



Submission by Slovenia and the European Commission on behalf of the European Union and its Member States

Adaptation Communication of the European Union

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Introduction

The European Union (EU) and its Member States are fully committed to the Paris Agreement, its long-term goals and associated ambition cycle, including on adaptation, in light of the latest available science and aims to ensure a just transition. This submission on behalf of the EU and its Member States constitutes the EU adaptation communication (ADCOM). It is submitted in accordance with Article 7 of the Paris Agreement, and the Conclusion of the Council of European Ministers for the Environment on the new EU Adaptation Strategy (see Annexes 1 and 2). The submission takes due consideration of the guidance from the Katowice Climate Package in relation to the adaptation communication and the transparency framework.

It is worth noting that the EU and its Member States contribute to the objectives of the Paris Agreement through many processes and activities, including information on our adaptation actions through National Communications and other existing reports under the UNFCCC. The EU will submit such communications to the UNFCCC in alignment with the ambition mechanism. EU Member States are responsible for their adaptation and risk management policies.

This ADCOM systematises the latest developments on adaptation at the EU level, in particular the 2021 EU Adaptation Strategy. The document does not aim to reflect in an exhaustive manner all the progress achieved by the EU together with its Member States. Instead, to keep this ADCOM useful for all stakeholders, we chose to showcase a selection of good practices, actions and lessons learnt from EU and Member State programmes and initiatives. More information from EU Member States regarding their strategies, plans and actions, are available at the Climate-ADAPT portal,¹ which shall be viewed as an integral part of this ADCOM (Annex 3). In addition to the EU ADCOM, some EU Member States have declared their intention to submit their own national ADCOMs, and these shall be viewed as an integral part of this ADCOM.

Furthermore, the EU and its Member States are engaged in communicating relevant information, experiences and lessons learned on adaptation planning, implementation and evaluation via submissions and workshops in different areas of negotiations, e.g. Nairobi Work Programme, National Adaptation Plans (NAP) Expo and Capacity Building. The EU will continue to engage in international joint efforts to share information and knowledge about approaches to adaptation and practical experiences and lessons learned.

(a) National circumstances, institutional arrangements and legal frameworks

The EU is a unique economic and political union of 27 European countries. **Climate change is an area of shared competence between the EU and its Member States, therefore both may legislate and adopt legally binding acts in this regard. The EU is working across all sectors and policies to cut greenhouse gas emissions and make the transition to a clean, climate neutral and sustainable economy**, as well as addressing unavoidable consequences of climate change. To contribute to keeping global rise of temperature well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, as established under the Paris Agreement, the EU has a range of policies and instruments in place for lowering emissions and driving the transition towards climate neutrality.

Climate action is at the forefront of the European Green Deal, the roadmap presented by the European Commission to transform the EU's economy.² The European Green Deal is an ambitious package of measures that should enable European citizens and businesses to benefit from a sustainable green transition. The initiative sets out the

¹ <https://climate-adapt.eea.europa.eu>

² https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

Commission's plan on how it aims to enable the EU to tackle climate and environmental-related challenges and introduces the green oath to "do no harm".

The recently adopted European Climate Law,³ a key initiative under the European Green Deal, enshrines into law the EU's commitment to reaching climate neutrality by 2050 and the intermediate target, as also contained in its enhanced Nationally Determined Contribution, of reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

Furthermore, climate action is now incorporated into all of the main EU spending programmes, with 30% of the EU budget for 2021-2027 to be spent on climate-related initiatives, both in adaptation and mitigation. In addition, the EU is facilitating private investment in mitigation and adaptation. In June 2020, the Taxonomy Regulation on sustainable activities was adopted, recognising climate change mitigation and adaptation as two of the six environmental objectives that can be pursued to define an economic activity as sustainable.⁴ The European Investment Bank (EIB) through its Climate Strategy adopted in 2020 will also be focusing on adaptation from the very earliest stages of project preparation through the provision of advisory services and technical assistance.

The EU adaptation policy is an integral part of the European Green Deal. The European Climate Law recognises adaptation as a key component of the long-term global response to climate change. It requires Member States and the Union to enhance their adaptation action by introducing a requirement for the implementation of national strategies and regular progress assessments as part of the overall EU governance on climate action.

In addition, the new EU Adaptation Strategy, attached in full as Annex 1 to this submission, will scale up and strengthen the ongoing drive to mainstream adaptation considerations in EU legislation and instruments, as the need to adapt affects almost the entire spectrum of EU policy (see section C below). The EU Adaptation Strategy is aligned with the Paris Agreement, the Habitat III new Urban Agenda, the 2030 Agenda and its Sustainable Development Goals, the Sendai Framework for Disaster Risk Reduction, the Convention on Biological Diversity, the United Nations Convention to Combat Desertification (UNCCD) and other relevant international processes.

Examples of good practices in the EU Member States:

Sweden is one of the EU Member States aiming to mainstream climate resilience into all relevant policy fields, and in this way advance the implementation of climate adaptation. To do this, the Swedish Government commissioned 53 authorities and county administrative boards to initiate, support, and follow up on adaptation within their area of responsibility.⁵

Besides its National Adaptation Strategy and Plan, Portugal is currently preparing its National Roadmap for adaptation. The roadmap will help identify investment needs and costs, including cost of inaction to support Portugal's adaptation policies on the ground.

(b) Impacts, risks and vulnerabilities

With record high temperatures in 2020 both globally and across much of Europe, and with a clear message from climate research that temperatures will continue to increase, the

³ https://ec.europa.eu/clima/policies/eu-climate-action/law_en

⁴ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

⁵ http://www.klimatanpassning.se/en?pk_vid=4952650c3941ba7016257525102e0154

urgency to adapt is undeniable.^{6,7} Although climate mitigation is the primary way to reduce, or even avoid, some of the impacts of climate change,⁸ stopping all greenhouse gas emissions would not halt the climate impacts that are already occurring and are projected to increase for decades to come.

The frequency and severity of climate and weather extremes is increasing in Europe.⁹

This has caused a surge in the number of, and damages from, weather and climate-related disasters over the past two decades.¹⁰ These extremes range from unprecedented forest fires and heatwaves above the Arctic Circle to devastating droughts in the Mediterranean region; and from hurricanes ravaging in the EU's outermost regions to forests decimated by unprecedented bark beetle outbreaks across the continent. Slow onset events, such as desertification, loss of biodiversity, land and ecosystem degradation, ocean acidification or sea level rise are equally destructive in the long term and likely reinforce extreme weather events.

Climate change impacts are having far-reaching effects in the EU, affecting all economic sectors and ways of life.

To mention one specific sector, water shortages in the EU have affected economic activities as diverse as agriculture, aquaculture, tourism, power plant cooling, and cargo shipping on rivers. It affects not only the economy, but also the health and well-being of Europeans, who increasingly suffer from heatwaves. The deadliest disaster of 2019 was the European heatwave with 2,500 deaths.¹¹ Both globally and in Europe, climate change disproportionately affects vulnerable groups such as the elderly, persons with disabilities, displaced persons, or socially marginalised groups (see section H below). It further poses risks to food security, and worsening existing social inequalities. Climate change also cause non-economic losses such as threats to cultural heritage, biodiversity and ecosystem services. On top of this, the EU already is, and will increasingly be, affected by climate impacts outside Europe, through cascading and spill over effects on trade or migration.

Economic losses from more frequent climate-related extreme events are increasing.

In the EU, these losses already average around EUR 12 billion per year.¹² Conservative estimates show that exposing today's EU economy to global warming of 3°C above pre-industrial levels would result in an **annual loss of at least EUR 170 billion** (1.36% of EU GDP¹³) if no adaptation action is taken. A recent Horizon 2020 project, COACCH,¹⁴ estimates costs of inaction in Europe in 2050 to be close to EUR 200 billion per year in a 4°C pathway, and more than EUR 100 billion per year in a 2°C pathway. Slow onset sea level rise is also an increasing worry for coastal areas, which produce approximately 40% of the EU GDP and are home to circa 40% of its population. Losses are distributed unevenly, harming regions that may already face social, ecological and economic challenges like low growth, high youth unemployment or are vulnerable due to its physical characteristics (e.g. low-lying coastal areas).

Drought provides a good example of the economic consequences of current climate change in the EU.

Many European regions are already facing more frequent, severe, and longer lasting droughts. Droughts can have cascading effects; for example, they reduce water

⁶ Copernicus Climate Change Service (2021) 2020 was the warmest year on record for Europe globally, 2020 ties with 2016 for warmest year recorded. Retrieved from <https://climate.copernicus.eu/2020-warmest-year-record-europe-globally-2020-ties-2016-warmest-year-recorded>

⁷ WMO (2021) WMO confirms 2020 was one of the three warmest years on record. Retrieved from <https://public.wmo.int/en/media/press-release/2020-was-one-of-three-warmest-years-record>

⁸ Feyen L., Ciscar J.C., Gosling S., Ibarreta D., Soria A. (editors) (2020). Climate change impacts and adaptation in Europe. JRC PESETA IV final report. EUR 30180EN, Publications Office of the European Union, Luxembourg, ISBN 97

⁹ <https://www.eea.europa.eu/highlights/soer2020-europes-environment-state-and-outlook-report>

¹⁰ <https://www.undrr.org/news/drrday-un-report-charts-huge-rise-climate-disasters>

¹¹ <https://reliefweb.int/report/world/european-summer-heatwaves-most-lethal-disaster-2019-says-international-research-group>

¹² 2021 EU Adaptation Strategy: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:82:FIN>

¹³ <https://ec.europa.eu/jrc/en/peseta-iv/economic-impacts>

¹⁴ Horizon 2020 project COACCH (2018). The Economic Cost of Climate Change in Europe: Synthesis Report on State of Knowledge and Key Research Gaps. Policy brief by the COACCH project. Editors: Paul Watkiss, Jenny Troeltzsch, Katriona McGlade. Published May 2018. (pg. 56).

levels in rivers and ground water, stunt tree and crop growth, increase pest attacks and fuel wildfires. In Europe, most of the losses caused by drought (around EUR 9 billion/year) affect agriculture, the energy sector and the public water supply. Extreme droughts in western and central Europe in 2018, 2019 and 2020 caused considerable damage. In 2018 alone, climate-related agricultural damages amounted to some EUR 2 billion in France, EUR 1.4 billion in the Netherlands, and EUR 770 million in Germany. With global warming at 3°C, droughts would happen twice as often and the absolute annual drought losses in Europe would increase to EUR 40 billion/year, with the most severe impacts in the Mediterranean and Atlantic Regions.¹⁵

Moreover, conditions for vital ecosystems and biodiversity, which provide critical services for mitigation (e.g. carbon sinks) and adaptation (e.g. protection against floods, desertification, water and air purification) are worsening. This is caused by a combination of climate change and other factors such as unsustainable resource use, pollution etc.¹⁶

Examples of good practices in the EU Member States:

To strengthen knowledge and educate stakeholders about climate change, Croatia has established its national “Adaptation to climate change” portal. It provides information on expected climatic changes, impacts and vulnerabilities for different sectors in the country, with the aim to support implementation of its national adaptation strategy.¹⁷

Poland has developed a Guide to Investment Preparation Respecting Climate Change Mitigation and Adaptation as well as Resilience to Natural Disasters. The guide aims to help project developers and investors by providing methodologies and suggestions concerning how climate issues should be included in the process of developing investments and projects.¹⁸

(c) Adaptation priorities, strategies, policies, plans, goals and actions

The EU has taken action to boost its resilience over the past years under the 2013 Adaptation Strategy.¹⁹ All Member States have a national adaptation strategy or plan; adaptation has been mainstreamed into the EU’s policies and long-term budget; and the Climate-ADAPT platform²⁰ has become a key reference for knowledge on adaptation. The Global Commission on Adaptation recognised the EU as a pioneer in integrating considerations of climate risk into decision-making.²¹

Since 2013, however, the climate change has become even more evident, and it has been recognised as a climate emergency by the European Parliament,²² several Member States and many European cities. The Council of the EU concluded in January 2020 that climate change is “an existential threat”.²³ The EU endorsed the 2020 Leaders’ Pledge for Nature,²⁴ to tackle jointly the climate change and biodiversity crisis. The focus on the green transition in the EU Recovery and Resilience Facility and the next generation territorial cohesion programmes provide an opportunity to frontload investments and reforms that can help increase resilience to climate shocks as well as accelerate the decarbonisation of the

¹⁵ PESETA IV report <https://ec.europa.eu/jrc/en/peseta-iv/droughts>

¹⁶ https://ec.europa.eu/jrc/sites/default/files/pesetaiv_summary_final_report.pdf

¹⁷ <https://prilagodba-klimi.hr/>

¹⁸ https://klimada.mos.gov.pl/wp-content/uploads/2018/02/Poradnik-przygotowania-inwestycji-z-uwzgl%C4%99dnieniem-zmian-klimatu-ich-%C5%82agodzenia-i-przystosowania-do-tych-zmian-oraz-odporno%C5%9Bci-na-kl%C4%99ski_ver_5_2_sierpnia_2017.pdf

¹⁹ Evaluation of the EU Strategy on adaptation to climate change, [SWD/2018/461 final](https://www.ec.europa.eu/transport/policies/air/evaluation-of-the-eu-strategy-on-adaptation-to-climate-change_en)

²⁰ <https://climate-adapt.eea.europa.eu/>

²¹ <https://gca.org/reports/adapt-now-a-global-call-for-leadership-on-climate-resilience/>

²² <https://www.europarl.europa.eu/news/en/press-room/20191121IPR67110/the-european-parliament-declares-climate-emergency>

²³ <https://data.consilium.europa.eu/doc/document/ST-5033-2020-INIT/en/pdf>

²⁴ <https://www.leaderspledgefornature.org/>

economy. At least 37% of the spending under the Recovery and Resilience Facility will be dedicated to climate mitigation and adaptation. For the private sector, the EU taxonomy on sustainable activities will provide the framework to facilitate climate-resilient investments.

On 24 February 2021, the European Commission adopted a new EU strategy on adaptation. This strategy builds on the experience of the EU and its Member States' work since 2013, increases ambition, and expands to cover new areas and priorities. In essence, the new strategy outlines a long-term vision for the EU to become a climate-resilient society, fully adapted to the unavoidable impacts of climate change by 2050. Complementing the EU's ambitious goal to become climate neutral by 2050, this strategy aims to enhance the adaptive capacity of the EU, reduce its vulnerability to the impacts of climate change and strengthen its resilience, in line with the Paris Agreement and the European Climate Law. This strategy also reflects the EU's goal to act as a driving force for international adaptation action and climate resilience. An outline of the objectives and actions envisaged is included below:

1. Smarter adaptation	<ol style="list-style-type: none"> 1. Pushing the frontiers of knowledge on adaptation 2. More and better climate-related risk and losses data 3. Make Climate-ADAPT the authoritative European platform for adaptation knowledge
2. More systemic adaptation	<ol style="list-style-type: none"> 4. Improving adaptation strategies and plans 5. Fostering local, individual, and just resilience 6. Integrating climate resilience in national fiscal frameworks 7. Promoting nature-based solutions for adaptation
3. Faster adaptation	<ol style="list-style-type: none"> 8. Accelerating the rollout of adaptation solutions 9. Reducing climate-related risk 10. Closing the climate protection gap 11. Ensuring the availability and sustainability of freshwater
4. Stepping up international action for climate resilience	<ol style="list-style-type: none"> 12. Increasing support for international climate resilience and preparedness 13. Scaling up international finance to build climate resilience 14. Strengthen global engagement and exchanges on adaptation

The strategy focuses on improving knowledge of climate impacts and adaptation solutions, stepping up adaptation planning and climate risk assessments, accelerating adaptation action; and helping to strengthen climate resilience globally with a focus on Small Island Development States (SIDS) and Least Developed Countries (LDC). It sets out a whole-of-society approach, with particular consideration for those EU citizens who are most vulnerable, to guarantee that resilience is achieved in a just, inclusive and fair way.

Full implementation of the actions of the strategy would put Europe in a much better position to face climate impacts already by 2030. This would mean adaptation awareness and planning spread to every single local authority, company and household; adaptation implementation well underway for those most affected; and global leadership in areas such as climate services, climate proofing, or nature-based solutions. Full implementation of the international pillar of this strategy would also position the EU as a key partner for developing country Parties in their pathways to climate resilience.

On 10th June 2021, the Council of Ministers of the EU endorsed the new EU Adaptation Strategy. The endorsement by EU Ministers is annexed to this submission (see the Council Conclusion in Annex 2).

Further to the EU Adaptation Strategy, the European Climate Law provides the foundation for increased ambition and policy coherence on adaptation. It sets both the

framework for achieving climate neutrality and the ambition on adaptation by 2050 by integrating the internationally shared vision for action into EU law (i.e. the global goal on adaptation in Article 7 of the Paris Agreement and Sustainable Development Goal 13). The Climate Law commits the EU and its Member States to make continuous progress to boost adaptive capacity, strengthen resilience and reduce vulnerability to climate change.

Given the systemic nature of adaptation policy, adaptation actions will be implemented in an integrated manner with other European Green Deal initiatives such as the Biodiversity Strategy,²⁵ Renovation Wave,²⁶ Farm to Fork Strategy,²⁷ the Taxonomy Regulation on sustainable activities,²⁸ the Circular Economy and Zero Pollution Action Plans,²⁹ ³⁰ Forest Strategy,³¹ Soil Strategy,³² Sustainable and Smart Mobility Strategy,³³ and Renewed Sustainable Finance Strategy.³⁴ Furthermore, adaptation to climate change in the EU and in EU partner countries will be strengthened through the national implementation of relevant international conventions and agreements.

The EU Adaptation Strategy highlights that the EU will continue working with other Parties to the UNFCCC and the Paris Agreement to help strengthen adaptation efforts and related activities to averting, minimising and addressing loss and damage associated with climate change. The strategy further outlines the need for targeted support to partner countries in the design and implementation of disaster risk finance strategies to increase climate resilience. The strategy also highlights what the EU is already doing, for example supporting countries to draw on data from services such as Copernicus, the European Union's Earth Observation Programme, to assess climate risks and prepare adequate responses.³⁵ In addition, both the new strategy and the recent Communication on the EU's humanitarian action³⁶ advocate for a sustained and increased investment in enhancing resilience and adaptation in the most disaster-prone countries and regions.

Examples of good practices in the EU Member States:

Malta adopted its National Climate Change Adaptation Strategy (NAS) in 2012. The Strategy identifies recommendations across several climate vulnerable sectors such as water, agriculture, infrastructure, buildings, human health and tourism. The Strategy is currently in the process of being updated, with a public consultation taking place as part of the Maltese Low Carbon Development Strategy.

The Greek National Adaptation Strategy is delivered through 13 Regional Adaptation Action Plans (RAAPs) to account for the different climatic, socio-economic and environmental conditions throughout the country. Each RAAP defines its priority areas on the basis of the specificities and characteristics identified for the region.

In 2019, Latvia adopted its National Plan for Adaptation to Climate Change. The plan stretches until 2030 and contains more than 80 concrete adaptation measures to address

²⁵ https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en

²⁶ https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/renovation-wave_en

²⁷ https://ec.europa.eu/food/horizontal-topics/farm-fork-strategy_en

²⁸ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en

²⁹ https://ec.europa.eu/environment/topics/circular-economy/first-circular-economy-action-plan_en

³⁰ https://ec.europa.eu/environment/strategy/zero-pollution-action-plan_en

³¹ https://ec.europa.eu/info/food-farming-fisheries/forestry/forestry-explained_en

³² https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12634-Healthy-soils-new-EU-soil-strategy_en

³³ https://ec.europa.eu/transport/themes/mobilitystrategy_en

³⁴ https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/overview-sustainable-finance_en

³⁵ <https://www.copernicus.eu/en>

³⁶ https://ec.europa.eu/info/publications/communication-eus-humanitarian-action-new-challenges-same-principles_en

climate risks. The plan further aims to increase general awareness of adaptation and foster local climate resilience, engaging local governments to incorporate climate change in their mid-term development programs.

(d) Provision of support to developing country Parties

The EU remains committed to contributing towards the developed countries' goal of jointly mobilising USD 100 billion per year by 2020 and continue their existing collective mobilisation goal through 2025 for climate action. The funding will come from a wide variety of sources – public and private, bilateral and multilateral, and alternative sources of finance – in the context of meaningful mitigation and adaptation action and transparent implementation. The EU is calling for existing and potential contributors to support climate action in developing countries in line with their respective capabilities and responsibilities.

The EU and its Member States are the largest contributors of public climate finance, including to multilateral climate funds. Together, they increased their overall climate finance support to developing countries by 7.4% in 2019 (compared to 2018), amounting to EUR 21.9 billion³⁷, 52% of which was spent on helping EU partners adapt to climate change (including cross-cutting adaptation/mitigation actions). While the EU alone (without the individual Member States) provided EUR 2.5 billion³⁸ to the overall climate finance support in 2019, it aims to further increase this number in the future and mobilise more resources for adaptation action. The EU and its Member States acknowledge the need to better target public finance to leverage private sector funding for adaptation and mitigation action.

As part of the EU budget for 2021 – 2027, the EU is committed to allocate 30% of its external cooperation budget to climate-relevant actions, including through innovative mechanisms such as the European Fund for Sustainable Development Plus, as well as making resources available through bilateral channels and in partnership with Member States (the “Team Europe” approach). The European Commission itself is going to allocate to climate action 30% of the total budget of its almost EUR 80 billion new financial instrument for external action (the Neighbourhood, Development and International Cooperation Instrument) for the period 2021-2027, to complement EU Member States spending. This represents a significant increase compared to the previous 20% target for external climate action, and will amount to some EUR 24 billion for the period 2021-27.

The EU and its Member States also contribute through a number of multilateral and bilateral channels, and allocate resources to Multilateral Development Banks and International Financial Institutions, which in turn have mechanisms in place which allow finance to flow in line with the needs and priorities of beneficiaries. For example, the EU Member States are the largest contributors to the Green Climate Fund's (GCF) first replenishment. The GCF supports the efforts of developing countries to respond to the challenge of climate change. EU Member States also provide 95% of all voluntary funding to the Adaptation Fund (AF). In addition, more than 95% out of the more than USD 180 million pledged to Least Developed Countries Fund (LDCF) in the period from 1 July 2019 to 1 April 2020 came from EU countries.

The EU and its Member States are the world's leading humanitarian aid donors, helping those that are most vulnerable to the impacts of climate change. Disaster preparedness is an integral part of the EU's humanitarian response, with a dedicated budget, and a key element of the EU's long-term disaster risk reduction agenda. 65% of all the EU-funded humanitarian

³⁷ Excluding the United Kingdom. The contribution of the EU alone (without its Member States) amounted to EUR 2.5 billion

³⁸ https://ec.europa.eu/clima/policies/international/finance_en

projects have included a disaster preparedness component over the past 5 years. The EU will further mainstream climate change considerations and environmental factors into humanitarian aid policy and practice and strengthen coordination with development, security and climate/environment actors to build resilience of vulnerable communities.³⁹

In the future, the EU and its Member States will continue to provide public climate finance for adaptation and mitigation in a manner that reflects the demands, needs and priorities of developing countries, in particular the most vulnerable countries. For example, a **technical assistance** facility will be set up to provide support and policy advice to upgrade and implement Nationally Determined Contributions (NDC) under the Paris Agreement. The facility will also support formulating and implementing National Adaptation Plans (NAP), land policies and practices, disaster risk reduction strategies and long-term climate-neutral development strategies.

Furthermore, as part of the implementation of the new EU strategy, the European Union will:

- strengthen the support for the development and implementation of Nationally Determined Contributions and National Adaptation Plans in EU partner countries;
- mainstream conflict-sensitive, anticipatory and preventive climate resilience and preparedness in relevant EU policies and instruments for external action;
- intensify and broaden adaptation support to local authorities in EU partner countries and develop regional programmes, including for countries in the EU Southern and Eastern neighbourhoods, and in candidate and potential candidate countries;
- include climate change considerations in the future agreement on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction;
- aim to increase international climate finance for adaptation through the EU instruments for external action and by leveraging private sector investments;
- promote the design and implementation of disaster risk finance strategies to increase macroeconomic climate resilience in partner countries;
- support partner countries in the design of policies and incentives to promote climate resilient investment, including in nature-based solutions;
- enhance the climate proofing of all EU external investments and actions;
- deepen political engagement on climate change adaptation with international and regional partners, and partner countries;
- increase the pool of knowledge and tools on adaptation available to non-EU countries and promote adaptation in Green Alliances and partnerships.

The EU and its Member States also support partner countries in the development of their National Adaptation Plans, and adaptation monitoring & evaluation systems.⁴⁰ At least 78 countries have received NAP or monitoring and evaluation relevant support through the period 2010-2020, with a majority in Africa, 94% of which was bilateral.

Examples of good practices in the EU Member States:

Since 2017, France's "Adapt'Action" Facility supports 15 climate vulnerable countries and regional organisations in the implementation of their adaptation strategies. The Facility provides technical assistance and capacity-building support to strengthen climate governance,

³⁹ Communication on the EU's humanitarian action: new challenges, same principles, COM(2021) 110

⁴⁰ EU EGA NAP Survey

and helps countries and regions make sure that adaptation is incorporated in their public policies and projects.⁴¹

Spain promotes the exchange of information and experiences as well as capacity building activities on adaptation through the “Ibero-American network of Climate Change Offices”. The network was set up in 2004 with the objective to maintain a fluid and permanent dialogue on climate change with the 22 countries of the Ibero-American region.

The InsuResilience Global Partnership with its 100+ members aims to increase the resilience of poor and vulnerable people in developing countries against climate and disaster risks. Germany launched this key initiative together with France, the Netherlands, UK and other partners. In 2020 alone, 22 programmes in more than 100 countries provided financial protection for 137 million people. The InsuResilience Vision 2025 aims at covering 500 million poor and vulnerable people by 2025.⁴³

The Netherlands International Water Ambition (NIWA) stands for the coherent use of Dutch water related integral international policy making instruments and offers a platform for cooperation among public, private, societal and knowledge partners to strengthen local capacity. NIWA contributes to achieving the SDG agenda and puts climate adaptation at the heart of its work. As part of the NIWA the Netherlands’ “Blue Deal Programme” consists of 17 partnership in 14 countries to strengthen integrated sustainable water management. And the Programme Partners for Water brings knowledge, advice, finance and networks into projects in delta’s and coastal regions across the world for already over a decade. The Netherlands also supports knowledge and expertise on Disaster Risk Reduction in line with the Sendai DRR Framework. Knowledge is mobilized through expert teams supporting governments in finding solutions for upcoming disasters on water and climate change.⁴⁴

(e) Implementation of adaptation actions and plans

1. Progress and results achieved

In recognition of the shared challenges and cross-border nature of climate change, the European Commission has led the development of an EU-wide framework for adaptation. The European Commission started in 2007 by adopting a Green Paper “Adapting to climate change in Europe – options for EU action”. It was followed by the White Paper “Adapting to climate change: Towards a European framework for action” in 2009. These documents led to the adoption of the ‘EU strategy on adaptation to climate change’ in 2013.

Information on the 2013 strategy was submitted to the UNFCCC according to paragraph 12 of Decision 1/CP.20 (“European Union undertakings in adaptation planning”).⁴⁵

Between 2013 and 2020, the number of Member States with a national adaptation strategy went from 15 to 27 (all Member States). The implementation of the 2013 strategy was evaluated in-depth in 2018.⁴⁶ According to the evaluation, the strategy delivered on its objectives, with progress recorded against each of its eight individual actions. The EU was successful in promoting and monitoring action through LIFE projects and the Covenant of Mayors for Climate and Energy.⁴⁷ The strategy has contributed to improve adaptation

⁴¹ <https://www.afd.fr/en/adaptation>

⁴² <http://rioccadapt.com/en/>

⁴³ <https://www.insuresilience.org/>

⁴⁴ <https://www.government.nl/topics/water-management/waterenvoy/netherlands-international-water-ambition>

⁴⁵ https://unfccc.int/files/focus/adaptation/undertakings_in_adaptation_planning/application/pdf/20150602_eu.pdf

⁴⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0738>

⁴⁷ <https://www.covenantofmayors.eu/>

knowledge and to share it to inform decision-making. Through the strategy, adaptation has permeated and guided a wide range of the EU's own key policies and funding programmes, and reinforced links with disaster risk reduction (DRR), infrastructure resilience and the financial sector. However, the evaluation results revealed that adaptation needs had intensified and diversified since 2013, both in the EU and globally.

Examples of good practices in the EU Member States:

Austria has developed a "Natural hazard and climate change check for municipalities" to raise the awareness of municipal decision makers and actors to natural hazards and climate risks. This has helped strengthen risk awareness and the capacity to address these risks in the municipality.⁴⁸

Between 2017–2019, Poland implemented its "Development of Urban Adaptation Plans" project. Focusing on cities with more than 100,000 inhabitants, the project supported 44 Polish cities (representing almost 30% of the country's population) in their development of local adaptation plans, as well as by supporting educational and public awareness raising.⁴⁹

Ireland's National Adaptation Framework identifies the critical role played by local authorities in addressing climate adaptation, and the need for more coordinated action between local authorities. In 2018, Ireland established four Climate Action Regional Offices to develop and implement climate action measures and build capacity related to climate change.⁵⁰

Germany established an Information Centre on Adaptation⁵¹ targeted specifically at local- and regional-level actors. The Centre will support them, by phone or e-mail, through webinars or on location, in planning and implementing adaptation measures and in identifying suitable funding opportunities. It will train and connect these actors with each other and serve as a knowledge hub for best practices in adaptation.

2. Cooperation on enhancing adaptation at the national, regional and international level

At the local level, more than 3,400 cities and towns in the EU are now committed through the Covenant of Mayors to enhancing their climate resilience, reflecting an increase of 780 cities since January 2020.⁵²

Transnational cooperation between EU Member States to adapt to climate change has increased and cuts across EU policies. Water management was the first area to take climate adaptation action on board, e.g. transboundary river basins or catchment areas. There is a long-standing transnational cooperation in energy infrastructure that speeds up the completion of a European electricity grid to prevent widespread black-outs. The same goes for coastal area management where adaptation to climate change is seen as a transboundary issue, in connection with biodiversity conservation and strategies and risk management protocols for natural hazards.

The EU supports the development of regional strategies that involve several countries and integrate the consideration of climate change impacts and adaptation e.g. for the Baltic Sea Region, the Danube Region, the Adriatic and Ionian Region and the Alpine Region. This support aims to reinforce cooperation within these regions to face various challenges and promote a more balanced and climate resilient development.⁵³

⁴⁸ <https://www.naturgefahrenimklimawandel.at/en/vc-ng-kw-english>

⁴⁹ <http://44mpa.pl/urban-adaptation-plans/?lang=en>

⁵⁰ www.caro.ie

⁵¹ <https://www.zentrum-klimaanpassung.de/>

⁵² <https://www.covenantofmayors.eu/en/>

⁵³ <https://climate-adapt.eea.europa.eu/countries-regions/transnational-regions>

Valuable cooperation and exchange of experience is also taking place within the Interest Group on 'Climate Change Adaptation' (IG CCA) of the Network of European Environmental Protection Agencies.⁵⁴

At the international level, EU cooperation with partner countries on issues related to increased adaptation and resilience builds on (available) context specific vulnerability and risk assessments which are based on the needs and priorities expressed by developing countries in their national development plans and budget allocations and adaptation strategies. These strategies include National Adaptation Programs of Action (NAPAs), national strategies on DRR and national action plans on desertification, land degradation and drought. In partnership with other actors, the EU and its Member States support partner countries to accelerate their adaptation planning by strengthening their capacity to access climate financing. More concretely, this is done by setting up or improving their National Adaptation Plans (NAPs) processes or equivalent strategic processes and documents. Such actions focus among other things on: Taking a holistic whole-of-society approach, diversifying livelihoods, promoting gender sensitive adaptation strategies, and establishing monitoring and evaluation systems. It also encourages needs assessments and institution building, improving access to science-based climate information and nature-based solutions such as ecosystem-based adaptation, reducing disaster risks, developing and scaling up risk finance tools, promoting improved agricultural techniques such as agroforestry, soil conservation and water management.

At a local level, the EU promotes and supports the development of local and regional climate action plans (including focus on adaptation) through the Global Covenant of Mayors.

Examples of good practices in the EU Member States:

Hungary, Poland, Croatia, Slovakia and Germany cooperate as part of the "DEEPWATER-CE" project to protect central European water resources through managed aquifer recharge solutions. The project aims to maintain, enhance and secure the balance of groundwater systems impacted by climate change, including through the sustainable recharge of groundwater.⁵⁵

In the framework of the International Commission for the Protection of the Danube River (ICPDR), Austria, Bulgaria, Croatia, Czechia, Germany, Hungary, Romania, Slovakia, Slovenia and the EU work together with five neighbouring countries, are cooperating in cross-border adaptation efforts for the Danube river basin. The ICPDR has developed an updated climate adaptation strategy offering guidance on integration of climate adaptation in planning processes and serves as a reference for national policy makers and other officials.⁵⁶

Spain and Portugal have jointly established a standing cooperation mechanism for adaptation. The mechanism promotes adaptation cooperation between the two countries, with outcomes such as the organisation of the "Adaptation Conference" (Adaptas) organised in 2020. The conference brought together more than 1,500 participants from various countries working on 10 thematic sessions related to climate adaptation.⁵⁷

Between 2019 – 2021, Italy and Croatia developed the "Joint strategies for Climate Change Adaptation in coastal areas" project to support the development of joint Sustainable Energy and Climate Action Plans. Eight Italian and Croatian partners worked together on the project

⁵⁴ <https://epanet.eea.europa.eu/reports-letters/reports>

⁵⁵ <https://www.interreg-central.eu/Content.Node/DEEPWATER-CE.html>

⁵⁶ <https://www.icpdr.org/main/activities-projects/climate-change-adaptation>

⁵⁷ <https://conferencia.lifeshara.com/que-es-adaptas/>

within the Interreg Italy-Croatia Program, with the aim of gathering data, assessing climate risks, planning joint adaptation actions, and raising citizens' awareness.⁵⁸

3. Barriers, challenges and gaps related to the implementation of adaptation

The 2021 EU Adaptation Strategy is based on a detailed impact assessment⁵⁹ analysing the various barriers related to the implementation of adaptation. **The lack of access to actionable solutions is one of the main barriers to adaptation.** Climate change manifests itself in a large number of hazards, impacting almost all sectors. Therefore, the knowledge base required to inform effective action is extensive. It includes uncertainty on how fast and how far the climate will change and affect natural, human and economic systems, and the effectiveness of policies and measures. There is increasing demand to translate the wealth of climate information available into customised, user-friendly tools and action. The EU needs to push the frontiers of adaptation knowledge, and acquire more and better climate-related data and knowledge, including on economic and non-economic losses. The EU Framework Programme and the Climate Knowledge and Innovation Community⁶⁰ already support adaptation innovation, but recent analysis shows the need to step up its efforts.⁶¹ One of the proposed Horizon Europe Missions will be on “Adaptation to Climate Change, including Societal Transformation”. The Mission would test integrated solutions that can achieve the vision of climate-resilience and neutrality by 2050 with an emphasis on citizen engagement. These solutions could then be scaled up and rolled out in Europe and beyond. The Mission proposal aims to support communities to develop solutions for transformative adaptation and scale up deep demonstrations of climate-resilience.

With regard to the EU outermost regions and some Overseas Countries and Territories of the EU Member States, which already face stark adaptation challenges, the EU could benefit from existing experience from **other countries and communities**. For instance, through traditional knowledge, knowledge of indigenous peoples or on community-led and nature-based solutions.

We need a deeper understanding of the climate-related risks for health and greater capacity to counter them. Climate change related health threats are increasing. They are serious and most of them can only be addressed across borders. They include death and injury from heat waves or cold spells, floods or forest fires, and the emergence and spread of infectious diseases and allergens linked to geographical shifts in vectors and pathogens.⁶² Climate change will also increasingly challenge the ability of public health systems to function effectively, e.g. to develop capacities to deal with diseases previously unknown in Europe. The European Commission will pool and connect data, tools and expertise to communicate,

⁵⁸ <https://www.italy-croatia.eu/web/jointsecap>

⁵⁹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD:2021:25:FIN>

⁶⁰ <https://www.climate-kic.org/>

⁶¹ <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/648341591630145546/invention-and-global-diffusion-of-technologies-for-climate-change-adaptation-a-patent-analysis>

⁶² <https://www.eea.europa.eu/publications/healthy-environment-healthy-lives>

monitor, analyse and prevent the effects of climate change on human health, based on a 'One Health' approach. For that purpose, the EU has launched a Climate and Health Observatory.⁶³

Examples of good practices in the EU Member States:

Austria's "Natural Hazard Overview & Risk Assessment" (HORA) platform informs about possible dangers such as floods, storms, hail, lightning and snow leading. This enables private individuals to get a first assessment about the exposure and risks of his/her house or property, and supports the identification of barriers, challenges and gaps for the implementation of adaptation actions in the country.

4. Good practices, lessons learned and information-sharing

As regards **good practices and information sharing**, the European Climate Adaptation Platform Climate-ADAPT is a platform, which includes a database containing quality-checked information that can be easily searched. Climate-ADAPT aims to support Europe in adapting to climate change helping users to access and share data and information on:

- Expected climate change in Europe.
- Current and future vulnerability of regions and sectors.
- EU, national and transnational adaptation strategies and actions.
- Adaptation case studies and potential adaptation options.
- Tools that support adaptation planning.

As regards **lessons learned**:

- Knowledge gaps on adaptation may never be entirely closed, but the added value of EU research and innovation actions since 2013 has been strongly appreciated by stakeholders. This is why the new EU Adaptation Strategy makes the switch from generating knowledge to applying it for decision-making under uncertainty, promoting a precautionary approach, particularly in economic sectors or regions that are potentially more vulnerable, such as agriculture in the Mediterranean regions or the European outermost regions.⁶⁵
- In case of long-term infrastructure investments, climate resilience is essential: it requires, among other things specific adaptation provisions in infrastructure construction standards.⁶⁶ Adaptation initiatives could be better integrated with each other across multiple levels to enhance multilevel governance. Links between adaptation actions at EU level did occur spontaneously but could be better identified and exploited. For example, Climate-ADAPT could provide a better overview of current research projects funded by the EU or operational activities such as the various Copernicus services. In addition, there should be a more frequent exchange of methodologies and findings targeting practitioners and relevant national and EU platforms, e.g. through more interactive tools or webinars.

⁶³ <https://climate-adapt.eea.europa.eu/observatory>

⁶⁴ <https://www.hora.gv.at/>

⁶⁵ Feyen L., Ciscar J.C., Gosling S., Ibarreta D., Soria A. (editors) (2020). Climate change impacts and adaptation in Europe. JRC PESETA IV final report. EUR 30180EN, Publications Office of the European Union, Luxembourg, ISBN 97

⁶⁶ The Commission has requested the European Standardisation Organisations to update standards for climate-resilient infrastructure in the transport, energy and building sectors. See Commission Decision (C(2014)3451).

- The EU needs to work further to promote the international dimension of adaptation, to synchronise with global collective policy and actions on sustainable development, biodiversity and disaster risk reduction, to name just a few.
- On the number of local adaptation strategies, progress differs between Member States. This is probably linked to national circumstances, including whether or not there is binding national legislation requiring local adaptation plans from local authorities.⁶⁷ One of the lessons learnt includes that in order to promote the development and carrying out of local adaptation strategies, the EU should encourage frameworks to enhance local action, mainstreaming across policy areas and increase awareness-raising and technical and financial assistance to local authorities, for example through initiatives such as the Covenant of Mayors.

Examples of good practices in the EU Member States:

To encourage bottom-up adaptation action, Czechia has set up the “Adaptterra” award. The award takes place on a yearly basis and helps identify best practice projects that can then be supported. Best practices are then stored on a database to help inspire professionals and the general public.⁶⁸

Estonia has developed smart storm water systems and sustainable drainage systems for cities, integrating climate adaptation considerations. The project helps reduce pollution and damages caused by heavy rains and floods.⁶⁹

Denmark has developed public-private partnerships focusing on water and resource efficiency. Through such a partnership, Denmark was able to reduce the water consumption by 30% in some of the most water-consuming industries, leading to innovation and reduces use of scarce resources.

5. Monitoring and evaluation

In the EU, monitoring and evaluation has been planned or implemented at different levels, for different purposes and objectives.

The 2013 EU Adaptation Strategy was evaluated in 2018 in accordance with the “Better Regulation Guidelines” of the European Commission. In line with the Commission’s better regulation guidelines, the evaluation was carried out according to five criteria: (i) effectiveness, (ii) efficiency, (iii) relevance, (iv) coherence and (v) EU added value.

In addition, the Commission based its analysis on several sources, either consulted directly or integrated by means of the contractor’s report, e.g. other evaluations linked to actions under the strategy, national strategies and plans from Member States, information provided by Member States under the Monitoring Mechanism Regulation, reports for programmes funded by the European Structural and Investment Funds (ESIF) since 2014 and results of research and innovation projects financed by the EU framework programmes.

As part of its evaluation, the European Commission proposed an ‘adaptation preparedness scoreboard’, that identified key process indicators for assessing Member States’ level of progress along the classical steps of the adaptation policy cycle – preparing the ground for adaptation, assessing risks and vulnerabilities, identifying adaptation options, implementing adaptation action; monitoring and evaluation. The scoreboard was prepared to

⁶⁷ Denmark and France have binding national legislation in place requiring local adaptation plans from local authorities.

⁶⁸ <https://www.adaptterraawards.cz/>

⁶⁹ <https://projects.interreg-baltic.eu/projects/noah-178.html>

display the adaptation progress made by Member States along the adaptation policy cycle, based on the reported information by Member States.⁷⁰

Since 2021, Member States provide reports on their adaptation activities within an EU climate monitoring and reporting system (the Regulation on the Governance of the Energy Union and Climate Action), including information on Member States national adaptation planning and strategies, outlining their implemented or planned actions to facilitate adaptation to climate change. Information reported is publicly available on the Climate-ADAPT country pages (see Annex 3).

More generally, the European Commission regularly monitors **progress towards the Sustainable Development Goals (SDGs)** in an EU context. For this purpose, it coordinated the development of the EU SDG indicator set,⁷¹ including SDG13 on climate action, and keeps it up to date. It also produces regular monitoring reports on progress towards the SDGs in an EU context.⁷²

Examples of good practices in the EU Member States:

In 2015, Finland set up a National Monitoring Group for its National Adaptation Plan. The group consists of more than 20 key stakeholders across sectors, and is responsible for the implementation, monitoring and communication relating to the National Adaptation Plan. The group is chaired by the Finnish Ministry of Agriculture and Forestry, and its members represent relevant ministries, national agencies, research institutes, as well as regional and local actors.

In 2016, Ireland set up its Climate Change Advisory Council (CCAC). The CCAC acts as an independent advisory body in the preparation of Irelands National Adaptation Framework and adaptation plan. It further has a number of reporting obligations, including annual and period reviews of progress on Irelands National Transition Objective. A separate Adaptation Committee was established in 2016.⁷³

(f) Adaptation actions that result in mitigation co-benefits

In the EU Structural and Investment Funds 2014-2020, around 11% of the total budget (around EUR 49 billion) are estimated to go to actions supportive of both mitigation and adaptation. This involves a wide range of areas ranging from social policies to territorial cohesion, fisheries and agriculture. In 2019, around 30% of the climate finance support provided by the EU and its Member States to developing countries benefited cross-cutting projects, serving both climate change mitigation and adaptation purposes.

Extreme weather and climatic change impacts can damage infrastructure and buildings and therefore their mitigation potential e.g. solar panels or thermal insulation after hailstorms. Protecting infrastructure and buildings that are crucial for decarbonisation is one of the priorities of the EU, for example through local water retention that reduces the urban heat island effect with green roofs and walls, as well as enhances carbon sinks. The Renovation Wave and the Circular Economy Action Plan identify both mitigation and climate resilience as twin objectives. Furthermore, the European Commission will explore options to better project climate-induced stress on buildings and to integrate joint climate mitigation and adaptation considerations into the construction and renovation of buildings through Green Public Procurement criteria for public buildings, a Digital Building Logbook, and as part of the

⁷⁰ https://ec.europa.eu/clima/sites/clima/files/adaptation/what/docs/country_fiche_gb_en.pdf

⁷¹ <https://ec.europa.eu/eurostat/web/sdi/indicators>

⁷² <https://ec.europa.eu/eurostat/web/sdi>

⁷³ www.climatecouncil.ie

process to revise the Energy Performance of Buildings Directive and the Construction Products Regulation.

Adaptation of ecosystems to ongoing climate change will also help protect the services they provide to the economy, including the capacity to act as natural sinks for emissions. An example is the EU's Land Use, Land Use Change and Forestry Regulation (LULUCF Regulation), which promotes sustainable management practices in these sectors to preserve their capacity to mitigate climate change, acknowledging the need to maintain and enhance sinks and carbon stocks, e.g. by ensuring they are adapted to inevitable climate change. Similarly, the EU's new biodiversity strategy recognises that nature restoration and conservation is a key nature-based solution for both mitigation and adaptation. The European Commission will propose EU nature restoration targets in 2021 to restore degraded ecosystems, in particular those with the most potential to capture and store carbon and to prevent and reduce the impact of extreme weather. For the same purposes, the European Commission will request and support Member States to ensure there is no deterioration in conservation trends and status of all protected habitats and species by 2030.

Examples of good practices in the EU Member States:

Throughout its actions, Denmark has retained a strong focus on promoting nature-based solutions to adaptation. This includes creating natural spaces in close proximity to cities, including re-establishment of wetlands and forest areas. Beyond their adaptation benefits, these projects also contribute to climate mitigation, enhancing biodiversity and creating recreational spaces.

(g) How adaptation actions contribute to other international frameworks and/or conventions

The EU has mainstreamed the Paris Agreement goals and the **2030 Sustainable Development Goals** in its external action policies and assistance, in order to implement and enhance NDCs, while taking into account the needs and priorities of the developing countries. Exploring synergies across climate adaptation and other Sustainable Development Goals is a priority for major providers of climate finance such as the EU and its Member States.

Climate adaptation action must better leverage synergies with broader work on disaster risk prevention and reduction. Both provide a range of complementary approaches to managing climate risks in order to build resilient societies. The EU seeks better coherence in terms of practices, standards, guidance, targets, resources and knowledge by closer coordination at national level, EU level (under the Union Civil Protection Mechanism) and under the **Sendai Framework for Disaster Risk Reduction**. The EU will prepare an EU-wide climate risk assessment building on the recent "Overview of natural and man-made disaster risks the European Union may face",⁷⁴ relevant research projects, and taking into account existing sector regulations.

Data on climate-related risk and losses are crucial to improve the accuracy of climate risk assessment and weather forecast. This includes public and private losses from climate-related impacts, for example loss of life, ecosystems and biodiversity as well as damage to infrastructure or commercial operations. It also includes the costs of responding and recovering from climate-related impacts. Climate risk and loss data recording and sharing will be enhanced under the new EU Adaptation Strategy, and will support work under the Sendai Framework.

⁷⁴ https://ec.europa.eu/echo/news/european-commission-publishes-new-report-disaster-risks-eu_en

As regards the **Convention on Biological Diversity (CBD)**, the EU is working to better understand the interdependencies between climate change, ecosystems, and the services they deliver (which include adaptation). Major shifts in terrestrial ecosystems and vegetation types on the European Union's land area are expected during this century, including in protected areas. Water cycle and temperature changes, or sea level rise will put ecosystems under additional stress. The EU endorsed the 2020 Leaders' Pledge for Nature⁷⁵, to tackle jointly the climate and biodiversity crises. The EU is also implementing adaptation in a systemic approach together with other European Green Deal initiatives such as the Biodiversity Strategy for 2030, where the EU has set itself nature protection goals in line with the level of ambition sought for the CBD post-2020 Global Biodiversity Framework. In their official contribution to the Framework, the EU and the Member States also stress that 'stepping up action for climate change at all levels and within and across all sectors requires scaling up of biodiversity conservation and ecosystem restoration, investing in nature-based solutions.' The EU aims to integrate adaptation in the update of Natura 2000 and climate change guidance, and in guidelines on biodiversity-friendly afforestation and reforestation, including its new Forest Strategy.

Desertification and land degradation is also a concern in the EU, with 15% of land in the EU subject to erosion. The EU is a party to the **United Nations Convention to Combat Desertification (UNCCD)**, and currently 13 EU Member States have declared that they are affected parties under the Convention. The European Commission funds a large number of projects directly and indirectly targeting the issue of desertification, land degradation and sustainable land management, often with the joint aim of addressing biodiversity loss and climate adaptation.⁷⁶

Examples of good practices in the EU Member States:

Through the LIFE Programme, France has developed the integrated ARTISAN project to create a framework for the deployment of nature-based adaptation solutions in more than 1,000 cities. The project demonstrates and enhances the potential of nature-based adaptation solutions, raising awareness, developing skills among stakeholders and supports projects throughout France (as well as overseas).

(h) Gender-responsive adaptation action and traditional knowledge, knowledge of indigenous peoples and local knowledge systems related to adaptation

To combat climate change, all parts of society need to be involved. Increasing knowledge, coordination and cooperation including by enhancing the participation of indigenous peoples and local communities is an important part of the solution. Furthermore, indigenous peoples and local communities have traditional knowledge essential in both climate adaptation and mitigation. The EU and its member states are supporting and practicing the active involvement of the local communities and indigenous peoples in the EU's and the member states' national climate policies in a number of ways.⁷⁸

As enshrined in the Treaty on European Union, 'the Union is founded on the **values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities**. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between men and women prevail'. Equality is about equal rights for all

⁷⁵ <https://www.leaderspledgefornature.org/>

⁷⁶ https://ec.europa.eu/environment/international_issues/relations_unccd_en.htm

⁷⁷ https://webgate.ec.europa.eu/life/publicWebsite/index.cfm?fuseaction=search.dspPage&n_proj_id=7406

⁷⁸ <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202005131641---HR-05-13-2020%20EU%20Submission%203%20calls%20FWG.pdf>

citizens before the law. The **principle of equality between men and women** underpins all European policies and is the basis for European integration. It applies in all activities as required by Article 8 of the Treaty on the Functioning of the European Union. The EU considers climate action is most effective and sustainable when it builds on capacities and addresses the needs and vulnerabilities of all genders in an equal way. This reflects the dual approach of the EU Gender Equality Strategy of 2020: combining targeted measures to achieve gender equality with strengthened gender mainstreaming.

Human rights are also a key component of EU external action policies, which also includes climate policy. Integrating human rights in climate adaptation policies will benefit both policy areas, increasing their complementarities and synergies and benefiting especially minorities and other vulnerable groups of people to climate change effects. **At the UNFCCC, the EU has also been committed for many years to integrating the gender perspective**, and has been actively involved in the development of both programmes and its enhanced 2019 Gender Action Plan. This Plan seeks to promote the full participation of women in the design of climate policies, and to promote gender-responsive climate policies. In this regard, the EU's new Action Plan on Gender Equality and Women's Empowerment in External Action 2021–2025 (GAP III) dedicates a thematic area of engagement to “Addressing the challenges and harnessing the opportunities offered by the green transition and the digital transformation”.

The EU and its Member States acknowledge, in their official contribution to the development of the post-2020 Global Biodiversity Framework of the Convention of Biological Diversity (CBD) that 'nature-based solutions with safeguards can deliver multiple and cost-effective benefits in addition to climate mitigation, adaptation and disaster risk reduction. Including benefits to human health, food and water security, land degradation neutrality, sustainable development and poverty eradication, gender equality and women's empowerment, respect for human rights and respect for traditional knowledge, the rights of indigenous peoples and local communities.'⁷⁹

The EU also attaches great importance to the public participation of stakeholders such as civil society, academia, and the private sector in the design, implementation and monitoring of climate policies. This bottom-up approach is fundamental to ensure the effectiveness of climate policy by facilitating societal approval of policies. An example of such an initiative which could be replicated elsewhere is the European Climate Pact. The Pact is an EU wide initiative engaging citizens (and in particular youth), social partners and stakeholders, to participate in climate action. This is done by fostering dialogue and the diffusion of science-based information about climate change and its social and equality aspects to build a more sustainable Europe, with specific events and pledges related to adaptation.⁸⁰

As regards cities, the fruitful interaction between EU institutions and European urban stakeholders has great potential to make Europe a world reference point in identifying, testing and applying solutions to the future challenges that cities will face, including climate impacts. Networks focused on climate governance, such as the Global Covenant of Mayors, are significantly empowering cities and accelerating the evolution of urban adaptation governance towards cooperation that is more horizontal and knowledge exchange. In 2016, the launch of the Urban Agenda for the EU⁸¹ provided a new framework for cities' involvement in the development and implementation of EU policy, including adaptation. The Urban Agenda is built upon the principles of partnership and multi-level, cross-border cooperation, and includes a thematic partnership on adaptation. Partnerships comprise cities, Member States, the European Commission, EU organisations (European Investment Bank - EIB, European and Economic Social Committee - EESC and the Committee of the Regions), partner States, experts, umbrella organisations (e.g. EUROCITIES and the Council of European

⁷⁹ https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en

⁸⁰ https://ec.europa.eu/clima/policies/eu-climate-action/pact_en

⁸¹ https://ec.europa.eu/regional_policy/en/policy/themes/urban-development/agenda/

Municipalities and Regions - CEMR), knowledge organisations (e.g. URBACT and ESPON) and other relevant stakeholders (NGOs, business, etc.).

Examples of good practices in the EU Member States:

To combat climate change, Sweden works to enhance the participation of indigenous peoples and local communities such as the Sámi. The Sámi Parliament of Sweden is a body elected by the Sámi people to safeguard and promote Sámi rights, culture, livelihoods and languages. Through its work, the Sámi Parliament has developed an action plan focusing on how climate change affects Sámi culture and economic activities. Four Sámi districts having carried out climate and vulnerability analyses and developed action plans.

⁸² <https://www.sametinget.se/klimat>

⁸³ <http://www.klimatanpassning.se/en/cases/adapting-reindeer-husbandry-to-a-changing-climate-angesa-sami-district-1.172560>

Annex 1: Forging a climate-resilient Europe – the new EU Adaptation Strategy



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Annex 2: Council of the EU – conclusions of 10th June 2021

Stepping up international action

26. WELCOMES the introduction of the international dimension in the Strategy, taking into account that the adverse impacts of climate change are having far-reaching effects both within and outside the Union; RECALLS that the Paris Agreement established the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, and recognized the importance of support for and international cooperation on adaptation efforts; RECOGNIZES the importance of a balanced approach between action on mitigation and adaptation;
27. INVITES the Commission to prepare an EU adaptation communication in line with the Paris Agreement and taking into account to the extent possible the Katowice Climate Package, and to transmit it to the Council with a view to submitting it to the UNFCCC on behalf of the Union and its Member States in time for COP26; UNDERLINES that the Commission's Communication on the new EU Strategy on Adaptation to Climate Change should be the basis for the EU adaptation communication, along with information provided by Member States as detailed below; further INVITES Member States to submit, as appropriate, their national adaptation communications, in line with the Paris Agreement and taking into account to the extent possible the Katowice Climate Package; UNDERLINES that the information provided by Member States on adaptation as part of the reporting requirements under the Governance Regulation could provide a basis for such Member States submissions;

Annex 3: information from EU Member States

Climate-ADAPT Platform: <https://climate-adapt.eea.europa.eu/countries-regions/countries>

Member States information:

Austria:	https://climate-adapt.eea.europa.eu/countries-regions/countries/austria
Belgium:	https://climate-adapt.eea.europa.eu/countries-regions/countries/belgium
Bulgaria:	https://climate-adapt.eea.europa.eu/countries-regions/countries/bulgaria
Croatia:	https://climate-adapt.eea.europa.eu/countries-regions/countries/croatia
Cyprus:	https://climate-adapt.eea.europa.eu/countries-regions/countries/cyprus
Czechia:	https://climate-adapt.eea.europa.eu/countries-regions/countries/czechia
Denmark:	https://climate-adapt.eea.europa.eu/countries-regions/countries/denmark
Estonia:	https://climate-adapt.eea.europa.eu/countries-regions/countries/estonia
Finland:	https://climate-adapt.eea.europa.eu/countries-regions/countries/finland
France:	https://climate-adapt.eea.europa.eu/countries-regions/countries/france
Germany:	https://climate-adapt.eea.europa.eu/countries-regions/countries/germany
Greece:	https://climate-adapt.eea.europa.eu/countries-regions/countries/greece
Hungary:	https://climate-adapt.eea.europa.eu/countries-regions/countries/hungary
Ireland:	https://climate-adapt.eea.europa.eu/countries-regions/countries/ireland
Italy:	https://climate-adapt.eea.europa.eu/countries-regions/countries/italy
Latvia:	https://climate-adapt.eea.europa.eu/countries-regions/countries/latvia
Lithuania:	https://climate-adapt.eea.europa.eu/countries-regions/countries/lithuania
Luxembourg:	https://climate-adapt.eea.europa.eu/countries-regions/countries/luxembourg
Malta:	https://climate-adapt.eea.europa.eu/countries-regions/countries/malta
Netherlands:	https://climate-adapt.eea.europa.eu/countries-regions/countries/netherlands
Poland:	https://climate-adapt.eea.europa.eu/countries-regions/countries/poland
Portugal:	https://climate-adapt.eea.europa.eu/countries-regions/countries/portugal
Romania:	https://climate-adapt.eea.europa.eu/countries-regions/countries/romania
Slovakia:	https://climate-adapt.eea.europa.eu/countries-regions/countries/slovakia
Slovenia:	https://climate-adapt.eea.europa.eu/countries-regions/countries/slovenia
Spain:	https://climate-adapt.eea.europa.eu/countries-regions/countries/spain
Sweden:	https://climate-adapt.eea.europa.eu/countries-regions/countries/sweden