



Research and Innovation Centers

Innovation Acceleration Hubs



ReSEES Laboratory



Stochastic Modeling and Applications Laboratory



Sustainable Development Unit / Athena



DTU Management Department of Technology, Management and Economics. Climate and Energy Policy Division



Brigaid Connect



MENA Maritime Accelerator



Black Sea Accelerator



SDSN Global Climate Hub



Climate-KIC Greece Hub

Science - Policy Networks

Scientific Associations and Academies



SDSN



SDSN Europe



SDSN Greece



Water Europe



Nexus cluster



EAERE



WCERA



Academia Europaea



World Academy of Art and Science

WAAS



IAP



European Academy of Sciences and Arts



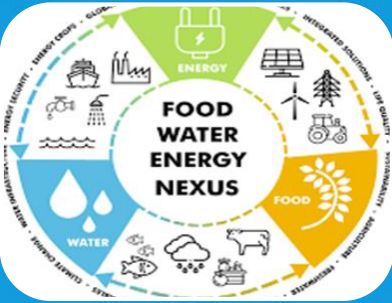
SDGs – ESG measurement
Sustainable Finance



Sustainable Pathways
Climate Neutrality
& Resilience



Sustainable Pathways
for Seas and Oceans



Sustainable Pathways
Land Use &
WFEB Nexus



Innovation Acceleration
Education
Upskilling/Reskilling



Human Security

Quantification and Acceleration

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- Comprehensive Human Security Assessment
 - Metrics to Quantify and Monitor
 - Tools to Support Informed Policy Decision Making
 - Comprehensive Framework
 - Enhance global understanding
 - Upskilling/ Reskilling

Objectives

- We aim to create cross country Indicators for the 8 aspects of Human Security using comparable hard data from multiple sources
 - based on KPIs used for the 170 SDG sub-indicators but expanding to encompass Human Security concepts
 - develop under a holistic framework incorporating all aspects of HS
- Utilize ML techniques to create a unique set of new indicators pertinent to the HS aspects using relevant online data.
- Utilize ML techniques to link policy documents, reports, and scientific papers to the 8 aspects of HS.
- Assess public sentiment on issues related to HS aspects like personal, community, and political security.
- Dashboards to assist Informed Policy Making (e.g. Early detection of health crises or outbreaks)



Methodology



- Assign Material Issues for each one of the 8 HS aspects (perhaps add cybersecurity)
- Assign KPIs for each Material Issue
- Develop Model to Assess Performance in each of the 8 Pillars/ Material Issues and KPIs
- Set Targets for all KPIs
- Standardize metrics to ensure harmonization / Benchmarking between different Countries/ Regions
- Collect All the necessary Data

The Eight Dimensions of Human Security



Political Freedom

Freedom from oppression, torture and other human rights violations.



Access to Healthcare

Access to healthcare, as well as prevention and protection against infectious diseases.



Economic Security

An assured basic income and livelihood from work, or in the last resort, social safety nets.



Community Security

Preservation of culture and identity, as well as safety from exclusion, discrimination and ethnic conflict.



Personal Safety & Mobility

Physical safety from violent conflict, domestic violence, crime and abuse.



Access to Technology

Enhancing the human experience and enabling us to do more with less.



Environmental Protection

Safety from natural and climate-induced disasters, plus resource scarcity due to environmental degradation.



Food Security

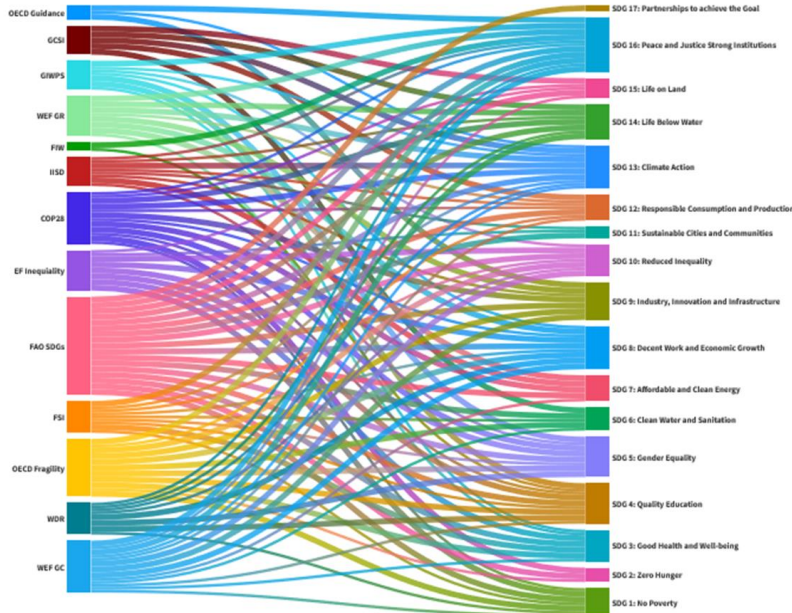
Physical and affordable access to basic food.

Decision Making Tools



- Dashboards for the performance in each Human Security Pillar / Material Issues for each Pillar and Links to SDGs in line with [SDSN - SDR](#)
- Coherent Database on Human Security Indicators with maximum cross-country (NUTS 2 level) and time coverage
- ML tool to link policy documents, reports, and scientific papers to the 8 aspects of HS.

Pillar	Material Issue	KPI Name	L0 - KPI Score	L0 - KPI Rating	
1. Environment	Energy Management	Energy consumption to Sales (GJ/MilEuro)	61,27	3	
		Food Waste	% Volume of food waste	67,02	3
		GHG Emissions	Scope 1 emissions	0,00	1
			Scope 2 emissions	0,00	1
			Scope 3 emissions	0,00	1
	Sustainable Packaging	% of Packaging from recycled raw materials	22,80	2	
		% of Recyclable packaging	100,00	4	
	Waste Management & Circular Economy	% Recyclable waste	100,00	4	
		% Waste to landfill	75,94	4	
	Water Consumption	Water consumption to Sales (m3 to MilEuro)	28,03	2	
2. Social	Community Support & Social Contribution	Number of ethics-related incidents	100,00	4	
		Diversity, Equality & Inclusion	% of women in total workforce	74,02	3
	Employee Training & Development	Training and Development	71,71	3	
	Human Rights	Number of human rights violations	100,00	4	
3. Governance	Regulatory Compliance	Number of non-compliance incidents	100,00	4	



Value Chain Level 1	SDG	SDG																
		1	2	3	4	5	6	7	8	9	10	12	13	15	16	17		
1. Sourcing	1.1 Inbound Logistics	4	4	4	2	3		4	3	2	4	2	4		4	4		
	1.2 Milk Zone	4	4	4	2	3		4	3	2	4	2	4		4	4		
	1.3 Raw Materials WH	4	4	4	2	3		4	3	2	4	2	4		4	4		
2. Production	2.1 Processing	4	4	4	4	3	2	3	4	3	4	4	3	3	4	4		
	3. Logistics	3.1 Intercompany	4	4	4	2	1			3	2	2	2	4		4	4	
3.2 Outbound Logistics		4	4	4	2	1			3	2	2	2	4		4	4		
4. Sale and end of cycle	4.1 Retail	4	4	4	3			4	3	2	2	2	4		4	4		
	4.2 Disposal / recycling	4	4	4	3			4	3	2	2	2	4		4	4		

Decision Making Tools



- Use natural language processing (NLP) to analyze news articles and social media posts. Track changes in sentiment over time or in response to specific events or policies. (Data Sources: Online news outlets, social media platforms, forums, and blogs.)

- Analyze search engine query trends and social media mentions for keywords related to All Human Security Aspects – **Enhance Dashboards with Human Related Sentiment Indicators**

The Eight Dimensions of Human Security

