

THE CLIMATE CHANGE AND NATURAL CATASTROPHES' PROJECT OF THE GENEVA ASSOCIATION
CC AND ITS ECONOMIC IMPACT ON INSURANCE (CC+I)

**Matrix to calibrate existing research studies and publications,
 identify key squares and highlight regional differences.**

The following matrix (or map) is proposed and submitted for discussion. It is meant as a guideline for the research economist when sorting out the existing information. Its objective is to ease the identification of well researched areas versus white spots on the map. The initial effort should focus on Levels 3 and 4.

Global Climate Change Factors	<u>Level 1</u> Corporate Responsibility in the context of sustainability - Economic - Social - Environmental - Political <i>Metrics</i> - -	<u>Level 2</u> Consumption of Resources - Energy - Materials - Water <i>Metrics</i> - Non-renewable resource consumption (kg p/capita) - Renewable resource consumption - Resource efficiency (GDP/kg) - Energy efficiency (toe/kg)	<u>Level 3</u> Global Climate Change – direct repercussions affecting society intensity and frequency - Sea level rise - Temperature changes (warming and cooling) - CO2 concentration in the atmosphere - Precipitation changes (wetter or drier) <i>Metrics</i> - In physical terms - In financial terms	<u>Level 4</u> Global Climate Change Indirect repercussions affecting society - Human capital (health & life expectancy) - Man-made capital (physical property and infrastructures) - Natural capital (arable land, biodiversity) <i>Metrics</i> - In physical terms - In financial terms -	<u>Level 5</u> Insurance as an enabler of sustainable solutions technologies - CSS - nuclear - renewables commercial - PFI
<u>Group 1</u> Assets - Securities (bonds, equities, financial investments) - Real Estate (physical, buildings, computer systems) - Intangibles (reputation) - <i>Metrics</i> - -	2	2			
<u>Group 2</u> Liabilities - New exposures - General liability - D&O, E&O - Environmental - <i>Metrics</i> - -			8	3	
<u>Group 3</u> Underwriting - Life and health - Property and casualty - Liability - <i>Metrics</i> - -			7	4	6
<u>Group 4</u> Claims handling - Life and health - Property and casualty - Liability - <i>Metrics</i> - -					
<u>Group 5</u> Human Resources - Availability of manpower - Skills of manpower - Mobility of manpower - <i>Metrics</i> - -					