Adaptation preparedness scoreboard:

Draft country fiche for Slovenia

Disclaimer

This draft country fiche was prepared in the context of the implementation of the EU's Strategy for Adaptation to Climate Change (EUAS). The indicators were developed and agreed with experts from the Member States (MS). This draft version of the fiche is published as background information to the public stakeholder consultation about the evaluation of the EUAS running from early December 2017 to early March 2018. It constitutes work in progress, a particular stage of information collection and dialogue between the Commission and the Member States. It presents a snapshot of the status in the country as of September or October 2017. The fiches are planned to be finalised and published as an annex to the strategy's evaluation report in the fourth quarter of 2018, before which they will be further updated and modified. Should you have any specific comments on the draft fiche, please send it to the mailbox CLIMA-CLIMATE-CHANGE-ADAPTATION@ec.europa.eu

Please note that the assessments (yes/no/in progress) need to be read in conjunction with the narrative that accompanies them. They assess the state of play within each country. While all effort has been made to ensure the coherence across fiches in the assessment of the same indicator, it should not be directly compared across the MS. Two countries with a "yes" on the same indicator could have a different national situation leading to that assessment. Not all indicators have the "in progress" status, some can only be "yes" or "no". For a more detailed explanation of what each indicator means and how its value is determined, please refer to the description of the scoreboard, a document published alongside the country fiches.

Table of Contents

POLICY FRAMEWORK	2
Adaptation strategies	2
A1. National adaptation strategy	
A2. Adaptation strategies adopted at subnational levels	2
Adaptation action plans	3
B1. National adaptation plan	3
B2. Adaptation plans adopted at sub-national level	3
B3. Sectoral adaptation plans	
SCOREBOARD	4
Step A: preparing the ground for adaptation	4
1. Coordination structure	4

2. Stakeholders' involvement in policy development	5
Step B: assessing risks and vulnerabilities to climate change	6
3. Current and projected climate change	6
4. Knowledge gaps	7
5. Knowledge transfer	8
Step C: identifying adaptation options	8
6. Adaptation options' identification	8
7. Funding resources identified and allocated	9
Step D: Implementing adaptation action	
8. Mainstreaming adaptation in planning processes	10
9. Implementing adaptation	
Step E: Monitoring and evaluation of adaptation activities	12
10. Monitoring and reporting	
11. Evaluation	13
SUMMARY TABLE	14

POLICY FRAMEWORK

Adaptation strategies

A1. National adaptation strategy

Slovenia has a Strategic Framework for Climate Change Adaptation. The Ministry of Environment and Spatial Planning has developed a Strategic Framework for Climate Change Adaptation¹ that was approved at the end of 2016. It provides a long term vision and strategic guidelines for adaptation-related activities. It consists of four chapters: mainstreaming, wider cooperation, research and development, education, training, communication and public awareness. The ambition is for Slovenia to be fully adapted to climate change impacts by 2050 and to develop into a climate resilient and sustainable society with a high quality of life. The Strategic Framework includes four separate annexes on terminology², assessing methods³, comparisons of good adaptation processes in other EU member states⁴ and an approach to develop and apply a vulnerability indicator in Slovenian regions⁵.

A2. Adaptation strategies adopted at subnational levels

There is a plan for adaptation strategies to be developed at subnational level in 2018. In Slovenia, municipalities are the only level of self-government; they have an extensive role regarding spatial and urban planning, housing, water management, economic development, tourism and environmental protection. However, with the need to address certain issues also at regional level, unofficial regions will also play an important role in adaptation activities in the future.

 $^{^{1}\}underline{\text{http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_ang.pdf}$

²http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_priloga1.pdf

³http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_priloga2.pdf

⁴http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_priloga3.pdf

http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_priloga4.pdf

Climate change adaptation initiatives at the local and/or regional levels were until now mostly based on one-off participation in various projects (e.g. pilot research projects, transnational cooperation projects, LIFE projects)⁶. In the new legislation currently under development, climate change adaptation considerations will form an integral part of development processes at the local and also at the regional level⁷.

Adaptation action plans

B1. National adaptation plan

Slovenia is currently developing action plans for adaptation. Slovenia's Strategic Framework for Climate Change Adaptation will be followed by an action plan of adaptation measures, which will be prepared taking into account the national risk assessments and a comprehensive national climate change vulnerability assessment.⁸ Furthermore, the strategic framework encourages the mainstreaming of adaptation at all regional and local levels⁹.

B2. Adaptation plans adopted at sub-national level

The NUTS3 statistical regions (*statistične regije*) are required to develop regional development plans that should include assessments of vulnerability to climate change impacts.

On the local level, adaptation actions are mostly limited to adjustments of contingency plans for emergency situations, including the ones caused by climate change (floods, forest fires, heat waves etc.) and improvement of energy efficiency of public buildings (including kindergartens and schools).

B3. Sectoral adaptation plans

There are sectoral plans that include adaptation. In 2008, the Government of the Republic of Slovenia adopted the Strategy for the Adaptation of Slovenian Agriculture and Forestry to Climate Change¹⁰. The strategy was followed by an action plan for 2010 and 2011¹¹, which the Government adopted in October 2010 and amended in March 2011. The plan was not updated in 2012 due to lack of funding, however many adaptation measures are still implemented in the framework of the 1st and 2nd pillar of the CAP¹².

The River Basin Management Plans for the Danube¹³ and Adriatic See Basins for the 2016–2021¹⁴ define a range of measures also contributing to climate change adaptation. A specific fundamental measure included in the Programme of Measures¹⁵ under the climate change headline is a preparation of a set of

⁶http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_ang.pdf

⁷ http://climate-adapt.eea.europa.eu/countries-regions/countries/slovenia

⁸ http://www.mop.gov.si/si/delovna_podrocja/podnebne_spremembe/prilagajanje_podnebnim_spremembam/

⁹http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_ang.pdf

 $^{{}^{10}\}underline{http://agromet.mkgp.gov.si/Publikacije/STRATEGIJA\%20prilagajanja.pdf}$

¹¹ http://www.mko.gov.si/fileadmin/mko.gov.si/pageuploads/podrocja/Kmetijstvo/Naravne_nesrece/Akcijski_nacrt_precisceno_be_sedilo__.pdf

Self-assessment survey findings (EEA): http://climate-adapt.eea.europa.eu/countries-regions/countries/slovenia and http://www.mkgp.gov.si/fileadmin/mkgp.gov.si/pageuploads/Medijsko_sredisce/2017/06_junij/13_PRP/S2J-SP-KMC417061315311.pdf

¹³ http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/voda/nuv_II/NUV_VOD.pdf

http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/voda/nuv_II/NUV_VOJM.pdf

http://www.mop.gov.si/si/delovna_podrocja/voda/nacrt_upravljanja_voda/#c18222

indicators for drought, but all measures related to improving water status and management could be counted as contributing to climate change adaptation.

SCOREBOARD

Step A: preparing the ground for adaptation

1. Coordination structure

1a. A central administration body officially in charge of adaptation policy making

Yes / No

In Slovenia, the Ministry of Environment and Spatial Planning is in charge of adaptation policy-making. The Law Amending the Environmental Protection Law - EPA-1F (Official Gazette of RS, no. 92/13) regulates matters related to climate change with adaptation more specifically mentioned only in connection with the provision of finances from the Climate Fund to adaptation measures. There are plans to provide more specific legal basis for adaptation processes in the new EPA, which is in preparation.

1b. Horizontal (i.e. sectoral) coordination mechanisms exist within the governance system, with division of responsibilities

Yes / In progress / No

The Inter-ministrial Working Group on Climate Change Adaptation with members from all concerned ministries, agencies and government offices held informal meetings during 2014 and was officially nominated by the Government in September 2016¹⁶. The Group serves as a main reference point during the process of adaptation policy development, led by the Ministry of Environment and Spatial Planning with a help of external experts and the Slovenian Environment Agency (ARSO). The Group serves the purposes of horizontal and vertical coordination for adaptation policy-making.

1c. Vertical (i.e. across levels of administration) coordination mechanisms exist within the governance system, enabling lower levels of administration to influence policy making.

Yes / In progress / No

There is no active vertical coordination mechanism specific for adaptation policy-making, however there are mechanisms in place that provide vertical coordination between local, regional and national level in development, spatial planning and SEA procedures, as well as in standard legislation and policy making structures. The Strategic Framework indicates that municipalities will be supported in the future in expert groundwork and developing adaptation plans. The framework aims to provide support in the form of relevant groundwork, guidelines and funds. A national contact point needs to be established to coordinate and promote implementation of measures at local level.

 $^{{\}color{blue} {}^{16}} \underline{\text{http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_ang.pdf} \\$

2. Stakeholders' involvement in policy development

2a. A dedicated process is in place to facilitate stakeholders' involvement in the preparation of adaptation policies

Yes/ No

A dedicated process to facilitate stakeholders' involvement in preparing adaptation policy formed an integral part of developing the national climate change risk assessment (CCRA)¹⁷. In cooperation with external experts, a plan has been prepared on how to involve stakeholders; a public event has been organised with more than 100 participants in preparation of the risk assessment and sectoral experts were consulted separately. Public consultation has taken place during the development of the Strategic Framework as well.

2b. Transboundary cooperation is planned to address common challenges with relevant countries

Yes / No

Transboundary cooperation to address common challenges with relevant countries is present but limited. It does not yet result in specific adaptation on the ground. In the Strategic Framework, the ambition for better transboundary cooperation is mentioned¹⁸. Some cooperation has been conducted bilaterally in cross-border cooperation programmes based on an assessment of common priority sectors and risks such as floods¹⁹. Recent natural disasters, such as floods, hailstorms and sleet have drawn more attention to the transboundary issues both in terms of preventive and relief actions. The 2014 floods in Croatia, Bosnia and Herzegovina and Serbia intensified the cooperation in the region in terms of adaptation, sharing of information and best practice (e.g. in terms of flood prevention measures, flood control).

Slovenia takes part in the implementation of the three EU level Macro-regional strategies: EUSALP²⁰, EUSAIR²¹ and EUSDR²² to address various climate related challenges shared in the region.

Furthermore, Slovenia is involved in European projects that foster transboundary cooperation and Ljubljana has been selected as the green capital of Europe in 2016, encouraging international collaboration²³. Sub-national research and activities have focused on the Alpine regions and have been carried out as part of EU funded projects Clisp and C3Alps. Slovenia is also involved in climate adaptation activities and transport in the context of the international United Nations Economic Commission for Europe²⁴. International collaboration is one of the guiding principles to stimulate climate adaptation in Slovenia.

¹⁷ http://www.mop.gov.si/si/medijsko_sredisce/novica/article//7153/

¹⁸ http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_ang.pdf

http://www.icpdr.org/main/danube-basin

https://www.alpine-region.eu/

²¹ http://www.adriatic-ionian.eu/

²² http://www.danube-region.eu/

http://www.greenljubljana.com/

²⁴https://www.unece.org/trans/areas-of-work/trends-and-economics/activities/group-of-experts-on-climate-change-impacts-and-adaptation-for-transport-networks-and-nodes-wp5ge3.html

Step B: assessing risks and vulnerabilities to climate change

3. Current and projected climate change

3a. Observation systems are in place to monitor climate change, extreme climate events and their impacts

Yes / In progress / No

ARSO provides scientific data and information on current climate change, extreme climate events and their impacts²⁵. These indicators include air temperature, precipitation, snow, wind, solar radiation, phenology and heating indicators. Environmental indicators also provide data on extreme weather events and glaciers. Data on extreme weather events and their impacts (damages to infrastructure, property, etc.) are being collected and being made available to the public by the Administration for Civil Protection and Disaster Relief. A specific indicator on climate change vulnerability of Slovenia is currently being developed.

3b. Scenarios and projections are used to assess the economic, social and environmental impacts of climate change, taking into account geographical specificities and best available science (e.g. in response to revised IPCC assessments)

Yes / In progress / No

In 2016 and 2017 a new project of assessing impacts of climate change is being carried out at the ARSO²⁶. Based on the new IPCC Representative Concentration Pathways (RCP) emission scenarios, ensemble of 6 models from EURO-CORDEX for RCP4.5 and RCP8.5 have been taken to assess the long term (until 2100) changes in climate variables for Slovenia (average climate conditions and extreme weather events) and impact assessments are being carried out (for agricultural drought, heat waves, frost, soil conditions, etc.). Tailored climate services²⁷ are in high demand from different users; climate services are being currently used for upgrades of risk assessments, vulnerability assessments of major projects and other activities such as long term planning in different areas. For example, in preparing the national Disaster Risk Assessment and Report, climate change scenarios have been used to evaluate the impact and probability of the risks in the future.²⁸

3c. Sound climate risks/vulnerability assessments for priority vulnerable sectors are undertaken to support adaptation decision making.

Yes / In progress / No

To support adaptation policy and decision making, a comprehensive national climate change risks assessment (CCRA) together with a wide public and interministrial consultation process has been carried out in 2014. It included all sectors, while indirect and transboundary risks were taken into account to some extent. It forms a basis for further work in this area.

http://www.sos112.si/slo/tdocs/porocilo_izdelava_ocen_ang.pdf

 $^{^{25} \} http://meteo.arso.gov.si/met/en/climate/ \ \ and \ \underline{http://kazalci.arso.gov.si/?data=group\&group_id=8}$

²⁶ http://meteo.arso.gov.si/met/sl/climate/pss-project/

²⁷ http://www.arso.gov.si/

The agriculture and forestry analysed the vulnerability in 2004²⁹, resulting in an adaptation strategy for the agriculture and forestry sectors which was adopted in 2008. These strategies have not been reviewed since.

The water sector also carried out preliminary risk assessments in the framework of river basin management planning and flood risk management.

Slovenia adopted the first National Disaster Risk Assessment $(NDRA)^{30}$ in 2015. Selected separate risk assessments for disasters related to climate change (in particular floods, drought and forest fires) as well as the NDRA have been updated with a climate change impacts assessment in 2016^{31} .

At regional level, a research project funded by the Target Research Programme 'Adaptation to Climate Change with Spatial Planning Tools'³² was carried out as a continuation of the EU project CLISP and provided first vulnerability assessment for the Gorenjska region.

3d. Climate risks/vulnerability assessments take transboundary risks into account, when relevant

Yes / In progress / **No**

The vulnerability assessment or the Strategic Framework do not identify any transboundary risks.

4. Knowledge gaps

4. Work is being carried out to identify, prioritise and address the knowledge gaps

Yes / In progress / No

Knowledge gaps are identified and work is ongoing to address them. The Strategic Framework clearly emphasizes the importance of knowledge and knowledge transfer in order to be able to adapt. The objectives are to further develop and provide user friendly climate services, upgrade and link databases and processes in support of decision making and establish regular cooperation between researchers and decision-makers.

There is however limited research on climate change adaptation, with limited resources devoted to the subject. National funding for applied research to be used for policy-making by specific Ministries is provided through the Target Research Programme³³ (TRP). Sectors independently decide on funding priorities for research in their respective departments. Adaptation-related research through the TRP was thus mainly carried out by the Ministry in charge of Agriculture and Forestry as these were assessed to be the most vulnerable sectors. On the other hand some adaptation-related research gaps are also addressed through the dedicated Climate Change Fund.

7

²⁹ http://www.arso.gov.si/vreme/poro%C4%8Dila%20in%20publikacije/ranljivost.pdf and

³⁰ http://www.sos112.si/slo/page.php?src=os17.htm

³¹ http://www.sos112.si/slo/page.php?src=os12.htm

³² http://www2.uirs.si/sl/Raziskovanje/Projekti/CRPKonkuren%C4%8DnostSlovenije20062013.aspx

³³ http://www.arrs.gov.si/en/progproj/crp/

The Slovenian Environment Agency hosts the Drought Management Centre for Southeastern Europe – DMCSEE³⁴. The Centre monitors and assesses drought and risks and vulnerability connected to drought for the South East Europe region, also partly through EU funded projects (currently within the DriDanube project³⁵).

5. Knowledge transfer

5a. Adaptation relevant data and information is available to all stakeholders, including policy makers (e.g. through a dedicated website or other comparable means)

Yes / In progress / No

ARSO has an information website dedicated to climate change information³⁶. The Ministry of Environment and Spatial Planning³⁷ and the Ministry of Agriculture, Forestry and Food³⁸ have some information and material on adaptation-related issues However, the visibility and breadth of information on these webpages could be improved. A project to set up a dedicated climate portal is in progress.

5b. Capacity building activities take place; education and training materials on climate change adaptation concepts and practices are available and disseminated

Yes / In progress / No

There are limited capacity building activities and education and training materials on climate change adaptation. Promotional and educational material is made available and disseminated through participation in European projects, such as C3Alps³⁹. Slovenia plans to develop a capacity building and communication programme funded by the Climate Fund in the future.

Step C: identifying adaptation options

6. Adaptation options' identification

6a. Adaptation options address the sectoral risks identified in 3c, the geographical specificities identified in 3b and follow best practices in similar contexts

Yes / No

Slovenia is working on an action plan of adaptation measures. Many sectors are in the initial stages of exploring and integrating climate adaptation. However, in sectoral policy plans, some adaptation options have already been identified as for instance in the strategy and the action plan for the Adaptation of Slovenian Agriculture and Forestry to Climate Change (2008). The River Basin Management Plans for the Danube⁴⁰ and Adriatic See Basins for the 2016–2021⁴¹ contain

³⁴ http://www.dmcsee.org/

³⁵ http://www.interreg-danube.eu/approved-projects/dridanube

³⁶ http://meteo.arso.gov.si/met/sl/climate/pss-project

³⁷ http://www.mop.gov.si/si/delovna_podrocja/podnebne_spremembe/prilagajanje_podnebnim_spremembam/

³⁸ http://www.mkgp.gov.si/en/

C3Alps project: http://www.alpine-space.org/2007-2013/projects/projects/index4ec0.html?tx_txrunningprojects_pi1[uid]=39&tx_txrunningprojects_pi1[view]=singleView

 $^{^{40} \,} http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/voda/nuv_II/NUV_VOD.pdf$

⁴¹ http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/voda/nuv_II/NUV_VOJM.pdf

measures for climate change adaptation, which were based on a vulnerability assessment.

It can be concluded that adaptation options for the agriculture and water management sectors are consistent with sectoral risk assessments, and with measures and good practices identified in similar context. Update on the action plan for the agriculture sector is needed and other sectors still have to follow these frontrunning sectors.

6b. The selection of priority adaptation options is based on robust methods (e.g. multi-criteria analyses, stakeholders' consultation, etc.) and consistent with existing decision-making frameworks

Yes / No

As mentioned in 6a., Slovenia is working on an action plan and it is therefore too early to indicate whether the selection of priority adaptation options is based on robust methods.

6c. Mechanisms are in place to coordinate disaster risk management and climate change adaptation and to ensure coherence between the two policies

Yes/ In Progress / No

In August 2014, the Slovenian government adopted the Decree Implementing the Decision on a Union Civil Protection Mechanism (Official Gazette of the Republic of Slovenia, no. 62/14) which determines a list of separate risk assessments to be carried out as well as responsible ministries, deadlines, procedures and requirements for such assessment, together with procedures and requirements for the National Disaster Risk Assessment (NDRA)⁴². These were first prepared in 2015. In 2016, selected risk assessments and the NDRA have been updated to include climate change impacts.

The Administration for Civil Protection and Disaster Relief under Ministry of Defence is the national coordination body for risk assessment processes. The Administration provides links with adaptation-related policies through Interministerial working group on Disaster Risk Assessments and is also responsible for national emergency response plans in co-operation with other ministries. The National Disaster Risk Assessment presents the overall risk assessment for disasters presenting identified risks for the country and as such a first step of a comprehensive risk management.

7. Funding resources identified and allocated

7. Funding is available to increase climate resilience in vulnerable sectors and for cross-cutting adaptation action

Yes / In Progress / No

-

⁴² http://www.sos112.si/slo/page.php?src=os17.htm

Funds for cross-cutting climate adaptation action are available within the Climate Change Fund. However, in some sectors, reliable multiannual funds will have to be mobilised once an action plan of adaptation measures is in place. The Strategic Framework lays down the main principles for mobilising funds. The focus is on using national and local budget as co-finance to attract additional international funding. The other part of the strategy is to foster investments from the private sector.

Step D: Implementing adaptation action

8. Mainstreaming adaptation in planning processes

8a. Consideration of climate change adaptation has been included in the national frameworks for environmental impact assessments

Yes / No

The new EIA Directive is in place⁴³ and the Slovenian authorities are expected to include the environmental objective of 'resilience and adaptation to climate change' in the assessment of all programmes, plans and projects. The upcoming environmental reports will include a chapter on climate change.

8b. Prevention/preparedness strategies in place under national disaster risk management plans take into account climate change impacts and projections

Yes / No

In the new disaster risk assessments, which was prepared in 2016, impacts of climate change have been take into account. The new new disaster risk management plans are currently still under preparation.

8c. Key land use, spatial planning, urban planning and maritime spatial planning policies take into account the impacts of climate change

Yes / No

Spatial planning legislation is currently under revision in Slovenia. Climate change adaptation consideration form an integral part of the spatial planning processes to some extent and for some risks (e.g. floods, landslides) at the local and also at the regional level.

8d. National policy instruments promote adaptation at sectoral level, in line with national priorities and in areas where adaptation is mainstreamed in EU policies

Yes / **In Progress** / No

The Strategic Framework describes guidelines on how climate adaptation can be mainstreamed in sectoral policies in two steps:

1) Effective coordination of the contents and processes of development and spatial planning, including taking account of capabilities for disaster risk management

⁴³ http://www.arso.gov.si/en/environmental%20protection/environmental%20impact%20assessment/

2) Strengthening the use of environmental impact assessment instruments

These steps are currently used to foster mainstreaming of adaptation in sectoral policies and actions⁴⁴.

8e. Adaptation is mainstreamed in insurance or alternative policy instruments, where relevant, to provide incentives for investments in risk prevention

Yes / **No**

Currently, adaptation is not being mainstreamed in insurance policies or alternative policy instruments to provide incentives for investments in risk prevention.

9. Implementing adaptation

9a. Adaptation policies and measures are implemented, e.g. as defined in action plans or sectoral policy documents

Yes / In progress / No

Adaptation actions are being carried out in some sectors, for instance, agriculture, forestry, water management, and flood risk management sector. These actions are carried out by the national governmental departments. However, some sectors are confronted with lack of budget, hampering implementation of adaptation actions.

9b. Cooperation mechanisms in place to foster and support adaptation at relevant scales (e.g. local, subnational)

Yes / No

The Strategic Framework describes the guiding principle of cooperation that should be at the basis of climate change adaptation. Municipalities will be supported in their implementation by laying down the expert groundwork, and through guidelines and funding. Furthermore, the plan is to establish a national contact point for the coordination and promotion of the implementation of measures at local and regional level. Existing networks will be used to address the challenges of climate change adaptation and to encourage collaboration, also through the Council for Sustainable Development and Environmental Protection.

9c. Procedures or guidelines are available to assess the potential impact of climate change on major projects or programmes, and facilitate the choice of alternative options, e.g. green infrastructure

Yes / No

The Strategic Framework indicates that mainstreaming climate adaptation is one of its main objectives. Guidelines are in place to integrated adaptation in the spatial planning policies, prepared through a transboundary project⁴⁵. There are also sectoral development planning documents that outline guidelines for integrating adaptation in these sectors. There are also guidelines on how to include adaptation to climate change in the Strategic Environmental Assessment process⁴⁶, which

 $^{^{44} \,} http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/podrocja/podnebne_spremembe/SOzP_ang.pdf \\$

⁴⁵ http://www.clisp.eu/content/sites/default/files/guidance_slovenian.pdf

⁴⁶ Self-assessment survey findings (EEA): http://www.eea.europa.eu/publications/national-adaptation-policy-processes

have been applied in cases such as the assessment for the Transport Development Strategy in 2014⁴⁷.

9d. There are processes for stakeholders' involvement in the implementation of adaptation policies and measures.

Yes / No

As the national adaptation policy implementation process is in its early phases, there does not seem to be any stakeholders' involvement in the implementation of adaptation policies and measures.

Step E: Monitoring and evaluation of adaptation activities

10. Monitoring and reporting

10a. NAS/NAP implementation is monitored and the results of the monitoring are disseminated

Yes / No

Implementation of the strategic framework is followed by an inter-ministerial climate change adaptation working group and will be biennially reported and updated.

Slovenia has set-up a qualitative and and quantitative monitoring process for the implementation of the Strategic Framework through a vulnerability indicator. The strategic framework outlines a set of indicators that will form the vulnerability indicator. The aim is to monitor climate change by collecting information on a range of variables like exposure, sensitivity and adaptive capacity variables, key climate change impacts and identified risks and opportunities. Monitoring of the implementation of measures will be selected when adaptation plans and actions are developed.

10b. The integration of climate change adaptation in sectoral policies is monitored and the results of the monitoring are disseminated

Yes / **No**

In the water sector⁴⁸, monitoring of the plans take place on a regular basis, as is the case for the Danube River Basin Water Management Plan. This monitoring includes monitoring of measures under the climate change adaptation headline. A system for periodic review of adaptation action of sectoral policies will be developed in the framework of the National Action Plan on Adaptation. The Plan will provide indicators for each of the sectors.

10c. Regional-, sub-national or local action is monitored and the results of the monitoring are disseminated

Yes / **No**

47http://www.mzi.gov.si/fileadmin/mzi.gov.si/pageuploads/DMZ/OP_strategija_prirocnik_julij_CPVO_ang.pdf

48 https://www.icpdr.org/main/activities-projects/river-basin-management

Regional, sub-national or local plans that are explicitly focussing on climate adaptation are not yet developed. Although Ljubljana works hard to implement green measures in city development, there is no climate change adaptation monitoring system. A system for periodic review of adaptation action at sectoral and local level and the allocation of reporting responsibilities will be developed in the framework of the National Action Plan on Adaptation. The Plan should provide also for the indicators and type of framework to be used to monitor progress via a set of indicators to assess preparedness.

11. Evaluation

11a. A periodic review of the national adaptation strategy and action plans is planned

Yes / No

As Slovenia reports that the adaptation policy-making process is at an early stage, it is too early to evaluate adaptation actions. Although, monitoring and evaluation are activities that are developed in the Strategic Framework both in qualitative and in quantitative terms (see 10a), no evidence on the planning of a periodic review of the Strategic Framework is available.

11b. Stakeholders are involved in the assessment, evaluation and review of national adaptation policy

Yes / No

Through the National working group on adaptation involvement of stakeholders is assured in the future evaluations of adaptation policy. Involvement in monitoring and reviewing the Strategic Framework seems to be less clearly enshrined.

SUMMARY TABLE

Adaptation Preparedness Scoreboard				
No.	Indicator	Met?		
Step A	Step A: Preparing the ground for adaptation			
1	Coordination structure			
1a	A central administration body officially in charge of adaptation policy making	<u>Yes</u> / No		
1b	Horizontal (i.e. sectoral) coordination mechanisms exist within the governance system, with division of responsibilities	Yes / In progress / No		
1c	Vertical (i.e. across levels of administration) coordination mechanisms exist within the governance system, enabling lower levels of administration to influence policy making.	Yes / <u>In</u> <u>progress</u> / No		
2	Stakeholders' involvement in policy development			
2a	A dedicated process is in place to facilitate stakeholders' involvement in the preparation of adaptation policies	<u>Yes</u> / No		
2b	Transboundary cooperation is planned to address common challenges with relevant countries	<u>Yes</u> / No		
Step chang	B: Assessing risks and vulnerabilities to climate e			
3	Current and projected climate change			
3a	Observation systems are in place to monitor climate change, extreme climate events and their impacts	Yes / <u>In</u> <u>progress</u> / No		
3b	Scenarios and projections are used to assess the economic, social and environmental impacts of climate change, taking into account geographical specificities and best available science (e.g. in response to revised IPCC assessments) Yes / In progress / No (e.g. in response to revised IPCC assessments)	Yes / In progress / No		
3c	Sound climate risks/vulnerability assessments for priority vulnerable sectors are undertaken to support adaptation decision making.	Yes / In progress / No		
3d	Climate risks/vulnerability assessments take transboundary risks into account, when relevant	Yes / In progress / <u>No</u>		
4	Knowledge gaps			
4	Work is being carried out to identify, prioritise and address	Yes / In progress		
	the knowledge gaps	/ No		
5	Knowledge gaps Knowledge transfer	/ No		

Adaptation Preparedness Scoreboard			
No.	Indicator	Met?	
	stakeholders, including policy makers (e.g. through a dedicated website or other comparable means).	progress / No	
5b	Capacity building activities take place; education and training materials on climate change adaptation concepts and practices are available and disseminated	Yes / <u>In</u> <u>progress</u> / No	
Step C	: Identifying adaptation options		
6	Identification of adaptation options		
6a	Adaptation options address the sectoral risks identified in 3c, the geographical specificities identified in 3b and follow best practices in similar contexts	Yes / No	
6b	The selection of priority adaptation options is based on robust methods (e.g. multi-criteria analyses, stakeholders' consultation, etc.) and consistent with existing decision-making frameworks	Yes / No	
6c	Mechanisms are in place to coordinate disaster risk management and climate change adaptation and to ensure coherence between the two policies	Yes/ In Progress / No	
7	Funding resources identified and allocated		
7	Funding is available to increase climate resilience in vulnerable sectors and for cross-cutting adaptation action	Yes / <u>In</u> <u>Progress</u> / No	
Step D	: Implementing adaptation action		
8	Mainstreaming adaptation in planning processes		
8a	Consideration of climate change adaptation has been included in the national frameworks for environmental impact assessments	<u>Yes</u> / No	
8b	Prevention/preparedness strategies in place under national disaster risk management plans take into account climate change impacts and projections	Yes / No	
8c	Key land use, spatial planning, urban planning and maritime spatial planning policies take into account the impacts of climate change	Yes / No	
8d	National policy instruments promote adaptation at sectoral level, in line with national priorities and in areas where adaptation is mainstreamed in EU policies	Yes / <u>In</u> <u>Progress</u> / No	
8e	Adaptation is mainstreamed in insurance or alternative policy instruments, where relevant, to provide incentives for investments in risk prevention	Yes / No	
9	Implementing adaptation		
9a	Adaptation policies and measures are implemented, e.g. as defined in action plans or sectoral policy documents	Yes / <u>In</u> <u>progress</u> / No	
9b	Cooperation mechanisms in place to foster and support	Yes / No	

Adaptation Preparedness Scoreboard				
No.	Indicator	Met?		
	adaptation at relevant scales (e.g. local, subnational)			
9c	Procedures or guidelines are available to assess the potential impact of climate change on major projects or programmes, and facilitate the choice of alternative options, e.g. green infrastructure	<u>Yes</u> / No		
9d	There are processes for stakeholders' involvement in the implementation of adaptation policies and measures.	Yes / No		
Step E	: Monitoring and evaluation of adaptation activities			
10	Monitoring and reporting			
10a	NAS/NAP implementation is monitored and the results of the monitoring are disseminated	Yes / No		
10b	The integration of climate change adaptation in sectoral policies is monitored and the results of the monitoring are disseminated	Yes / <u>No</u>		
10c	Regional-, sub-national or local action is monitored and the results of the monitoring are disseminated	Yes / No		
11	Evaluation			
11a	A periodic review of the national adaptation strategy and action plans is planned	Yes / No		
11b	Stakeholders are involved in the assessment, evaluation and review of national adaptation policy	<u>Yes</u> / No		