

**Global Covenant of Mayors   
Common Reporting Framework**

**Version 6.0**

September 13th, 2018

## Risk and Vulnerability Assessment

## 5.1. Climate Risk and Vulnerability Assessment

The local government **shall** prepare and submit climate risk and vulnerability assessment within two years after committing to the GCoM.

The assessment **shall** include the following information:

* Boundary of assessment (boundary of assessment **shall** be equal to or greater than the city boundary), including the local government(s) name(s)
* Year of approval from local government
* Data sources
* A glossary of key terms and definitions
* Leading/coordinating team in the city

Terminologies and definitions used in the reports **shall** be consistent with those used in the IPCC Fifth Assessment Report (AR5) or any update following the AR5 as well as with national frameworks/requirements.

## 5.2. Climate Hazards

The local government **shall** identify the most significant climate hazards faced by the community. For each identified climate hazard, the local government **shall** report the following information:

* Current risk level (probability x consequence) of the hazard
* Description of expected future impacts
* Expected intensity, frequency, and timescale of the hazard
* All relevant sectors, assets, or services that are expected to be most impacted by the hazard in future and the magnitude of the impact for each of them

Furthermore, the local government **should** provide information on vulnerable population groups (e.g. poor, elderly, youth, people with chronic disease, unemployed, etc.) that are expected to be most affected by future hazards; this information can help the local government in having a better understanding of the vulnerability dimension of risks and in prioritizing their adaptation actions.

See Annex D, Table 1 for further details.

## 5.3. Adaptive Capacity

The local government **shall** identify factors that will most greatly affect its own and the city’s adaptive capacity and enhance climate resilience. For each factor, the local government **shall** report the following information:

* Description of the factor as it relates to (supporting or challenging) the adaptive capacity
* Degree to which the factor challenges (as opposed to supports) the adaptive capacity and obstructs enhanced climate resilience

See Annex D, Table 2 for further details.

## 5.4. Major Climate Hazards Occurred in the Past Years

Besides the assessment of future hazards, the local government **shall** report the following information about major hazards that occurred in the past years:

* Scale of the hazard, including loss of human lives, economic losses (direct and indirect, if possible), environmental and other impacts
* Current risk level of the hazards (probability X consequence)
* Intensity and frequency of the hazard
* All relevant sectors, assets, or services most impacted by the hazard and the magnitude of impact for each of them
* Vulnerable population groups most affected by the hazard (if available)

## Annex D: Risk and Vulnerability Assessment Reporting Framework

|  |  |  |
| --- | --- | --- |
| (m) | = | mandatory to report |
| (r) | = | Recommended to report |
| (opt) | = | Optional to report |
| *italics* | = | Explanatory notes |

Table 1. Section A - Current and future climate risks, exposure, impacts and vulnerability

|  |  |  |
| --- | --- | --- |
| **Table 1.** Please identify **the most significant** climate hazards faced by your jurisdiction (m) and complete the questions to the right for each one. | | |
| **HAZARDS[[1]](#footnote-1)** *(grouped under headers, can report on multiple across the table)* | CURRENT hazard **RISK** level (*dropdown for each hazard selected)* | |
| Probability of Hazard (m) | Consequence of hazard (m) |
|  |  |  |
| Extreme Precipitation |  |  |
| Rain storm | * High * Moderate * Low * Do not know | * High * Moderate * Low * Do not know |
| Monsoon | [dropdown as above] | [dropdown as above] |
| Heavy snow | [dropdown as above] | [dropdown as above] |
| Fog | [dropdown as above] | [dropdown as above] |
| Hail | [dropdown as above] | [dropdown as above] |
| Storm and wind ∨ |  |  |
| Severe wind | [dropdown as above] | [dropdown as above] |
| Tornado | [dropdown as above] | [dropdown as above] |
| Cyclone (Hurricane / Typhoon) | [dropdown as above] | [dropdown as above] |
| Extra tropical storm | [dropdown as above] | [dropdown as above] |
| Tropical storm | [dropdown as above] | [dropdown as above] |
| Storm surge | [dropdown as above] | [dropdown as above] |
| Lightning / thunderstorm | [dropdown as above] | [dropdown as above] |
| Extreme cold temperature ∨ |  |  |
| Extreme winter conditions | [dropdown as above] | [dropdown as above] |
| Cold wave | [dropdown as above] | [dropdown as above] |
| Extreme cold days | [dropdown as above] | [dropdown as above] |
| Extreme hot temperature ∨ |  |  |
| Heat wave | [dropdown as above] | [dropdown as above] |
| Extreme hot days | [dropdown as above] | [dropdown as above] |
| Water Scarcity ∨ |  |  |
| Drought | [dropdown as above] | [dropdown as above] |
| Wild fire ∨ |  |  |
| Forest fire | [dropdown as above] | [dropdown as above] |
| Land fire | [dropdown as above] | [dropdown as above] |
| Flood and sea level rise ∨ |  |  |
| Flash / surface flood | [dropdown as above] | [dropdown as above] |
| River flood | [dropdown as above] | [dropdown as above] |
| Coastal flood | [dropdown as above] | [dropdown as above] |
| Groundwater flood | [dropdown as above] | [dropdown as above] |
| Permanent inundation | [dropdown as above] | [dropdown as above] |
| Chemical change ∨ |  |  |
| Salt water intrusion | [dropdown as above] | [dropdown as above] |
| Ocean acidification | [dropdown as above] | [dropdown as above] |
| Atmospheric CO2 concentrations | [dropdown as above] | [dropdown as above] |
| Mass movement ∨ |  |  |
| Landslide | [dropdown as above] | [dropdown as above] |
| Avalanche | [dropdown as above] | [dropdown as above] |
| Rock fall | [dropdown as above] | [dropdown as above] |
| Subsidence | [dropdown as above] | [dropdown as above] |
| Biological hazards ∨ |  |  |
| Water-borne disease | [dropdown as above] | [dropdown as above] |
| Vector-borne disease | [dropdown as above] | [dropdown as above] |
| Air-borne disease | [dropdown as above] | [dropdown as above] |
| Insect infestation | [dropdown as above] | [dropdown as above] |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| …Current and future climate risks, exposure, impacts, vulnerability (table 1 continued horizontally from hazards table, only top row shown, which is repeated down *the table)* | | | | | | |
| Please indicate how you expect climate change to affect the intensity and frequency of each hazard and when you FIRST expect to experience those changes [[2]](#footnote-2) | | | Please describe the overall impact of FUTURE hazards in your jurisdiction and the sectors, assets, and/or services that will be most affected (at least 5). [[3]](#footnote-3) | | | Please indicate which vulnerable population groups will be most impacted by FUTURE hazards. [[4]](#footnote-4) |
| Expected change in frequency (m) | Expected change in intensity (m) | Timescale [[5]](#footnote-5) (m) | Description of expected impact (r) | Impacted sectors, assets, and services (m) [[6]](#footnote-6) and the magnitude of those impacts (m) | | Impacted vulnerable groups  (r) *(can specify multiple for each hazard)* |
|  |  |  |  |  |  |  |
| * Increase * Decrease * No change * Not known | * Increase * Decrease * No change * Not known | * Immediately * Short-term * Medium-term * Long-term * Not known | [open field] | * Transport * Energy * ICT (Information and Communications technology) * Water supply and sanitation * Waste management * Public Health * Law & Order * Emergency Services * Land use planning * Education * Food & Agriculture * Environment, Biodiversity, Forestry * Commercial * Industrial * Tourism * Residential * Society/community & culture * Other \_\_\_\_ | Magnitude of expected impact   * High * Moderate * Low * Do not know | *Women and girls*  *Children and Youth*  *Elderly*  *Indigenous population*  *Marginalized groups*  *Persons with disabilities*  *Persons with chronic diseases*  *Low-income households*  *Unemployed persons*  *Persons living in sub-standard housing*  *Other* |
| [repeat as above, for all hazards] | [repeat as above, for all hazards] | [repeat as above, for all hazards] | [repeat as above, for all hazards] | [repeat as above, for all hazards] | [repeats, for all hazards and s/a/s] | [repeat as above, for all hazards] |

1. Hazards based on C40 Hazard Taxonomy. Full definitions will be made available in the GCOM guidance materials. Can report on 1 or more. If you identify a hazard that has not been listed here, please notify the GCoM/Regional Covenant Secretariat. [↑](#footnote-ref-1)
2. 22 Allow entities to report multiple expected impacts across multiple time scales for the same hazard (e.g. allow cities to add multiple rows for the same hazards). [↑](#footnote-ref-2)
3. Terminology: this and the following section address exposure and impacts (further guidance will be provided in the implementation phase). [↑](#footnote-ref-3)
4. 24 The guidance document that will be made available will elaborate on the concept of vulnerable population and provide examples and guidance helping local governments to identify the relevant groups. [↑](#footnote-ref-4)
5. Short Term = by 2025 Medium term = 2026-2050 Long term = after 2050 (further guidance will be provided) [↑](#footnote-ref-5)
6. For each hazard, select which sectors/assets/services will be most impacted. Then for each sector/asset/service selected, indicate the magnitude of the expected impact (creative formatting needed). **Law & Order** = police, security personnel and systems etc.; **Emergency services** = first responders, EMT, Firefighters etc.; **Society/Community & culture** = things like cultural assets, heritage, community in the sense of social cohesion etc. (which could be impacted if communities are relocated or heritage sites submerged, for example). Further guidance will be provided in the implementation phase. [↑](#footnote-ref-6)