

# Annex 5

## Knowledge platforms addressing nature-based solutions for climate change adaptation and disaster risk reduction at European and national levels

### A5.1 Introduction

The term 'knowledge adaptation platform' refers to a comprehensive resource for decision-makers with the data, tools, guidance and information needed to adapt to a changing climate (Palutikof et al., 2019). Adaptation platforms have a range of functionalities, such as decision support tools to facilitate the decision-making process, components for capacity building, networking, dissemination and other features to assist adaptation planning and implementation. Commonly, knowledge adaptation platforms are online resources and are known as either 'web portals' or 'web-based knowledge portals'.

The knowledge platforms addressing the umbrella concept of nature-based solutions (NbS) for climate change adaptation (CCA) and disaster risk reduction (DRR) and the approaches it encompasses — ecosystem approach (EA) and ecosystem-based approach (EbAp), green infrastructure (GI) and blue-green infrastructure (BGI), ecosystem-based adaptation (EbA), ecosystem-based DRR (Eco-DRR), natural water retention measures (NWRMs), sustainable management (SM) and ecosystem-based management (EbM), as defined in Chapter 1 — have a valuable role to play as an interface for enhancing knowledge exchange between science, policy and practice, to promote the further development of NbS or some particular stages of the CCA or DRR policy cycles, and to scale up and step up the implementation of NbS.

Depending on the specific scope of each platform (political mandate, target audience, sector focus, funding model, etc.), they can have prominent or minor roles in the whole process, ranging from the provision of an overarching key component in the framing of CCA or DRR strategies (e.g. a decision support tool) to contributing specific input to the implementation of practical actions (e.g. with inspiring case studies).

Similarly, depending on the above-mentioned features and on the platform's main aims, these web portals contribute to different extents to sharing exemplary and/or innovative insights on how NbS can address a range of core societal challenges (as defined in Chapter 1, Table 1.1): improving society's resilience to extreme weather- and climate-related events (CSC1); food security, sustainable agriculture and forestry (CSC2); preserving habitat, reducing biodiversity loss and increasing green and blue spaces (CSC3); water management (CSC4); social justice, cohesion and equity and reducing the risks for groups of society highly vulnerable to climate change (CSC5); public health and well-being (related to climate change impacts) (CSC6); and making cities and human settlements inclusive, safe, resilient and sustainable (CSC7).

There is a variety of global platforms and partnerships supporting NbS uptake, and Box A5.1 offers some outstanding examples of them; this annex, however, focuses on the European level.

### A5.1.1 Criteria for selecting the knowledge platforms

The landscape of CCA and DRR platforms in Europe is wide, various and rapidly evolving. These web-based knowledge portals have different underlying frameworks, purposes and objectives that are reflected in the range of contents they encompass and in the products and services they provide (EEA, 2018b). Opportunities for increasing the consistency and complementarity of the knowledge thus shared have already been identified (EEA, 2017a).

In this landscape we reviewed the most commonly known knowledge platforms in the research and practice community addressing themes related to NbS for CCA or DRR and contributing to solving the core societal challenges (as defined in Chapter 1).

To draw some meaningful considerations and comparisons, we selected those platforms meeting all or most of the following criteria:

- The platform has a European scope or a good European coverage and focuses on knowledge directly related to NbS and related approaches.
- The platform has a political mandate (directly refers to a legal instrument or provides a direct contribution to a policy regulation) related to CCA and/or DRR or aims to support policymaking and development and is maintained and operated by an official institution.
- The platform is operative and up to date. If developed by a research project or initiative, the platform is more than a project/initiative website and has the (potential) guarantee to continue beyond the project's end and to be continuously updated.

## A5.2 Overview of relevant platforms

### A5.2.1 European level

This section provides a short overview of 12 platforms — BISE, Climatescan, Climate-ADAPT, DRMKC, Natural Hazards — Nature Based Solutions platform, Nature-based Solutions

Initiative, Naturvation Urban Nature Atlas, NWRM, OPPLA, Panorama, ThinkNature and weADAPT — that were selected according to the above criteria. The descriptions focus on what main NbS concepts/approaches and core societal challenges the platforms deal with, as well as highlighting whether the platforms specifically address CCA or DRR in some particular sectors. The information reported was inferred from screening the platforms themselves<sup>(16)</sup>, and then validated by the platform managers<sup>(17)</sup>.

Furthermore, a 'mapping' exercise offers a summary (through tables and graphs) of some of the main general features of the selected platforms and illustrates how their contents cover the NbS approaches and the core societal challenges that are relevant to the present report.

### BISE

The Biodiversity Information System for Europe (BISE) is a web portal for data and information on biodiversity, strengthening the knowledge base in support to the implementation of the EU biodiversity strategy and the Convention on Biological Diversity (CBD) Aichi biodiversity targets (BISE, 2020).

BISE refers to GI and NbS as ways to protect natural capital and strengthen the functionality of ecosystems for delivering goods and services. The platform includes information on CCA and the ecosystem services related to climate and natural hazard regulation, and it has a specific section on GI with information on the EU policy framework, definitions and links to key publications and networks. Furthermore, the BISE country pages include an overview of national activities on GI undertaken by EU Member States.

BISE contributes to the core societal challenge on preserving habitat, reducing biodiversity loss and increasing green and blue spaces (CSC3), gathering references, information and resources related to the status of and threats to biodiversity and ecosystems in Europe, responses and solutions. In addition, the content in BISE is relevant to addressing societal challenges on resilience to climate change (CSC1, improving society's resilience to extreme weather- and climate-related events) and on sustainable management of terrestrial ecosystems (CSC2, food security, sustainable agriculture and forestry).

<sup>(16)</sup> Last visit to the platforms was in June 2020.

<sup>(17)</sup> Except for NWRM and OPPLA.

### Box A5.1 EGlobal platforms and partnership relevant for supporting the uptake of nature-based solutions

#### Global Platform for Disaster Risk Reduction

The Global Platform for Disaster Risk Reduction (GPDRR) was first convened in 2007 and is a biennial multi-stakeholder forum established by the United Nations General Assembly to assess and review progress in the implementation of the global disaster risk reduction agenda, and to serve as a platform for governments and stakeholders to share good practice, identify gaps and make recommendations to further accelerate implementation.

The GPDRR is a critical component of the monitoring and implementation processes of the Sendai Framework for Disaster Risk Reduction (SFDRR 2015-2030). These efforts contribute towards the successful achievement of a risk-informed 2030 agenda for sustainable development. In 2017 at the fifth session of the GPDRR, the *Cancun high-level communiqué* stressed the close link between climate change and water-related hazards and disasters and highlighted integrated water resources management (IWRM) as an effective instrument for enhancing resilience and serving both disaster risk reduction (DRR) and climate change adaptation goals (GPDRR, 2017).

In 2019 at the sixth Session of the GPDRR (GP2019) the Parties adopted a Co-chairs' summary of the event (GPDRR, 2019). This summary includes recommendations for a mid-term review of the SFDRR, and for DRR to be fully integrated in the implementation of the Sustainable Development Goals (including developing disaster-resilient infrastructure through ecosystem-based approaches that leverage the complementarity across blue, green and grey infrastructure and adopting nature-based solutions, NbS).

#### Partnership for Environment and Disaster Risk Reduction

The Partnership for Environment and Disaster Risk Reduction (PEDRR), established in 2008, is a global thematic platform of the United Nations Office for Disaster Risk Reduction and aims to promote and scale up the implementation of NbS for DRR and to ensure that it is mainstreamed in development planning at global, national and local levels, in line with the SFDRR. This is conducted through the organisation of courses and workshops and the production of syntheses of the current and future challenges for NbS for DRR.

The Fourth International Science-Policy Workshop organised by PEDRR (12 - 14 February 2019) in Bonn (Germany) provided an update on the science-policy issues and gaps on ecosystem-based DRR and adaptation and highlighted how to improve mainstreaming and use of ecosystem-based approaches in the context of sustainable development. Finally, it also reviewed the activities performed by PEDRR since its inception and elaborated on PEDRR's vision for the next decade.

#### Friends of Ecosystem-based Adaptation

Friends of Ecosystem-based Adaptation (FEBA) is an international network that was created in 2015 and is hosted by the International Union for the Conservation of Nature (IUCN). The network includes experts from science, policy and practice and aims to share knowledge and practical experience on the effective design and implementation of ecosystem-based approaches to adaptation. For this purpose, FEBA has developed guidelines on the effective design and implementation of NbS and ecosystem-based approaches and provides policy advice to the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity and other policy processes.

#### *Climatescan*

Climatescan is an interactive web-based map application for knowledge exchange on (over 5 000) 'blue-green' projects mostly on urban resilience, climate-proofing and CCA around the globe, with a good European coverage (Climatescan, 2020).

It involves over a thousand registered (public and private) participants around the world coordinated by the Hanze University of Applied Sciences (Netherlands). Most contributors upload their projects in Climatecafes (Climatecafe.nl): an international field education concept involving various fields of science and practice for capacity building in CCA. Climatescan

has no policy mandate or direct link to a policy regulation; however, it does work with the Dutch national government to find solutions on CCA. The showcased practical local initiatives (called 'projects' in the portal) cover all the approaches of NbS for CCA and DRR. The projects are classified by (seven) sectoral focus topics (water, people, nature-biodiversity, heat, energy-climate mitigation, urban agriculture and air quality), covering over 20 categories.

Even if not explicitly mentioned on the portal, it can be deduced from the range of topical foci of the platform that its content is relevant to addressing all of the core societal challenges.

## **Climate-ADAPT**

The European Climate Adaptation Platform (Climate-ADAPT) is mandated by the EU adaptation strategy to promote better informed decision-making in adapting to climate change. It provides the knowledge base and facilitates knowledge sharing on CCA in Europe at all administrative levels and for all the stages of the adaptation policy cycle (Climate-ADAPT, 2020b).

The platform includes sections on DRR and for ecosystem approaches and ecosystem-based approaches for CCA and DRR, presenting information on the EU policy framework, knowledge base, funding sources and links to relevant resources, as well as complete information on related contents in the Climate-ADAPT database (publications and reports; information portals; guidance documents; tools; research and knowledge projects; adaptation options; case studies; organisations). Overall, Climate-ADAPT covers (to different extents) several NbS approaches: ecosystem approach, ecosystem-based approach, GI/BGI, ecosystem-based adaptation, sustainable/ecosystem-based management and natural water retention measures. The platform considers 14 CCA-relevant sectors, including water management, forestry, agriculture, cities and coastal areas.

The Climate-ADAPT case studies deserve a special mention: they are a type of database item with a comprehensive structure, describing all the key implementation aspects of real adaptation measures. They are specifically developed for the platform with the support of the organisations responsible for the measure's implementation. The case studies in Climate-ADAPT include illustrative examples of how NbS are applied in Europe.

The content in Climate-ADAPT is particularly relevant to addressing the societal challenges on resilience to climate change (CSC1, improving society's resilience to extreme weather- and climate-related events), on climate change impacts on health and well-being (CSC6) and on reducing risk for groups of society highly vulnerable to climate change (CSC5), but they also can make a significant contribution to solving the rest of the core societal challenges.

## **DRMKC**

The European Commission Disaster Risk Management Knowledge Centre (DRMKC) provides knowledge and evidence at all levels and at all stages of the disaster risk management cycle (prevention, reduction, preparedness, response and recovery), including those disasters associated with climate and so considering CCA (DRMKC, 2020). The DRMKC web platform facilitates information and knowledge sharing between policymakers, practitioners and scientists within and beyond the EU, enhancing the connection between science, operational activities and policy.

The platform gathers around 2 000 relevant research and operational projects in a database with search functions (the Project Explorer), and also maintains a set of web

tools such as the Risk Data Hub (a GIS web of EU risk data and methodologies for disaster risk management) and the Gap Explorer (to analyse knowledge, methodologies and technologies available for different hazards). DRMKC promotes ecosystem-based-solutions for the elaboration of disaster risk management plans at national level that are developed on the basis of national risk assessments (ecosystem-based DRR).

The content in DRMKC is particularly relevant to addressing the societal challenges on resilience to extreme weather associated with climate change (CSC1), as it provides information on different hazards including heat waves, river floods, coastal flooding, flash floods, droughts and forest fires, all relevant for water management, forestry, agriculture, cities, coastal areas and other sectors.

## **Natural Hazards — Nature-based Solutions platform**

The Natural Hazards — Nature-based Solutions platform provides hundreds of examples of projects from around the world, with several European cases (Natural Hazards — Nature-based Solutions platform, 2020). It was developed by the World Bank, the Global Facility for Disaster Reduction and Recovery, and Deltares. Its objective is to host and facilitate the exchange of practical guidelines, experience and lessons learned from a range of stakeholders, to provide guidance on the planning and technical implementation of NbS, and to promote these solutions in policymaking and investments in socio-economic development projects.

The NbS projects presented focus on interventions addressing disaster risk management and water resources management challenges to mitigate or adapt to climate change effects or natural hazards (covering CCA and DRR). Here the NbS are intended to cover the full range of approaches using ecosystems to increase resilience, making use of natural processes, and ecosystem services for functional purposes. The types of NbS are categorised into coastal wetlands, coral reefs and living shorelines, dunes and beaches, forests and vegetation, inland wetlands, mangroves, rivers and floodplains, and urban green spaces. The projects presented are completely 'green' (i.e. consisting of only ecosystem elements) or 'hybrid' (i.e. a combination of ecosystem elements and hard engineering approaches).

From the hazard types and benefits of the interventions presented, it can be deduced that the content of the platform is relevant to address all of the core societal challenges considered in this report.

## **Nature-based Solutions Initiative**

The Nature-based Solutions Initiative is an interdisciplinary programme of research, policy advice and education based at the University of Oxford (United Kingdom) focusing on the science, policy and practice of NbS to address global challenges and increase their sustainable implementation (Nature-based Solutions Initiative, 2020).

Its website and associated two global platforms ('Nature-based Solutions Evidence Platform' and 'Nature-based Solutions Policy Platform') bring together evidence from scientific peer-reviewed literature on the effectiveness of investing in nature to deal with a range of climate impacts, including disasters, in support of CCA and DRR.

The interactive evidence map is well populated for Europe, with contents covering the economic, social and environmental dimensions of the most commonly implemented or planned NbS adaptation actions (ecosystem-based adaptation), such as the protection, restoration and/or afforestation of terrestrial forests or woodlands, coastal and marine habitats, and river catchments (including wetland), and it includes case studies.

The content of the platform is relevant to addressing major societal challenges, such as food security, climate change, water security, human health, disaster risk, and social and economic development. Therefore, it can be linked to all of the core societal challenges considered in the present report.

### ***Naturvation Urban Nature Atlas***

The Urban Nature Atlas developed by the Horizon 2020 (2017-2020) Nature-based Urban Innovation (Naturvation) project contains a thousand illustrative examples of NbS from about 100 European cities (Naturvation, 2020). The project aimed to assess what NbS can achieve in cities, to show how they respond to urban sustainability challenges by working with communities and stakeholders, and to use this knowledge to inform policy and practice.

The cities featured in the Urban Nature Atlas were selected to ensure appropriate representation of diverse urban conditions and environmental settings and considering their geographical distribution. The solutions, presented through an interactive map, are (either physical or discursive) interventions with 'function-enhancing' features, responding to a range of urban sustainability challenges. Approximately 200 NbS cases aim to address the challenges of CCA in various urban settings: external building greens, grey infrastructure with green features, parks, allotments and community gardens, blue areas, green indoor areas, green areas for water management (GI/BGI) and derelict areas. The Urban Nature Atlas clearly focuses on the urban sector, but it also covers other sectors considered in the report.

All of the above solutions are assessed in relation to the key urban sustainability challenges they address and are explicitly labelled according to the Sustainable Development Goals (SDGs) they are relevant to. Therefore, they can be linked to many core societal challenges, i.e. CSC1 on improving society's resilience to extreme weather- and climate-related events; CSC3 on

preserving habitat, reducing biodiversity loss and increasing green and blue spaces; CSC4 on water management; and CSC5 on social justice, cohesion and equity and reducing risk for groups of society highly vulnerable to climate change.

### ***NWRM***

The Natural Water Retention Measures (NWRM) platform gathers information at EU level on NbS and GI applied to the water sector (NWRM, 2020). NWRM are widely recognised as nature-based green solutions that contribute to the objectives of the EU green infrastructure strategy and the Water Framework and Flood Directives. The main focus of NWRM actions is to enhance, as well as preserve, the water retention capacity of aquifers, soil and ecosystems with a view to improving their status, with multiple benefits including climate resilience and DRR. The platform contains a catalogue of 53 measures addressing four sectors (agriculture, nature, urban, forestry) and a large number of case studies across Europe, illustrating implementation of these NWRMs and links to impacts, benefits and policy objectives.

Regarding the core societal challenges, the content of the NWRM platform is particularly relevant to address CSC1 (improving society's resilience to extreme weather- and climate-related events) and CSC4 (water management).

### ***OPPLA***

The OPPLA platform is the EU repository for NbS (OPPLA, 2020b). It is an information hub capturing and selecting emerging knowledge on NbS and facilitating its sharing to support environmental management. It hosts the results of all EU research and innovation projects on NbS and provides a 'knowledge marketplace, collecting the latest thinking on natural capital, ecosystem services and NbS. The content of the platform is relevant for both CCA and DRR. It includes a wide range of case studies, networking and collaboration tools, and also commercial services. OPPLA's set of case studies aims to facilitate sharing and browsing examples of NbS from around Europe and beyond. The platform includes around 300 case studies covering sectors such as water management, forestry, agriculture, cities and coastal areas.

The target audience of the platform includes science, policy and practice, the public, private and voluntary sectors, large and small organisations, and individuals. Over 60 universities, research institutes, agencies and enterprises contribute to OPPLA as part of a joint activity between the OPERAs and OpenNESS projects, funded by the European Commission's seventh framework programme. The content in OPPLA is relevant to addressing all of the core societal challenges.

### **Panorama**

Panorama — Solutions for a Healthy Planet — is a partnership initiative involving multiple interlinked thematic communities (Panorama, 2020), managed by the IUCN (International Union for Conservation of Nature) and GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH). The Panorama web portal documents and promotes (over 600) successfully applied and replicable solutions to conserve or improve the health of biodiversity and ecosystems that have demonstrated positive impacts on nature conservation and/or sustainable development, across a range of regions and sectors around the world, with more than 50 cases located in Europe. These solutions (case studies) may be entire projects or only some aspects/phases/activities of a project. Even without a direct policy mandate, the content of the platform is very relevant (and tagged) for the Aichi targets of the strategic plan for biodiversity 2011-2020 and to several SDGs of the 2030 agenda for sustainable development.

The platform has a section specifically devoted to mainstreaming ecosystem-based adaptation, featuring (more than 130) solutions worldwide, including a dozen examples in Europe. Ecosystem-based adaptation cases are here understood as a subset of NbS, specifically focusing on CCA. The ecosystem types encompassed concern the following sectors: agriculture, desert, forests, marine and coastal, freshwater, grasslands, and the urban and built environment.

They explicitly address climate, ecological, economic and social challenges, covering the whole spectrum of the core societal challenges tackled in this report.

### **ThinkNature**

The ThinkNature platform is a knowledge hub dedicated to NbS that provides access through dynamic map viewers to relevant project web sites, platforms, case studies and other resources on state-of-the-art practice (ThinkNature, 2020). The platform is an output of the Horizon 2020 (2016-2019) project ThinkNature — Development of a multi-stakeholder dialogue platform and think tank — supporting the understanding and promotion of NbS at local, regional, EU and international levels. The NbS featured encompass 'actions inspired by, supported by, or copied from nature that deploy various natural features and processes, are resource efficient and adapted to systems in diverse spatial areas, facing social, environmental, and economic challenges'. The five main goals include both CCA and DRR, and the topics cover ecosystem-based adaptation, ecosystem-based DRR, GI/BGI and sustainable/ecosystem-based management and all the sectors considered in this report.

The types of NbS are also classified according to the global challenges and the SDGs they relate to, including climate change, sustainable energy, food security, and economic and social development. Therefore, it can be deemed that the content of the platform is relevant to all of the core societal challenges considered in this report.

### **weADAPT**

WeADAPT is a global collaborative platform facilitating learning and exchange on CCA among practitioners, researchers and policymakers (weADAPT, 2020).

The content of weADAPT focuses on CCA but is also relevant to DRR due to the intrinsic link between these fields. It has a specific section on disasters and climate change and on ecosystem-based adaptation, including concept description, links to further resources (publications and projects) and links to other initiatives. The section on ecosystem-based adaptation is currently being updated. It is being redesigned to focus on NbS in general and will feature sub-topic areas, including those on landscape and ecosystem restoration, ecosystem-based adaptation, ecosystem-based DRR and nature-based agricultural systems. Overall, the platform also has a database with more than 2 400 items relevant to a wide range of sectors, including water management, forestry, agriculture, cities and coastal areas. These, and the profiles of users registered on the sites, are searchable by filters (including hazard, context and sector). The database also includes adaptation case studies in Europe and worldwide that can also be searched by means of a visualisation feature called the Adaptation layer (map viewer).

The content in weADAPT provides information that contributes to the core societal challenges, in particular those with direct links to climate change impacts (CSC1 on improving society's resilience to extreme weather- and climate-related events, CSC6 on climate change impacts in health and well-being and CSC5 on reducing risk for groups of society highly vulnerable to climate change).

### **Platform mapping**

The following three tables provide a summary overview (mapping) of some of the main features of the selected European platforms, with the aim of facilitating exploring and analysing the information.

Table A5.1 shows their general elements, namely policy relevance/mandate, target audience/intended users, content geographical coverage and governance level and some interesting functionalities and features.

Table A5.2 illustrates their coverage of the NbS topics relevant to this report, taking into account the definitions in Chapter 1 of this report and on Climate-ADAPT <sup>(18)</sup>.

Table A5.3 illustrates their contribution to providing relevant knowledge and potential support for solving the core societal challenges, as defined in Chapter 1, Table 1.1.

Table A5.2 and Table A5.3 are complemented by graphs depicting the occurrence of the topics covered and the core societal challenges addressed, thus assisting the investigation, comparison and identification of common elements in the mapping results.

**Table A5.1 Overview of European platforms — general elements**

Platform		BISE	Climatescan	Climate-ADAPT	DRMKC	Natural Hazards — Nature-based Solutions platform	Nature-based Solutions Initiative	Naturvation Urban Nature Atlas	NWRM	OPPLA	Panorama	ThinkNature	weADAPT	
		Policy relevance / mandate												
The platform has a policy mandate or is directly linked to a policy regulation		✓		✓	✓		✓		✓					
		Target audience/profile												
Governmental decision-makers (any level)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Scientists		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	
Practitioners (implementation)		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Private/business sector			✓		✓	✓	✓			✓	✓			
General public		✓	✓		✓		✓			✓				
		Content, geographical coverage and governance level												
Geographical coverage/governance level		Local		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Regional		✓		✓	✓		✓		✓	✓	✓	
		National	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Transnational		✓	✓	✓	✓					✓	✓	✓
		European	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Global		✓		✓	✓	✓					✓	✓
		Functionalities and other features												
Capacity building/training (online help, webinars, fora)			✓	✓			✓	✓		✓	✓	✓	✓	
Case studies <sup>(9)</sup>			✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	
Communication (newsletter, news, events)		✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	

<sup>(18)</sup> <https://climate-adapt.eea.europa.eu/eu-adaptation-policy/sector-policies/ecosystem/document-definitions-ebi-3.pdf>

Platform	BISE	Climatescan	Climate-ADAPT	DRMKC	Natural Hazards — Nature-based Solutions platform	Nature-based Solutions Initiative	Naturvation Urban Nature Atlas	NWRM	OPPLA	Panorama	ThinkNature	weADAPT
	Functionalities and other features											
Interactive tools (map viewers, decision support tools, guidance, info submissions)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Climate services <sup>(b)</sup>		✓	✓									✓
Searchable database		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connections with other platforms <sup>(c)</sup>		✓	✓	✓							✓	✓

**Note:** Tick-boxes were selected in consultation with platform managers, except the entries for NWRM and OPPLA. <sup>(a)</sup> Examples of actions implemented in practice that may inspire others. <sup>(b)</sup> The platform has a specific climate services component beyond links that offers users climate information and products. <sup>(c)</sup> The platform has connections with other platforms beyond simple links, e.g. cross-harvesting elements or databases.

**Source:** EEA.

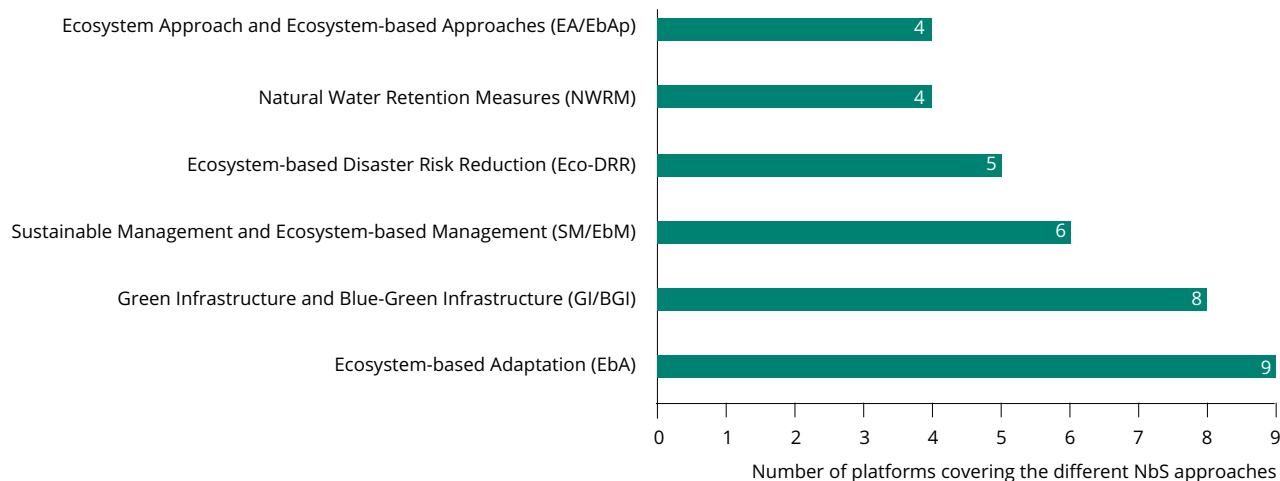
**Table A5.2 Overview of European platforms — content coverage of topics relevant for nature-based solutions**

	NbS approaches					
	EA/EbAp	GI/BGI	EbA	SM/EbM	NWRMs	Eco-DRR
BISE		✓				
Climatescan	✓	✓	✓	✓	✓	✓
Climate-ADAPT	✓	✓	✓	✓	✓	
DRMKC						✓
Natural Hazards — Nature-based Solutions platform	✓	✓	✓	✓	✓	✓
Nature-based Solutions Initiative			✓			
Naturvation Urban Nature Atlas		✓	✓			
NWRM		✓			✓	
OPPLA	✓	✓	✓	✓		
Panorama			✓	✓		
ThinkNature		✓	✓	✓		✓
weADAPT			✓			✓

**Note:** Tick-boxes were selected in consultation with platform managers, except the entries for NWRM and OPPLA.

**Source:** EEA.



**Figure A5.1** Number of platforms covering the various approaches to nature-based solutions

**Note:** Based on the list of platforms selected for this study.

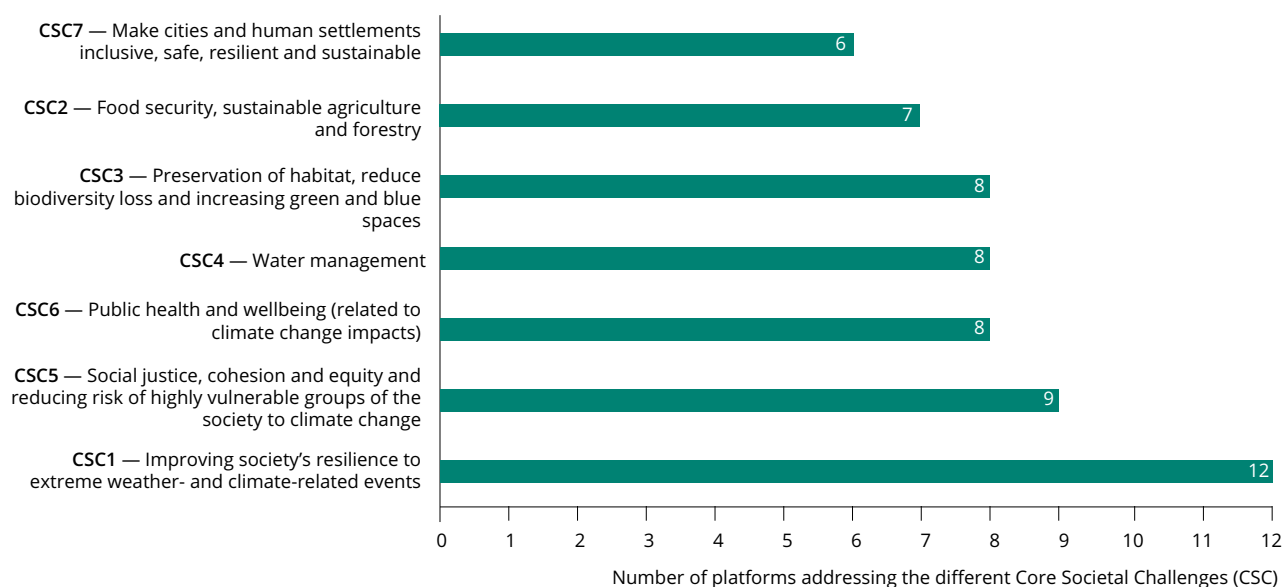
**Source:** EEA.

**Table A5.3** Overview of European platforms — content relevant to the core societal challenges

	Core societal challenges						
	CSC1	CSC2	CSC3	CSC4	CSC5	CSC6	CSC7
	Improving society's resilience to extreme weather- and climate-related events	Food security, sustainable agriculture and forestry	Preserving habitat, reducing biodiversity loss and increasing green and blue spaces	Water management	Social justice, cohesion and equity and reducing risk for groups of society highly vulnerable to climate change	Public health and well-being (related to climate change impacts)	Make cities and human settlements inclusive, safe, resilient and sustainable
BISE	✓	✓	✓				
Climatescan	✓	✓	✓	✓	✓	✓	✓
Climate-ADAPT	✓				✓	✓	
DRMKC	✓						
Natural Hazards — Nature-based Solutions platform	✓	✓	✓	✓	✓	✓	✓
Nature-based Solutions Initiative	✓	✓	✓	✓	✓	✓	✓
Naturvation Urban Nature Atlas	✓		✓	✓	✓		
NWRM	✓			✓			
OPPLA	✓	✓	✓	✓	✓	✓	✓
Panorama	✓	✓	✓	✓	✓	✓	✓
ThinkNature	✓	✓	✓	✓	✓	✓	✓
weADAPT	✓				✓	✓	

**Note:** Tick-boxes were selected in consultation with platform managers, except the entries for NWRM and OPPLA.

**Source:** EEA.

**Figure A5.2** Number of platforms addressing the various core societal challenges

**Note:** Based on the list of platforms selected for this study.

**Source:** EEA.

### A5.2.2 National level

This section complements the previous one with a short account of the knowledge platforms addressing NbS for CCA and DRR at the national level in Europe.

In order to collect information on the existence of such platforms and of their characteristics with the same level of detail as at the European level (i.e. target audience, geographical coverage, content, structure and functionalities), a questionnaire was sent to the relevant EEA/Eionet national reference centres (in June 2020). However, only 13 (out of 32) responded, and the subsequent Eionet consultation (in August 2020) provided some additional information for only one more country. Therefore, a representative overview cannot be derived from such limited data. However, we can report that six European countries have a knowledge platform addressing NbS for CCA and DRR. Specifically, five countries (Austria, Montenegro, Norway, Poland and Spain) have a national platform on CCA or DRR that include some elements of NbS.

Furthermore, two countries have a national sectoral platform encompassing the NbS topics: Austria on water and biodiversity and Czechia on national hazards, focusing on droughts and floods. (The other eight countries<sup>(19)</sup> replied that they do not have a specific national knowledge platform covering NbS and related concepts.)

Therefore, it can be deduced that currently there are only a few examples of national knowledge platforms tackling NbS and related concepts for CCA and DRR across Europe that complement the well represented European landscape of NbS knowledge platforms. This conclusion points to room for improvement at the national level.

On the other hand, there are European platforms that gather relevant national information on NbS in a systematic way. For example, BISE gathers data from all EU Member States regarding their GI national policy framework, implementation, mainstreaming and financing of GI, the knowledge base and the challenges and opportunities for GI development.

<sup>(19)</sup> Albania, Bosnia and Herzegovina, Bulgaria, Cyprus, France, Ireland, Italy and Slovenia.