Izpolnitev SECAP – Analiza tveganja in ranljivosti

Nikola Holodkov, Area Science Park

Webinar - 26/11/2020

Preglednica 1 - izredni podnebni pojavi

Table 1) Climate hazards

Climate hazards	<< Current risk of hazard occurring >>		<< Future hazards >>		
	Probability of hazard	Impact of hazard	Expected change in hazard intensity	Expected change in hazard frequency	Timeframe(s)
ⓘ **Step 1)** Check the boxes for the climate hazards that are applicable to your local authority **>>> Step 2)** Fill in all green fields for the selected hazards by choosing (i.e. copying and pasting) option(s) in row# 14 **>>> Step 3)** Optionally, fill in information for the relevant sub-hazards (do not fill anything for sub-hazards that are not relevant).					
	Single choice: Low Moderate High Not known	**Single choice:** Low Moderate High Not known	**Single choice:** Increase Decrease No change Not known	**Single choice:** Increase Decrease No change Not known	**Multiple choice:** Short-term Mid-term Long-term Not known
☐ **Extreme heat**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☐ **Extreme cold**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☐ **Heavy precipitation**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Heavy snowfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Fog	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
Hail	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]

Preglednica 1 – izredni podnebni pojavi

- **High (Visoka)**: zelo verjetno, da bo do pojava prišlo (možnost pojava višja od 5 %);
- **Moderate (Zmerna)**: verjetno, da bo do pojava prišlo (možnost pojava med 0,5 in 5 %);
- **Low (Nizka)**: ni verjetno, da bo do pojava prišlo (možnost pojava med 0,05 in 0,5 %);
- **Not Known (Neznana)**: mesto ni doživelo ali opazilo podnebnih tveganj v preteklosti oziroma ni natančno navedlo teh informacij na podlagi preskusov ali podatkov.

Preglednica 1 - izredni podnebni pojavi

Modello/Scenario	RCP2.6		RCP4.5		RCP8.5	
	Trend	T.S.	Trend	T.S.	Trend	T.S.
HadGEM2-ES_RACMO22E	Increase	0.18	Increase	0.18	Increase	0.18
MPI-ESM-LR_REMO2009	Increase	0.32	Increase	0.57	Increase	0.58
EC-EARTH_CCLM4-8-17	Increase	0.18	Increase	0.19	Increase	0.17
EC-EARTH_RACMO22E	Increase	0.17	No Change	0.06	Increase	0.28
EC-EARTH_RCA4	Increase	0.35	Increase	0.26	Increase	0.37

Preglednica 1 - izredni podnebni pojavi

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☑	**Extreme heat**	**High**	**Moderate**	**Increase**	**Increase**	**Short-term**
☐	**Extreme cold**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
☐	**Heavy precipitation**	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	Heavy rainfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	Heavy snowfall	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]
	Fog	[Please choose]	[Please choose]	[Please choose]	[Please choose]	[Please choose]

Preglednica 2 – ranljivi sektorji

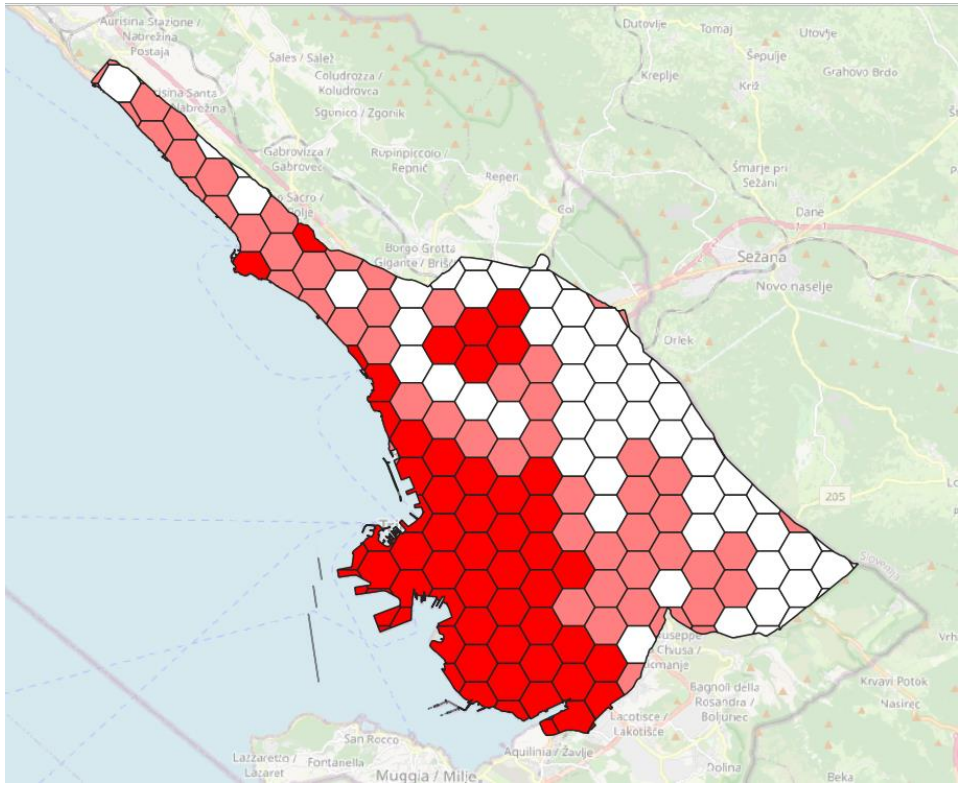
Table 2) Vulnerable sectors

Climate hazards	Relevant vulnerable sector(s)	Current vulnerability level	Indicator
ⓘ **Step 4)** Mark again with a tick box the same hazards selected in Table 1 above *(in the online template, these hazards will be generated/displayed automatically)*. Ignore the rest of the hazards. >>> **Step 5)** Choose (i.e. copy-paste) the relevant sectors from the list. When more than one sector is relevant, add separate rows for each sector and indicate the level of vulnerability against each sector identified.			
	Multiple choice: Buildings Transport Energy Water Waste Land use planning Agriculture & forestry Environment & biodiversity Health Civil protection & emergency Tourism Education ICT (Information & communication technologies) All listed sectors Not known	**Single choice:** Low Moderate High Not known	Choose an indicator from Annex 3, Table 1, along with a unit and numeric value, or write down your own indicator.
☐ **Extreme heat**	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐ **Extreme cold**	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]

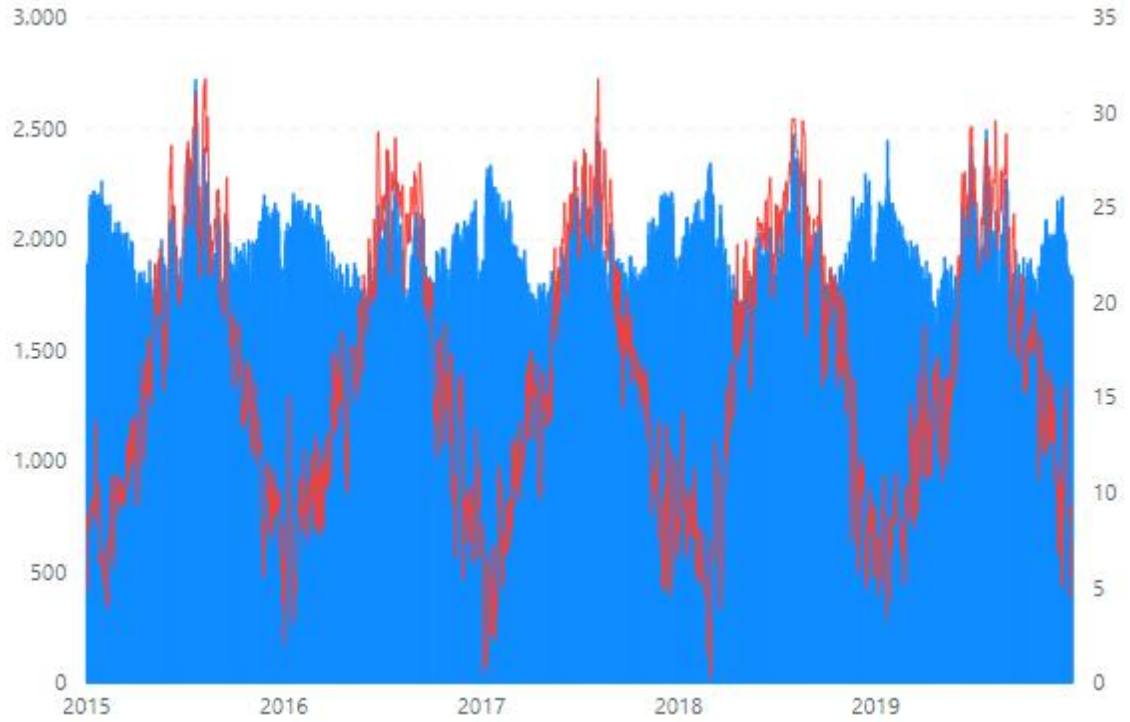
Kazalniki ranljivih sektorjev

ID#	Sector	Indicator	Measurement unit
1,1	Buildings	Number or % of (public/residential/tertiary) buildings damaged by extreme weather conditions/events	(per year / over a certain period)
1,2	Transport, Energy, Water, Waste, ICT	Number or % of transport/energy/water/waste/ICT infrastructure damaged by extreme weather conditions/events	(per year / over a certain period)
1,3	Land Use Planning	% of grey/blue/green areas affected by extreme weather conditions/events (e.g. Heat Island Effect, Flood, Rockfalls and/or Landslides, Forest/Land Fire)	%
1,4	Transport, Energy, Water, Waste, Civil Protection & Emergency	Number of days with public service interruptions (e.g. energy/water supply, health/civil protection/emergency services, waste)	No.
1,5	Transport, Energy, Water, Waste, Civil Protection & Emergency	Average length (in hours) of the public service interruptions (e.g. energy/water supply, public transport traffic, health/civil protection/emergency services)	hours
1,6	Health	Number of people injured/evacuated/relocated due to extreme weather event(s) (e.g. heat or cold waves)	(per year / over a certain period)
1,7	Health	Number of deaths related to extreme weather event(s) (e.g. heat or cold waves)	(per year / over a certain period)
1,8	Civil Protection & Emergency	Average response time (in min.) for police/fire-fighters/emergency services in case of extreme weather events	min.
1,9	Health	Number of water quality warnings issued	%
1.10	Health	Number of air quality warnings issued	No.
1.11	Environment & Biodiversity	% of areas affected by soil erosion / soil quality degradation	%
1.12	Environment & Biodiversity	% of habitat losses from extreme weather event(s)	%
1.13	Environment & Biodiversity	% change in number of native species	%
1.14	Environment & Biodiversity	% of native (animal/plant) species affected by diseases related to extreme weather conditions/events	%
1.15	Agriculture & Forestry	% of agriculture losses from extreme weather conditions/events (e.g. drought/water scarcity, soil erosion)	%
1.16	Agriculture & Forestry	% of livestock losses from extreme weather conditions	%
1.17	Agriculture & Forestry	% change in crop yield / evolution of the annual grassland productivity	%

Preglednica 2 - ranljivi sektorji



Preglednica 2 - ranljivi sektorji



Preglednica 2 – ranljivi sektorji

Table 2) Vulnerable sectors

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	ⓘ **Step 4)** Mark again with a tick box the same hazards selected in Table 1 above *(in the online template, these hazards will be generated/displayed automatically)*. Ignore the rest of the hazards. >>> **Step 5)** Choose (i.e. copy-paste) the relevant sectors from the list. When more than one sector is relevant, add separate rows for each sector and indicate the level of vulnerability against each sector identified.			
		Multiple choice: Buildings Transport Energy Water Waste Land use planning Agriculture & forestry Environment & biodiversity Health Civil protection & emergency Tourism Education ICT (Information & communication technologies) All listed sectors Not known	**Single choice:** Low Moderate High Not known	Choose an indicator from Annex 3, Table 1, along with a unit and numeric value, or write down your own indicator.
☑	**Extreme heat**	**Land use planning**	**Moderate**	**UHI vulnerability map - IUAV**
☑	**Extreme heat**	**Energy**	**Moderate**	**Average energy consumption during extreme heat (vs seasonal average)**

Preglednica 3 – sposobnost prilagajanja

Table 3) Adaptive capacity

	Impacted sector(s)	Relevant climate hazard(s)	Adaptive capacity factor(s)	Current adaptive capacity level	Indicator
	ⓘ **Step 6)** Mark with a tick box the sectors which have been identified in Table 2 above, in respect of all climate hazards *(in the online template, the list of sectors will be generated/displayed automatically. The online template will also generate automatically the hazards relevant to each sector as in Table 2; there is no need to fill in this information below).* **>>> Step 7)** Choose (i.e. copy-paste) the relevant adaptive capacity factors from the list. When more than one adaptive factor is relevant, add separate rows for each factor and indicate the level of adaptive capacity against each factor.				
		ⓘ Column not to be filled in	**Multiple choice:** Access to services Socio-economic Governmental & institutional Physical & environmental Knowledge & innovation	**Single choice:** Low Moderate High Not known	Choose an indicator from Annex 3, Table 1, along with a unit and numeric value, or write down your own indicator.
☐	**Buildings**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Transport**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Energy**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]
☐	**Water**	[to be generated automatically in online template]	[Choose from the list above]	[Please choose]	[Choose from Annex 3 or write down your own]

Kazalniki sposobnosti prilagajanja

ID#	Adaptive capcity factor	Indicator	Measurement unit
2.1	Socio-economic	% of public funds available to address a climate hazard and its impacts (e.g. fire, flood, heatwave, etc)	%
2.2	Socio-economic	% share of vulnerable population groups (e.g. elderly (65+)/young (25-) people, lonely pensioner households, low-income/unemployed households, migrants and displaced people) - compared to national average in year X in country X	%
2.3	Socio-economic	Number of households educated in house energy/water/waste management	No.
2.4	Socio-economic	Population density (compared to national/regional average in year X in country/region X)	People per km^2
2.5	Socio-economic	% of population living in areas at risk (e.g. flood/drought/heat wave/ forest or land fire)	%
2.6	Governmental & institutional	% change in green & blue infrastructure/areas (e.g. through new urban planning regulation/policy)	%
2.7	Physical & environmental	Length of transport network (e.g. road/rail) located in areas at risk (e.g. flood/drought/heat wave/ forest or land fire)	Km
2.8	Physical & environmental	Average time needed to reach a health facility	Hours
2.9	Physical & environmental	% of areas non-accessible for emergency responses (e.g. firefighting services)	%
2.10	Physical & environmental	% of (e.g. residential/commercial/agricultural/industrial/touristic) areas at risk (e.g. flood/drought/heat wave/ forest or land fire)	%
2.11	Knowledge & technology	Hours needed to inform population of a risk via an early warning system	hours

ⓘ Add as many rows as necessary

Preglednica 3 – sposobnost prilagajanja

Table 3) Adaptive capacity

	Impacted sector(s)	Relevant climate hazard(s)	Adaptive capacity factor(s)	Current adaptive capacity level	Indicator
	ⓘ **Step 6)** Mark with a tick box the sectors which have been identified in Table 2 above, in respect of all climate hazards *(in the online template, the list of sectors will be generated/displayed automatically. The online template will also generate automatically the hazards relevant to each sector as in Table 2; there is no need to fill in this information below).* **>>> Step 7)** Choose (i.e. copy-paste) the relevant adaptive capacity factors from the list. When more than one adaptive factor is relevant, add separate rows for each factor and indicate the level of adaptive capacity against each factor.				
		ⓘ Column not to be filled in	**Multiple choice:** Access to services Socio-economic Governmental & institutional Physical & environmental Knowledge & innovation	**Single choice:** Low Moderate High Not known	Choose an indicator from Annex 3, Table 1, along with a unit and numeric value, or write down your own indicator.
☑	**Land use planning**	[to be generated automatically in online template]	**Socio-economic**	**Low**	**Popolation density (vs national average**
☑	**Energy**	[to be generated automatically in online template]	**Socio-economic**	**Low**	**Average number of >65 (vs national average)**

Preglednica 4 - ranljive skupine prebivalstva

Table 4) Vulnerable population groups

	Climate hazards	Most vulnerable population group(s)
	ⓘ **Step 8)** Mark again with a tick box the same hazards selected in Table 1 above *(in the online template, these hazards will be generated/displayed automatically)*. Ignore the rest of the hazards. >>> **Step 9)** Choose (i.e. copy-paste) the most vulnerable population groups from the list. When more than one group is relevant, add in the same cell and separate with a comma.	
		Multiple choice: Women and girls Children Youth Elderly Marginalized groups Persons with disabilities Persons with chronic diseases Low-income households Unemployed persons Persons living in sub-standard housing Migrants and displaced people Other All listed population groups Not known
☑	**Extreme heat**	**Elderly**
☐	**Extreme cold**	[Choose from the list above]
☐	**Heavy precipitation**	[Choose from the list above]

Podporni instrumenti in literatura

→ Relevant resources

EUROSTAT Urban Audit – Database
EEA's Urban Adaptation Map Viewer – Tool
EEA's Map book urban vulnerability to climate change – Factsheets (July 2016)
Urban Vulnerability Indicators – Technical Report (ETC-CCA & ETC-SIA, 2012)
"World Council on City Data" – Open Data Portal
ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life (ISO May 2014)
Planning for Adaptation to Climate Change – Guidance Document (ACT Life project, 2013)

Hvala za pozornost!

Izpolnitev SECAP – Analiza tveganja in ranljivosti

Nikola Holodkov
www.ita -slo.eu/SECAP

Projekt sofinanciran v okviru Programa Sodelovanja Interreg V-A Italija Slovenija 2014-2020, iz sredstev Evropski sklada za regionalni razvoj in nacionalnih sredstev.