

## "KPIs for Sustainability: Defining the Strategy for a Sustainable Future in the Insurance Industry"

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## Appendix

Environmental						
Strategic Goal	KPI	Measurement	Target			
To improve the use of	Renewable sources	Renewable sources/other				
renewable sources		sources				
To reduce superfluous	Efficiency resources rate	Energy used per thousand				
resources consumption		product units (kWh/1000				
1		product units), total				
		consumption of water and				
		other resources per thousand				
		products (1/1000 product				
		units)				
To reduce greenhouse	Total direct or indirect	CO <sub>2</sub> /1000 products units				
gas emissions	emissions of greenhouse gases	Cognoco products units				
gus emissions	by weight					
Environment's	Waste reduction rate	Percentage of waste generated				
safeguard	waste reduction rate	per thousand product units				
To improve the effort	Percentage of	Recycled material used/total				
of green-ness	reusable/recycled material	material used				
of green-ness	Social	Illaterial used				
Strategic Goal	KPI	Measurement	Target			
Inclusion of all society	Integration rate	Questionnaire	larget			
members in	integration rate	Questionnaire				
developing sustainable						
goals						
Stakeholders'	Stakeholders' satisfaction rate	Questionnaire				
relationship	Stakeholders satisfaction rate	Questionnaire				
To participate at the	Number of social initiatives at	Total social initiatives at				
social initiatives		national and local level				
	national and local level					
To increase	Employee satisfaction rate	Questionnaire				
employees'						
satisfaction		G + 1 :				
Social marketing	Customer satisfaction rate	Cost analysis				
policies	F .					
Economic VI						
Strategic Goal To increase return of	ROI related to environmental	Measurement Cost analysis	Target			
investment	protection	Cost allarysis				
	1	Figure 1.1 man and in a				
To increase the	% additional revenue	Financial reporting				
revenues associated to	(additional price premium					
sustainability	brand differentiation, income					
dimensions	from recycling / closed loop					
	programs, sustainable					
To subserve 41 1	innovations)	Township and the second of				
To enhance technology	% of investments in	Investments in environmental				
process	environmental technology	technology / total investments				
To guarantee the	% production sites with	survey				
quality of the process	environmental certification,					
	environmental information					
	accuracy rate, environmental					
	information availability rate					

Appendix 1: The sustainability perspective based on Hristov and Chirico (2019, p. 12)

## Value Chain Product Operations and Development, Risk Management Underwriting Claims Marketing and Management Sales Roadmap Insurance cover for Integration of ESG due diligence Sustainable green objects sustainability in Assessment criteria leadership program Inclusion of green risk leadership and accompaniment \* 2. and metrics Greenhouse gas policy features analysis Inclusion of Sustainable transition Review of global sustainability in risk emissions inventory claims support risk objectives assessment Baseline metrics Promotion of Definition of local Definition of Meaningful targets environmentally tolerance levels decision-making and associated friendly behavior Risk monitoring processes actions Dialogue with External Delivery of ESG Progress customers environment expertise measurement, monitoring actions on deviations and reporting **Examples of metrics** Share of products Share of policies Number of referred GHG emission reviewed and updated reviewed and ESG risks reduction per Share of premiums updated to reflect Rate change of employee from sustainable ESG issues sustainable products Share of suppliers in products Number and types accordance with Loss ratio on Number of customers of ESG factors sustainable versus vendor code of included in ORSA classical products conduct participating in resilience programs or scenarios Share of damaged receiving prevention Share of risks in objects repaired inventory reviewed services versus replaced, or for ESG exposure replaced with environmentally friendly alternative

\* Note: Sustainable leadership is an overarching theme in all steps of the value chain

Appendix 2: Roadmap towards a sustainable insurance industry for executive management (cf. Stricker et al., 2022, p. 14)

	KPI			
Environmental	- Emission of ozone- depleting substance rate - Emission of greenhouse gases rate - % of emission other environmentally affecting gases - Carbon footprint rate - Sulphur dioxides (SOx emissions) - Nitrogen oxides (NOx emissions)	- % of waste generated per thousand product units - Dangerous waste generated rate - % of hazardous material over total waste - % of reuseable/recycled material - % of waste recycled off/on site - Waste reduction rate - % of waste reduced off/on site - % pollution indicators	- Energy intensity (energy used by thousand product units) - Electricity consumption (total consumption per thousand products) - Gas consumption rate - Soil use rate - Water use rate (total consumption of water and other resources per thousand products)	Renewable energy rate     Reusable/recycled     material rate     Renewable energy rate     Renewable electric     sources rate     Sustainable water use     rate
Goals	✓ Reduction of gas emissions	✓ Improvement of use of renewable sources	✓ Reduction of natural resources consumption	✓ Reduction of waste and improvement of efforts to address "green-ness"
	KPI			
Social	<ul> <li>Employee satisfaction rate</li> <li>Employee turnover rate</li> <li>Number of training hours per employee</li> <li>Rate of employees that are shareholders</li> <li>Support employee rate (physical activity, health, care and medicare)</li> </ul>	<ul> <li>Employment rate</li> <li>Internal relation rate</li> <li>Health and safety rate</li> <li>Training rate</li> <li>Diversity rate</li> <li>Opportunity rate</li> <li>Employee satisfaction rate</li> </ul>	Equality rate (male to female rate)     Child labor rate     Forced labor rate     Number of disciplinary actions     Social security rate	- Charity donations rate - Number of social initiatives at national and local level - Total expenses for social initiatives - % participations in social initiatives - Consumer, supplier and employees' satisfaction rate
Goal	✓ Employees' acceptance of organizational change	✓ Guaranteeing the quality of environmental and working conditions	✓ Guaranteeing the respect of the human rights	✓ Participation at the social initiative and maintaining a high level of responsibility
	KPI			
Economic	<ul> <li>Cost of ownership linked to energy, cost consumption, environmental tax</li> <li>Growth of gross margin</li> <li>Total costs and investments relating to environmental protection</li> <li>Environmental cost savings</li> <li>Amount of environmental penalties</li> </ul>	<ul> <li>% of additional revenue</li> <li>% additional price premium brand differentiation</li> <li>% of income from recycling / closed loop programs</li> <li>Sustainable innovations rate</li> </ul>	Investments in technology rate     Environmental technology levels     % of new environmentally sound product development     Response to environmental product request rate     Response to environmental programs rate (for suppliers)     Amount of environmentally safe alternatives	- % of production sites with environmental certification (ISO 9001, ISO 14001, ISO 50001, UNE 166002 and OHS AS 18001) - Environmental information accuracy rate - Environmental information availability rate - Supplier rejection rate
Goal	✓ Increasing return of investment	✓ Increasing the revenues associated to sustainability dimensions	✓ Enhancing technology process	✓ Guaranteeing the quality of the process

Appendix 3: Sustainability Key Performance Indicators based on Hristov and Chirico (cf. 2019, p. 8)