.90%	5.35%	5.34%	5.31%	5.28%	5.25%	5.14%	4.98%
<b>HR</b>																					
GRI 406	4.76%	4.79%	4.81%	4.83%	4.84%	4.88%	4.95%	4.76%	4.76%	4.74%	4.73%	4.72%	4.68%	4.64%	4.76%	4.73%	4.69%	4.67%	4.65%	4.59%	4.53%
GRI 407	2.82%	2.85%	2.90%	2.93%	2.97%	3.07%	3.22%	2.82%	2.83%	2.86%	2.88%	2.91%	3.00%	3.16%	2.82%	2.82%	2.84%	2.86%	2.88%	2.97%	3.14%
GRI 408	6.57%	6.60%	6.60%	6.60%	6.59%	6.55%	6.52%	6.57%	6.55%	6.50%	6.47%	6.42%	6.30%	6.14%	6.57%	6.52%	6.44%	6.38%	6.32%	6.18%	6.00%
GRI 409	5.96%	6.00%	6.03%	6.04%	6.05%	6.06%	6.08%	5.96%	5.95%	5.91%	5.88%	5.84%	5.75%	5.62%	5.96%	5.90%	5.82%	5.77%	5.72%	5.60%	5.45%
GRI 410	3.93%	3.89%	3.85%	3.83%	3.82%	3.79%	3.78%	3.93%	3.93%	3.95%	3.97%	3.99%	4.05%	4.16%	3.93%	3.97%	4.02%	4.05%	4.09%	4.17%	4.30%
GRI 411	3.52%	3.56%	3.61%	3.65%	3.68%	3.77%	3.89%	3.52%	3.53%	3.54%	3.54%	3.55%	3.57%	3.61%	3.52%	3.50%	3.48%	3.48%	3.48%	3.49%	3.51%
GRI 412	3.83%	3.83%	3.83%	3.83%	3.83%	3.83%	3.82%	3.83%	3.84%	3.84%	3.85%	3.86%	3.88%	3.90%	3.83%	3.84%	3.86%	3.87%	3.88%	3.90%	3.93%
<b>SOC</b>																					
GRI 413	6.00%	6.02%	6.13%	6.22%	6.34%	6.70%	7.30%	6.00%	6.04%	6.16%	6.25%	6.37%	6.72%	7.25%	6.00%	6.05%	6.17%	6.27%	6.39%	6.72%	7.22%
GRI 414	7.15%	7.16%	7.18%	7.20%	7.22%	7.27%	7.31%	7.15%	7.16%	7.19%	7.21%	7.23%	7.28%	7.30%	7.15%	7.17%	7.20%	7.22%	7.23%	7.27%	7.29%
GRI 415	7.27%	7.24%	7.20%	7.17%	7.14%	7.05%	6.84%	7.27%	7.27%	7.28%	7.28%	7.27%	7.24%	7.12%	7.27%	7.30%	7.34%	7.35%	7.35%	7.34%	7.24%
<b>PR</b>																					
GRI 416	7.61%	7.68%	7.75%	7.79%	7.83%	7.92%	7.99%	7.61%	7.62%	7.62%	7.62%	7.62%	7.60%	7.55%	7.61%	7.56%	7.52%	7.49%	7.47%	7.43%	7.36%
GRI 417	3.48%	3.46%	3.46%	3.48%	3.50%	3.57%	3.69%	3.48%	3.50%	3.54%	3.58%	3.62%	3.72%	3.85%	3.48%	3.53%	3.60%	3.64%	3.69%	3.80%	3.92%
GRI 418	2.91%	2.91%	2.95%	2.99%	3.03%	3.16%	3.35%	2.91%	2.93%	2.98%	3.03%	3.08%	3.22%	3.40%	2.91%	2.94%	3.01%	3.06%	3.11%	3.25%	3.43%
GRI 419	3.25%	3.25%	3.29%	3.33%	3.37%	3.48%	3.63%	3.25%	3.27%	3.32%	3.35%	3.40%	3.51%	3.65%	3.25%	3.28%	3.33%	3.37%	3.42%	3.53%	3.67%

Table 23 – Sensitivity Analysis on Social Disclosures (Global Weights)

	$\lambda = 0$							$\lambda = 0.5$							$\lambda = 1$						
	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$	$\alpha = 0$	$\alpha = 0.2$	$\alpha = 0.4$	$\alpha = 0.5$	$\alpha = 0.6$	$\alpha = 0.8$	$\alpha = 1$
<b>LPDW</b>																					
GRI 401-1	3.52%	3.56%	3.53%	3.49%	3.44%	3.27%	3.01%	3.52%	3.48%	3.38%	3.30%	3.21%	2.98%	2.68%	3.52%	3.43%	3.28%	3.19%	3.09%	2.86%	2.58%
GRI 401-2	1.91%	1.88%	1.85%	1.82%	1.80%	1.76%	1.72%	1.91%	1.91%	1.91%	1.90%	1.90%	1.88%	1.86%	1.91%	1.94%	1.95%	1.95%	1.95%	1.94%	1.91%
GRI 401-3	1.85%	1.82%	1.80%	1.79%	1.79%	1.78%	1.78%	1.85%	1.85%	1.87%	1.88%	1.89%	1.92%	1.94%	1.85%	1.88%	1.91%	1.93%	1.94%	1.97%	1.98%
GRI 402-1	4.24%	4.22%	4.20%	4.19%	4.17%	4.15%	4.13%	4.24%	4.25%	4.26%	4.28%	4.30%	4.36%	4.47%	4.24%	4.27%	4.31%	4.33%	4.36%	4.45%	4.58%
GRI 403-1	0.70%	0.69%	0.67%	0.66%	0.65%	0.62%	0.59%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.71%	0.72%	0.72%	0.72%	0.73%	0.72%
GRI 403-2	0.99%	0.99%	0.98%	0.98%	0.97%	0.94%	0.91%	0.99%	0.98%	0.96%	0.95%	0.93%	0.89%	0.83%	0.99%	0.97%	0.95%	0.94%	0.92%	0.88%	0.82%
GRI 403-3	0.60%	0.60%	0.60%	0.61%	0.61%	0.62%	0.63%	0.60%	0.60%	0.60%	0.61%	0.61%	0.63%	0.65%	0.60%	0.60%	0.60%	0.61%	0.61%	0.63%	0.65%
GRI 403-4	0.69%	0.69%	0.69%	0.68%	0.68%	0.67%	0.66%	0.69%	0.69%	0.69%	0.69%	0.69%	0.69%	0.69%	0.69%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%
GRI 403-5	0.93%	0.92%	0.89%	0.87%	0.85%	0.80%	0.73%	0.93%	0.93%	0.92%	0.91%	0.90%	0.88%	0.84%	0.93%	0.94%	0.94%	0.93%	0.93%	0.90%	0.86%
GRI 403-6	0.59%	0.59%	0.59%	0.59%	0.59%	0.60%	0.61%	0.59%	0.59%	0.60%	0.60%	0.61%	0.62%	0.65%	0.59%	0.59%	0.60%	0.61%	0.61%	0.63%	0.66%
GRI 403-7	0.99%	0.99%	0.98%	0.97%	0.96%	0.92%	0.86%	0.99%	0.99%	0.97%	0.95%	0.93%	0.88%	0.81%	0.99%	0.98%	0.96%	0.94%	0.93%	0.88%	0.81%
GRI 403-8	0.69%	0.69%	0.69%	0.69%	0.69%	0.69%	0.68%	0.69%	0.69%	0.68%	0.68%	0.68%	0.67%	0.67%	0.69%	0.68%	0.68%	0.68%	0.67%	0.67%	0.67%
GRI 403-9	1.24%	1.24%	1.22%	1.20%	1.18%	1.12%	1.03%	1.24%	1.23%	1.20%	1.18%	1.15%	1.08%	0.98%	1.24%	1.22%	1.19%	1.17%	1.14%	1.07%	0.97%
GRI 403-10	1.20%	1.19%	1.16%	1.14%	1.12%	1.05%	0.95%	1.20%	1.19%	1.17%	1.15%	1.12%	1.05%	0.96%	1.20%	1.19%	1.17%	1.15%	1.12%	1.06%	0.97%
GRI 404-1	2.00%	1.99%	1.96%	1.93%	1.89%	1.79%	1.65%	2.00%	1.99%	1.95%	1.93%	1.89%	1.82%	1.72%	2.00%	1.98%	1.95%	1.92%	1.90%	1.83%	1.74%
GRI 404-2	1.73%	1.71%	1.69%	1.67%	1.64%	1.58%	1.49%	1.73%	1.72%	1.71%	1.70%	1.68%	1.65%	1.60%	1.73%	1.73%	1.72%	1.72%	1.71%	1.68%	1.64%
GRI 404-3	1.71%	1.69%	1.66%	1.65%	1.63%	1.59%	1.51%	1.71%	1.71%	1.71%	1.71%	1.71%	1.71%	1.69%	1.71%	1.72%	1.74%	1.75%	1.75%	1.76%	1.75%
GRI 405-1	2.43%	2.42%	2.40%	2.40%	2.39%	2.38%	2.37%	2.43%	2.43%	2.43%	2.44%	2.44%	2.45%	2.48%	2.43%	2.44%	2.46%	2.47%	2.47%	2.49%	2.52%
GRI 405-2	2.92%	2.90%	2.84%	2.79%	2.74%	2.57%	2.30%	2.92%	2.90%	2.85%	2.81%	2.76%	2.63%	2.42%	2.92%	2.90%	2.85%	2.82%	2.77%	2.65%	2.47%
<b>HR</b>																					
GRI 406-1	4.76%	4.79%	4.81%	4.83%	4.84%	4.88%	4.95%	4.76%	4.76%	4.74%	4.73%	4.72%	4.68%	4.64%	4.76%	4.73%	4.69%	4.67%	4.65%	4.59%	4.53%
GRI 407-1	2.82%	2.85%	2.90%	2.93%	2.97%	3.07%	3.22%	2.82%	2.83%	2.86%	2.88%	2.91%	3.00%	3.16%	2.82%	2.82%	2.84%	2.86%	2.88%	2.97%	3.14%
GRI 408-1	6.57%	6.60%	6.60%	6.60%	6.59%	6.55%	6.52%	6.57%	6.55%	6.50%	6.47%	6.42%	6.30%	6.14%	6.57%	6.52%	6.44%	6.38%	6.32%	6.18%	6.00%
GRI 409-1	5.96%	6.00%	6.03%	6.04%	6.05%	6.06%	6.08%	5.96%	5.95%	5.91%	5.88%	5.84%	5.75%	5.62%	5.96%	5.90%	5.82%	5.77%	5.72%	5.60%	5.45%
GRI 410-1	3.93%	3.89%	3.85%	3.83%	3.82%	3.79%	3.78%	3.93%	3.93%	3.95%	3.97%	3.99%	4.05%	4.16%	3.93%	3.97%	4.02%	4.05%	4.09%	4.17%	4.30%
GRI 411-1	3.52%	3.56%	3.61%	3.65%	3.68%	3.77%	3.89%	3.52%	3.53%	3.54%	3.54%	3.55%	3.57%	3.61%	3.52%	3.50%	3.48%	3.48%	3.48%	3.49%	3.51%
GRI 412-1	1.10%	1.10%	1.11%	1.13%	1.14%	1.19%	1.26%	1.10%	1.10%	1.12%	1.13%	1.14%	1.19%	1.25%	1.10%	1.10%	1.12%	1.13%	1.15%	1.19%	1.24%
GRI 412-2	1.10%	1.10%	1.11%	1.13%	1.14%	1.19%	1.26%	1.10%	1.10%	1.12%	1.13%	1.14%	1.19%	1.25%	1.10%	1.10%	1.12%	1.13%	1.15%	1.19%	1.24%
GRI 412-3	1.64%	1.63%	1.60%	1.58%	1.54%	1.45%	1.30%	1.64%	1.64%	1.61%	1.59%	1.57%	1.50%	1.41%	1.64%	1.64%	1.62%	1.60%	1.58%	1.53%	1.45%
<b>SOC</b>																					
GRI 413-1	2.40%	2.38%	2.43%	2.49%	2.57%	2.84%	3.37%	2.40%	2.43%	2.53%	2.60%	2.71%	2.99%	3.45%	2.40%	2.47%	2.60%	2.69%	2.79%	3.08%	3.49%
GRI 413-2	3.60%	3.64%	3.70%	3.73%	3.77%	3.86%	3.93%	3.60%	3.61%	3.63%	3.65%	3.67%	3.72%	3.80%	3.60%	3.58%	3.57%	3.58%	3.60%	3.65%	3.74%
GRI 414-1	2.38%	2.34%	2.32%	2.32%	2.33%	2.37%	2.44%	2.38%	2.40%	2.44%	2.47%	2.51%	2.61%	2.74%	2.38%	2.45%	2.54%	2.59%	2.65%	2.77%	2.92%
GRI 414-2	4.77%	4.82%	4.86%	4.88%	4.89%	4.91%	4.88%	4.77%	4.76%	4.75%	4.74%	4.72%	4.67%	4.56%	4.77%	4.72%	4.66%	4.63%	4.59%	4.50%	4.37%

GRI 415-1	7.27%	7.24%	7.20%	7.17%	7.14%	7.05%	6.84%	7.27%	7.27%	7.28%	7.28%	7.27%	7.24%	7.12%	7.27%	7.30%	7.34%	7.35%	7.35%	7.34%	7.24%
<b>PR</b>																					
GRI 416-1	2.18%	2.15%	2.13%	2.13%	2.13%	2.14%	2.16%	2.18%	2.18%	2.21%	2.22%	2.24%	2.29%	2.35%	2.18%	2.22%	2.27%	2.31%	2.34%	2.42%	2.50%
GRI 416-2	5.44%	5.53%	5.62%	5.67%	5.71%	5.78%	5.83%	5.44%	5.43%	5.41%	5.40%	5.37%	5.31%	5.20%	5.44%	5.34%	5.24%	5.19%	5.13%	5.01%	4.86%
GRI 417-1	0.58%	0.57%	0.57%	0.57%	0.58%	0.59%	0.62%	0.58%	0.58%	0.60%	0.61%	0.62%	0.66%	0.71%	0.58%	0.60%	0.62%	0.64%	0.66%	0.70%	0.76%
GRI 417-2	1.45%	1.44%	1.45%	1.45%	1.46%	1.49%	1.53%	1.45%	1.46%	1.47%	1.48%	1.50%	1.53%	1.57%	1.45%	1.47%	1.49%	1.50%	1.52%	1.55%	1.58%
GRI 417-3	1.45%	1.44%	1.45%	1.45%	1.46%	1.49%	1.53%	1.45%	1.46%	1.47%	1.48%	1.50%	1.53%	1.57%	1.45%	1.47%	1.49%	1.50%	1.52%	1.55%	1.58%
GRI 418-1	2.91%	2.91%	2.95%	2.99%	3.03%	3.16%	3.35%	2.91%	2.93%	2.98%	3.03%	3.08%	3.22%	3.40%	2.91%	2.94%	3.01%	3.06%	3.11%	3.25%	3.43%
GRI 419-1	3.25%	3.25%	3.29%	3.33%	3.37%	3.48%	3.63%	3.25%	3.27%	3.32%	3.35%	3.40%	3.51%	3.65%	3.25%	3.28%	3.33%	3.37%	3.42%	3.53%	3.67%



Table 24 – Relative Robustness Scores of Scenarios, Topics, Disclosures, and Ranks (Global Weights)

	Scenarios			Items			Ranks		
	# Accurate	Number	Accuracy	# Accurate	Number	Accuracy	# Accurate	Number	Accuracy
<b>Economic</b>									
Topics	14	20	70.00%	4	7	57.14%	124	140	88.57%
Disclosures	20	20	100.00%	15	15	100.00%	300	300	100.00%
<b>Environmental</b>									
Topics	13	20	65.00%	4	8	50.00%	148	160	92.50%
Disclosures	11	20	55.00%	17	31	54.84%	573	620	92.42%
<b>Social</b>									
Subcategories	20	20	100.00%	4	4	100.00%	80	80	100.00%
Topics	3	20	15.00%	4	19	21.05%	294	380	77.37%
Disclosures	0	20	0.00%	14	30	46.67%	510	600	85.00%
<b>LPDW</b>									
Topics	19	20	95.00%	3	5	60.00%	98	100	98.00%
Disclosures	2	20	10.00%	3	18	16.67%	275	360	76.39%
<b>HR</b>									
Topics	17	20	85.00%	4	7	57.14%	134	140	95.71%
Disclosures	20	20	100.00%	3	3	100.00%	60	60	100.00%
<b>SOC</b>									
Topics	12	20	60.00%	0	3	0.00%	44	60	73.33%
Disclosures	20	20	100.00%	4	4	100.00%	80	80	100.00%
<b>PR</b>									
Topics	20	20	100.00%	4	4	100.00%	80	80	100.00%
Disclosures	20	20	100.00%	5	5	100.00%	100	100	100.00%