

**Article Title:**

Climate change and their impacts in the Balearic Islands. A guide for policy design in Mediterranean regions

**Journal name:**

Regional Environmental Change

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**Table I. Results of the expert knowledge elicitation regarding the prioritization of the climate change-related hazards likely to happen in the Balearic Islands during the 2050-2100 period according to their expected magnitude variation and probability of occurrence.**

LIST OF HAZARDS	PHYSICAL CHANGES <sup>a</sup>	EXPECTED MAGNITUDE VARIATION	PROBABILITY OF OCCURRENCE	PRIORITIZATION OF HAZARDS <sup>b</sup>	NEED FOR FURTHER RESEARCH <sup>c</sup>
<b>PHYSICAL CHANGES IN THE ATMOSPHERE AND THE SEA</b>					
Sea level rise	-	High	High	Of priority	No
Air and sea temperature increase	-	High	High	Of priority	No
Increase in the number, duration and intensity of atmospheric and marine heatwaves	-	High	High	Of priority	No
Reduction of average precipitation and increase in evapotranspiration	-	Medium	High	Of priority	No
Increase in the number, duration and intensity of droughts	-	Medium	High	Of priority	No
Decrease in the number of atmosphere and marine storms.	-	Low	Medium	Of no priority	Yes
Increase in the magnitude of the most extreme wind events	-	Low	Medium	Of no priority	Yes
Increase in the magnitude of the most extreme precipitation events	-	Low	Low	Of no concern	Yes
<b>IMPACTS ON ECOSYSTEMS</b>					
<b>Terrestrial ecosystems</b>					
<b>Natural systems</b>					
Beach surface decrease, dune system loss and increase in coastal erosion	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Increase in the magnitude of the most extreme precipitation events</li> </ul>	High	High	Of priority	Yes
Decrease in population and local extinction of rare psammophilous species	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Increase in the magnitude of the most extreme precipitation events</li> </ul>	High	High	Of priority	Yes
Change in the distribution of the main forest communities	<ul style="list-style-type: none"> <li>• Air temperature rise</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Increase in wildfires	<ul style="list-style-type: none"> <li>• Air temperature rise</li> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Increase in forest pests and pathogens due to the weakening of the main tree species	<ul style="list-style-type: none"> <li>• Air temperature rise</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Decay and defoliation of forests	<ul style="list-style-type: none"> <li>• Air temperature rise</li> <li>• Increase in the number, duration and</li> </ul>	Medium	High	Of priority	Yes

	<ul style="list-style-type: none"> <li>intensity of atmospheric heatwaves</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>				
Reduction of forest carbon sink capacity	<ul style="list-style-type: none"> <li>Air temperature rise</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>	Medium	High	Of priority	Yes
Extinction of endangered endemic plant and animal species	<ul style="list-style-type: none"> <li>Air temperature rise</li> <li>Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>	Medium	High	Of priority	Yes
Emergence and spread of invasive plants and animals	<ul style="list-style-type: none"> <li>Air temperature rise</li> </ul>	Medium	High	Of priority	Yes
Rupture of plant/animal mutualisms due to the change in plant phenology	<ul style="list-style-type: none"> <li>Air temperature rise</li> </ul>	No info	No info	Of no priority	Yes
Increase of parasites and disease vectors from other latitudes	<ul style="list-style-type: none"> <li>Air temperature rise</li> </ul>	Medium	High	Of no priority	Yes
Insect decline	<ul style="list-style-type: none"> <li>Air temperature increase</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>	Medium	Medium	Of priority	Yes
Increase in soil erosion	<ul style="list-style-type: none"> <li>Increase in the magnitude of the most extreme precipitation events</li> </ul>	Low	Medium	Of no priority	Yes
Increase in land avalanches	<ul style="list-style-type: none"> <li>Increase in the magnitude of the most extreme precipitation events</li> </ul>	Low	Low	Of no priority	Yes
<b><i>Agricultural systems</i></b>					
Reduction of crop yields	<ul style="list-style-type: none"> <li>Reduction of average precipitation and increase in evapotranspiration</li> <li>Increase in the number, duration and intensity of droughts</li> </ul>	Medium	High	Of priority	Yes
Modification of crop phenology cycles	<ul style="list-style-type: none"> <li>Air temperature increase</li> </ul>	Low	High	Of no priority	Yes
Changes in physiology due to a reduction of chill hours	<ul style="list-style-type: none"> <li>Air temperature increase</li> </ul>	Low	High	Of no priority	Yes
Changes in physiology due to heat waves	<ul style="list-style-type: none"> <li>Air temperature increase</li> <li>Increase in the number, duration and intensity of atmospheric heatwaves</li> </ul>	Medium	High	Of priority	No
Changes in chemical composition of fruit and by-products	<ul style="list-style-type: none"> <li>Air temperature increase</li> <li>Increase in the number, duration and intensity of droughts</li> </ul>	Medium	Medium	Of priority	Yes
Higher incidence of pests and diseases	<ul style="list-style-type: none"> <li>Air temperature increase</li> </ul>	Low	Medium	Of no priority	Yes
<b><i>Livestock systems</i></b>					
Increase in morbidity and mortality of animals caused by heat waves	<ul style="list-style-type: none"> <li>Air temperature increase</li> </ul>	High	High	Of priority	Yes
Emergence of vector borne diseases	<ul style="list-style-type: none"> <li>Air temperature increase</li> </ul>	High	High	Of priority	Yes

<b>Aquatic ecosystems</b>					
<b>Marine ecosystems<sup>d</sup></b>					
Increase in marine deoxygenation <sup>e</sup>	<ul style="list-style-type: none"> <li>• Sea temperature increase</li> </ul>	Medium	High	Of priority	Yes
Loss of <i>Posidonia oceanica</i> meadows and the services provided by the plant (e.g. coastal protection, wave's velocity and intensity reduction, water transparency, carbon sinks, oxygen sources, biodiversity hotspots and sand sources...)	<ul style="list-style-type: none"> <li>• Sea temperature increase</li> <li>• Increase in the number, duration and intensity of marine heatwaves</li> <li>• Increase in marine deoxygenation</li> </ul>	High	High	Of priority	Yes
Increase in organisms migration	<ul style="list-style-type: none"> <li>• Sea temperature increase</li> </ul>	High	High	Of priority	Yes
Increase in the abundance and number of invasive species of tropical origin	<ul style="list-style-type: none"> <li>• Sea temperature increase</li> </ul>	High	High	Of priority	Yes
Trophic interactions disruption	<ul style="list-style-type: none"> <li>• Sea temperature increase</li> </ul>	High	High	Of priority	Yes
Increase in mass mortality events (i.e. benthic filters)	<ul style="list-style-type: none"> <li>• Sea temperature increase</li> <li>• Increase in the number, duration and intensity of marine heatwaves</li> <li>• Increase in marine deoxygenation</li> </ul>	High	High	Of priority	Yes
<b>Freshwater ecosystems</b>					
Increase in the salinization of aquifer and coastal wetlands	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Local extinction of plant and animal species from seasonal aquatic environments	<ul style="list-style-type: none"> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	Medium	Medium	Of priority	Yes
<b>IMPACTS ON HUMAN SYSTEMS</b>					
<b>Water resources</b>					
Decrease in water availability	<ul style="list-style-type: none"> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	High	High	Of priority	Yes
Increase in seasonal demand for water resources (due to tourism activity)	<ul style="list-style-type: none"> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	High	High	Of priority	No
Increase in the penetration of salt water into aquifers, this reducing the quality of water supply	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	High	High	Of priority	Yes

Increase in the interconnections of the water distribution infrastructures to deal with droughts (related to the increase in the demand of desalinated water)	<ul style="list-style-type: none"> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	High	High	Of priority	No
Reduction in the replacement flow and increase in the concentrations of pollution in the aquifers	<ul style="list-style-type: none"> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	High	High	Of priority	Yes
<b>Energy</b>					
Increase in summer energy demand peaks (related to summer tropical-nights cooling demand)	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	High	High	Of priority	Yes
Increase in the base power generation to meet the peak demand, due to the HVAC in summer period, while average demand will remain constant (related to an increase in the power generation costs based on the current energy mix)	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	High	High	Of priority	Yes
Increase in the energy demand linked to desalination	<ul style="list-style-type: none"> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	Medium	High	Of priority	No
<b>Infrastructures<sup>f</sup></b>					
Impacts on port infrastructures (breakwater overtopping events, rise in the water table in piers and platforms...)	<ul style="list-style-type: none"> <li>• Sea level rise</li> </ul>	High	High	Of priority	No
Decrease in the durability of the foundations of buildings near the sea front and foundation settlements	<ul style="list-style-type: none"> <li>• Sea level rise</li> </ul>	Low	Medium	Of no priority	No
Increase in infrastructure deterioration (e.g. expansion joints, cracks in concrete structures, expansion of the rail affecting fastening systems...) due to thermal deformations	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, duration and intensity of atmospheric and marine heatwaves</li> </ul>	Medium	High	Of priority	No
Increase of the risk of wildfires and other types of fires linked to construction or exploitation of infrastructures	<ul style="list-style-type: none"> <li>• Increase in the number, duration and intensity of atmospheric heatwaves</li> <li>• Reduction of average precipitations and increase in evapotranspiration</li> <li>• Increase of the number, duration and intensity of droughts</li> </ul>	Medium	Medium	Of priority	No
Load increments causing deterioration, especially but not limited to roofs and façade enclosures in industrial buildings.	<ul style="list-style-type: none"> <li>• Increase in the magnitude of the most extreme wind events</li> </ul>	Low	Medium	Of no priority	No
Difficulties in operation of transport infrastructures (airports, ports...)	<ul style="list-style-type: none"> <li>• Increase in the magnitude of the most extreme wind events</li> </ul>	Medium	Medium	Of priority	No

Decrease in life span of fatigue critical structures (foundations in wind turbines...)	<ul style="list-style-type: none"> <li>• Increase in the magnitude of the most extreme wind events</li> </ul>	Low	Medium	Of no priority	No
Increase in flooding risk due to insufficient drainage section in infrastructures located in streams and near the sea front, which can cause damage to the same infrastructure or others	<ul style="list-style-type: none"> <li>• Increase in the magnitude of the most extreme precipitation events</li> </ul>	Medium	Low	Of no priority	Yes
Increase in number of landslides and of the maintenance and repair costs of roads and other infrastructures	<ul style="list-style-type: none"> <li>• Increase in the magnitude of the most extreme precipitation events</li> </ul>	Medium	Low	Of no priority	Yes
Interruption of road and rail communications	<ul style="list-style-type: none"> <li>• Increase in the magnitude of the most extreme precipitation events</li> </ul>	Medium	Low	Of no priority	No
<b>Human health<sup>9</sup></b>					
Increase in morbidity and mortality caused by heat waves	<ul style="list-style-type: none"> <li>• Air temperature rise</li> </ul>	High	High	Of priority	Yes
Health effects due to a higher number of forest fires	<ul style="list-style-type: none"> <li>• Air temperature rise</li> </ul>	Low	High	Of no priority	Yes
Health impacts caused by an increase of floods	<ul style="list-style-type: none"> <li>• Increase in the magnitude of the most extreme precipitation events</li> </ul>	Low	Low	Of no concern	Yes
A lower food security and a worse nutrition	<ul style="list-style-type: none"> <li>• Air temperature rise</li> <li>• Increase in the magnitude of the most extreme precipitation events</li> </ul>	Low	Low	Of no concern	No
Increase of water-borne diseases	<ul style="list-style-type: none"> <li>• Increase in the magnitude of the most extreme precipitation events</li> </ul>	Low	Low	Of no concern	No
Increase of vector-borne diseases	<ul style="list-style-type: none"> <li>• Air temperature rise</li> </ul>	Medium	High	Of priority	Yes
Increase of food-borne diseases	<ul style="list-style-type: none"> <li>• Air temperature rise</li> </ul>	Low	Medium	Of no priority	No
<b>Economy</b>					
<b>General Impacts</b>					
Decreased labor productivity <sup>h</sup>	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	High	High	Of priority	Yes
Increase in production costs due to decreased capacity of facilities and infrastructures <sup>i</sup>	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> <li>• Lower precipitation rate and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Increase in prices of water, energy and agro-products <sup>i</sup>	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> <li>• Lower precipitation rate and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
<b>Sectoral impacts</b>					

<b>a) Tourism<sup>k</sup></b>					
Seasonal and geographical redistribution of tourists' flows	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	High	High	Of priority	Yes
Loss of tourism attractiveness due to higher forest fire risk and loss of <i>Posidonia oceanica</i> seagrasses	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	High	High	Of priority	Yes
Loss of tourism attractiveness due to reduction of beach width	<ul style="list-style-type: none"> <li>• Sea level rise</li> </ul>	High	High	Of priority	Yes
Loss of tourism attractiveness of wetlands due to loss of endemic species	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Not enough info	Not enough info	Not enough info	Yes
Loss of recreational fishing value due to fewer catches derived from <i>Posidonia oceanica</i> seagrass losses	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Medium	High	Of priority	Yes
Loss of tourist experience quality due to jellyfish outbreaks	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Medium	Medium	Of priority	Yes
Loss of tourism attractiveness derived from vector-borne diseases <sup>l</sup>	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	High	High	Of priority	Yes
Loss of tourism attractiveness in Menorca due to the African horse sickness	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Low	Low	Of no concern	Yes
Loss of landscape values due to <i>Xylella fastidiosa</i>	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	High	High	Of priority	Yes
<b>b) Agriculture</b>					
Loss of agricultural sector's benefits due to lower yields	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	Medium	High	Of priority	Yes
Loss of agricultural sector's benefits due to higher irrigation costs	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	Medium	High	Of priority	Yes
Loss of agricultural sector's benefits due to new pathogens and pests	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Low	Medium	Of no priority	Yes

Loss of agricultural sector's benefits due to changes in the composition of some products (wine and olive oil)	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	Medium	Medium	Of priority	Yes
<b>c) Livestock</b>					
Loss of livestock sector's benefits due to a lower milk and cheese production	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Loss of livestock sector's benefits due to higher exploitation costs caused by a higher need to refrigerate and ventilate facilities	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Low	Low	Of no concern	Yes
Loss of livestock sector's benefits due to both a higher reproduction rate of parasites and pathogens and the introduction of new pathogens	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Low	Medium	Of no priority	Yes
<b>d) Fishing</b>					
Lower commercial fishing sector's benefits due either the loss of commercial species or their lower rate of growth	<ul style="list-style-type: none"> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Low	Medium	Of no priority	Yes
<b>e) Construction</b>					
Higher direct and indirect costs linked to a decrease of the useful life of infrastructures <sup>m</sup>	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Not enough info	High	Not enough info	Yes
<b>f) Real estate</b>					
Decrease in properties market values due to the loss of aesthetics caused by fires and the loss of beach width due to erosion	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> </ul>	Not enough info	Not enough info	Not enough info	Yes
<b>g) Public sector</b>					
Increase in public spending associated to energy and health systems, fighting against pests, port infrastructures and water collecting and distribution utilities	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Decrease in public revenues	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Air temperature increase</li> <li>• Increase in the number, length and</li> </ul>	High	High	Of priority	Yes



	<ul style="list-style-type: none"> <li>frequency of heat waves</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>				
<b>Human rights, society and the political system</b>					
<b>Human rights</b>					
Impacts on the right to life	<ul style="list-style-type: none"> <li>Increase in the number, length and frequency of heat waves</li> </ul>	High	High	Of priority	Yes
Impacts on the right to health	<ul style="list-style-type: none"> <li>Air temperature increase</li> <li>Increase in the magnitude of the most extreme precipitation events</li> </ul>	High	High	Of priority	Yes
Impacts on the right to private and family life	<ul style="list-style-type: none"> <li>Sea level rise</li> <li>Air temperature increase</li> <li>Increase in the number, length and frequency of heat waves</li> </ul>	High	High	Of priority	Yes
Impacts on the right to property	<ul style="list-style-type: none"> <li>Sea level rise</li> </ul>	High	High	Of priority	Yes
Impacts on the right to food	<ul style="list-style-type: none"> <li>Air temperature increase</li> <li>Increase in the number, length and frequency of heat waves</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>	Medium	High	Of priority	Yes
Impacts on the right to water	<ul style="list-style-type: none"> <li>Sea level rise</li> <li>Air temperature increase</li> <li>Increase in the number, length and frequency of heat waves</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Impacts on the right to housing	<ul style="list-style-type: none"> <li>Sea level rise</li> <li>Air temperature increase</li> </ul>	Medium	Medium	Of priority	Yes
Increase in the number of legal actions against public administrations for a lack of sufficient climate action or against private corporations for their emissions-generated activities	<ul style="list-style-type: none"> <li>Sea level rise</li> <li>Air temperature increase</li> <li>Increase in the number, length and frequency of heat waves</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
Impacts on the insurance sector and existing contracts	<ul style="list-style-type: none"> <li>Sea level rise</li> <li>Air temperature increase</li> <li>Increase in the number, length and frequency of heat waves</li> <li>Reduction of average precipitation and increase in evapotranspiration</li> </ul>	High	High	Of priority	Yes
<b>Social and political systems</b>					

<p>Growing social unrest and lack of confidence on the political system as a consequence of all the aforementioned impacts and increase in migration flows derived directly or indirectly from CC.</p>	<ul style="list-style-type: none"> <li>• Sea level rise</li> <li>• Air temperature increase</li> <li>• Increase in the number, length and frequency of heat waves</li> <li>• Reduction of average precipitation and increase in evapotranspiration</li> </ul>	<p>High</p>	<p>High</p>	<p>Of priority</p>	<p>Yes</p>
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<sup>a</sup> For impacts on both natural and human systems, this column indicates the physical changes derived from climate change they relate to.

<sup>b</sup> Impacts are considered of priority when both their expected magnitude variation and its probability of occurrence are medium or high. They are considered of no priority when either i) their expected magnitude variation is low and its probability of occurrence is medium/high or ii) their expected magnitude variation is medium/high and its probability of occurrence is low. When both the expected magnitude variation and its probability of occurrence are low, the hazards are assumed to be of no concern for the islands. When the existing research is not enough to draw conclusions about whether the hazard will occur or not due to CC, it is classified into a "not enough information" category. This category is also applied to hazards being likely to happen but whose expected variation in its magnitude and/or its probability of occurrence are difficult to determine according to existing data.

<sup>c</sup> This column indicates if further research on the specific hazard for the Balearic Islands is needed.

<sup>d</sup> As ocean acidification is not a consequence of climate change but one of the increase in the concentration of CO<sub>2</sub> in the atmosphere, it has not been reported in the table as a physical change. However, it is worth noting it will lead to a relevant impact on marine ecosystems: the reduction of survival, calcification, growth, development and abundance of calcifying organisms.

<sup>e</sup> Despite being a physical change provoked by the rise in sea temperature, the increase in marine deoxygenation has been reported here due to its important impacts on marine ecosystems.

<sup>f</sup> It is worth noting that the rise in atmospheric CO<sub>2</sub> concentration will also accelerate corrosion processes in concrete and steel structures, an impact on infrastructures which is also exacerbated by the increase in the air temperature.

<sup>g</sup> It is worth noting that the increase in the concentration of atmospheric CO<sub>2</sub> and other gases as well as pollen will also lead to a rise in the number of respiratory diseases and allergies.

<sup>h</sup> It will also be affected by air pollution-derived health impacts.

<sup>i</sup> It will also be affected by the acceleration of the corrosion process due to a rise in CO<sub>2</sub> concentration in the atmosphere.

<sup>j</sup> The peak oil, gas and coal phenomena are expected to further increase energy prices in the near future, while insularity costs will also contribute to increase the price of agro-products.

<sup>k</sup> Higher air pollution could also cause a loss of the tourist experience quality due to both higher human health risks and a lower visibility.

<sup>l</sup> The Covid-19 pandemics has shown virus and pathogens can have an important impact on the attractiveness of the tourism destination.

<sup>m</sup> Costs associated with infrastructures will also increase due to the higher CO<sub>2</sub> concentration in the atmosphere.