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Adapting to extremes: Key insights for bridging climate change adaptation and disaster risk reduction in the European Green Deal

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Policy brief

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Key messages

- Building more resilient societies, including advancing the European Green Deal, should be a central concern as Europe considers its recovery from the coronavirus pandemic. The COVID-19 recovery must be climate-compatible and focus on building long-term resilience, in addition to responding to short-term priorities.
- Climate change adaptation (CCA) and disaster risk reduction (DRR) are important processes for managing future risks and galvanising cooperation between communities, across sectors and scales and beyond borders. Insights from these areas should be leveraged for the European Green Deal and COVID-19 recovery.
- Improving communication, harmonising language, connecting actors, and building structures for cooperation will be essential for a resilient European Green Deal and green COVID-19 recovery. A wealth of tools and approaches are available to take immediate steps. Continued investments are needed to strengthen existing institutions and create new ones to manage risk and promote cooperation in a warming world.

Why link CCA and DRR?

- 1. Relevance: While CCA and DRR approaches can be distinct with different risk assessment methods, stakeholders and timescales (Lei and Wang, 2014) the two fields are highly relevant to one another. Both assess the way that hazards intersect with risk exposure and vulnerability to that risk, and engage with common concepts like resilience and ecosystems. They have similar scopes too, in that they convene diverse stakeholders across sectors and scales to strategise and take action, and aim to support individuals and communities to ultimately benefit people on the ground (UNFCCC, 2017). Because of these commonalities, there is a strong rationale to improve coordination between the CCA and DRR communities and benefit from shared knowledge and expertise.
- 2. Interest: There is significant interest from CCA and DRR professionals in further collaboration, including from researchers, decision-makers, and practitioners. From 2015 to 2020, PLACARD (co-)organised over 50 dialogues involving a broad profile of stakeholders, from major conferences to workshops and webinars. PLACARD also led in organising the European Climate Change Adaptation (ECCA) conference 2019 in Lisbon, focusing, for the first time, on collaboration between CCA and DRR.
- **3.** Efficiency: In an environment of scarce resources, more integrated approaches within and between governments could minimise duplication of efforts and ensure access to relevant resources or knowledge products. Additionally, where many developing countries especially may lack the capacity to implement multilateral frameworks such as the Paris Agreement or the Sendai Framework on Disaster Risk Reduction, combining efforts could enable more efficient use of resources.



See also: OECD (2020) and UNFCCC (2017).

Climate change adaptation (CCA) and disaster risk reduction (DRR) are fundamentally similar enterprises in that they both include reducing the negative impacts of extreme events. Both are concerned with society–risk dynamics and require engagement with complex risk assessments, foresight and strategic planning to build resilience. Yet, the policy communities engaged in each tend to be distinct – key decision-makers sit in different ministries or agencies, and the two communities rely on separate sources of information, funds and use incompatible technical language.

Since 2015, the <u>PLAtform for Climate Adaptation and Risk reDuction</u> (PLACARD) has worked with technical experts and decision-makers across Europe to understand and promote the benefits of connecting the CCA and DRR communities, and to develop tools and approaches to facilitate further collaboration. Today, as Europe weighs options for promoting a green recovery from the coronavirus pandemic and considers how to make this recovery compatible with the <u>European</u> <u>Green Deal</u> (EC, 2019) it is more critical than ever that our foremost ambition is to build resilient societies and systems.

This policy brief presents key insights from PLACARD for bridging CCA and DRR. We highlight three areas for action to improve cooperation, and provide recommendations for the European Green Deal. While these perspectives have originated in a European setting, they provide valuable insights across regional and national contexts to support efforts to build more resilient future societies as we adapt to extremes in a warming world.

Three areas for action to improve CCA and DRR coordination

1. Improve communication and harmonise language

Key insights:

- * Be more aware and transparent in the use of language, recognising when key terms are being used differently and harmonising concepts to strengthen communication.
- * Invest in knowledge management infrastructure to intelligently connect data, content and users, to put information in context and lead readers to relevant resources.
- Consider different audiences and tailor communications strategies to engage and mobilise these communities, in particular by using storytelling approaches to make communications more understandable, legitimate and compelling.

Good communication is critical for collaborative processes, alongside access to relevant, credible knowledge. However, differences in concepts, perspectives, terminology and language between the CCA and DRR communities can hinder information and knowledge flows. While both fields deal with risk, differences in terminology can generate challenges for building joint risk assessment approaches – as was the case in the <u>2012 Special Report on Extreme Events (SREX)</u> from the Intergovernmental Panel on Climate Change (IPCC, 2012). Although awareness of these differences has grown, the challenge remains especially prescient at the science–policy–practice interface where integrated thinking is critical and there is a focus on solutions.



Differences in professional terminology and jargon add to these difficulties, causing readers to be uncertain of meaning and purpose.

In this context, an enormous opportunity has arisen for information knowledge management, including climate services, to support decision-making (Barrott et al., Forthcoming; Street et al., 2019). Yet the sheer volume and richness of information is only useful if people can access information quickly and efficiently. A lack of knowledge sharing between communities – particularly who is doing what and where – can lead to replication of mistakes and missed opportunities for generating better outcomes.

The <u>PLACARD Connectivity Hub</u> uses tagging technology and a linked, open data approach to deliver information from the across the largest CCA and DRR knowledge products in Europe. By searching for key terms, users are able to identify relevant resources (reports, projects, topics and experts) as well as understand precisely how different search terms are being used in each context (Figure 1). This technology-driven approach can contribute to harmonising language and terminology over the long-term, strengthen knowledge management, improve the uptake of relevant information, and generate opportunities for collaboration. The PLACARD Connectivity Hub demonstrates what can be achieved using a harmonised set of terms to connect knowledge across multiple data sources.

This work has provided the means for scaling up linked open data approaches and laid the foundation for artificial intelligence methods to leverage this vast array of data to yield new insights and expedite learning (Barrott and Bharwani, 2018).

Figure 1: The PLACARD Connectivity Hub connects projects and organisations from across multiple European and global platforms to improve relevant, collaborative and efficient search and discovery of



CCA and DRR knowledge.

Beyond information access, it is also crucial to think about how we communicate. While the audiences for CCA and DRR information continue to grow, different stakeholders may have different needs. Therefore, using a broader range of information types – including data visualisations, images, audio and video – can help engage relevant communities and mobilise action. The <u>PLACARD Narratives Recipe Book</u> (Coninx et al., 2018) can help professionals design compelling stories for different audiences. It provides a simple framework to create strategic narratives for achieving specific goals, including identifying the right audience, framing and mode of dissemination.

2. Connect actors and look forward

Key insights:

- * Convene events and dialogues to bring together CCA and DRR professionals, focused on important topics or emerging issues for both communities.
- * Involve boundary partners to help bridge the divide between actors and translate concepts across contexts.
- Invest in facilitation to engage participants, including using foresight techniques to develop future-oriented and policy-relevant risk assessments, drawing on CCA and DRR expertise.

The CCA and DRR communities often operate in distinct 'spaces' with expertise and experience clustering around specific themes. Therefore, increasing interaction between experts and stakeholders is key to sharing knowledge and experiences. An obvious opportunity is to convene regular discussions on key topics and emerging issues (see Coninx et al., 2016 and 2019), with the express intention of facilitating learning and exchange. But what makes an interaction like this successful?

One key factor is who participates. Drawing on the right technical expertise and including perspectives from different nationalities and genders are important as well as representatives from organisations who are active in both CCA and DRR can help to bridge the divide between participants and build common understanding. PLACARD conducted a social network analysis of actors engaged in CCA and DRR throughout Europe and found that distinct communities existed with only limited communication and collaboration between them (Karali et al., 2017 and 2020). However, several institutions emerged as critical interlocutors, including Climate-ADAPT and DG Research (formerly DG RTD) (Figure 2). These boundary partners form the key connective tissue between the communities, bringing together relevant actors and sharing information. And yet, this function is rarely acknowledged in the mandate of these or other institutions. This underscores the need for dedicated boundary partner organisations to actively facilitate the exchange of knowledge and expertise between actors, especially in fragmented landscapes.

Beyond the expertise in the room, it is also crucial to consider how participants can engage effectively with one another. Participatory techniques and good facilitation are essential elements so that strong connections can be forged and information is retained. The <u>Participate!</u> course is a useful resource, which aims to teach practitioners critical skills for facilitating CCA and DRR-related workshops. The course provides tools and methodologies for hosting effective events, as well as facilitation techniques to engage participants in exciting ways.



A key lesson of Participate! is that engaging participants in collaborative activities can encourage people to share their views and insights, produce new knowledge, and explore opportunities for action as they engage with issues in novel ways. Given the focus of CCA and DRR on managing future risks, foresight methods can be particularly effective for helping to integrate CCA and DRR in practice.

Foresight techniques go beyond modelling exercises or qualitative scenarios; with the aim of developing forward-looking risk assessment approaches, foresight techniques can support decision-making in a variety of contexts and will be strengthened by the inclusion of more diverse inputs and perspectives.

The Foresight promotion report for policy and decision-makers (Leitner et al., 2019a) presents a comprehensive stocktake of foresight approaches employed across the CCA and DRR communities and identifies a number of concrete ways that each approach could be fruitfully employed (See also Leitner and Swart, 2019). Key factors for using foresight to bridge CCA and DRR include a balanced and equitable engagement of stakeholders; using common 'intermediate' time and spatial scales; harmonising definitions, key terms, drivers and exposure values; selecting methods and tools tailored to the objectives of the exercise; producing common outputs; focusing on positive concepts and outcomes; using a combination of quantitative and qualitative methods; giving equal attention to climate/environmental and socio-economic factors; and employing good facilitation to guide the work and manage the process.

Figure 2: Key boundary partners for bridging CCA and DRR in Europe. In-degree connections refer to the number of linkages originated by a partner, while degree centrality refers to the total number of linkages. Actors in the upper right-hand quadrant are the best-connected actors in the European CCA and DRR landscape.



Key insights:

- * Strengthen existing institutions by safeguarding sound governance, ensuring effective financing, seizing opportunities for cooperation, sharing new forms of communication, and enhancing knowledge management.
- * Create new initiatives or bodies with a specific mandate for convening stakeholders and acting as a boundary partner between the CCA and DRR communities.
- Make structural changes to risk governance approaches, aligning relevant agendas and sharing risk ownership across sectors and scales.

At a universal level, institutions that engage in the daily work of CCA and DRR need to be strengthened so that they have the expertise, tools and mandates to work effectively with one another. But institutional coordination and capacity cannot be improved through the initiative of staff alone; governance and incentive structures need to be developed that encourage cooperation and enable it in practice.

The <u>PLACARD Guidelines to Strengthen CCA and DRR Institutional Coordination and Capacity</u> (Leitner et al.) showcase innovative activities that target cooperation, collaboration, improved communication, increased coherence and capacity-sharing between the CCA and DRR communities. The recommendations provide hands-on insights and precise policy advice from more than 30 experts in an effort to encourage initiatives and activities that can further strengthen the collaboration between, and capacity of, relevant institutions. Some of the core conclusions comprise the need for more concerted funding and greater investments, but the Guidelines also suggest that in many places existing capacities can be enhanced easily by targeted cooperation, setting new priorities, and anticipation in process development.

There is also a need for new initiatives or bodies to fulfil key functions, or structural changes to risk management and governance approaches to establish and sustain an enabling environment for cooperation. New institutions, for example, could act specifically as boundary partners, convening relevant actors, innovating by developing new tools and approaches to support decision-makers, and learning by investing in intelligent knowledge management.

Structurally, there is a need to set agendas for CCA and DRR with common goals and targets and similar timelines for implementation. Risk ownership should also be shared across actors and scales to incentivise governance approaches that include local actors, as well as multiple ministries or agencies. This would enable CCA and DRR communities to benefit from multiple perspectives and to produce contextually specific whole-of-government approaches to risk management (PLACARD, 2017).



A resilient European Green Deal

In the midst of a once-in-a-generation pandemic, and on the cusp of an urgent societal transformation to slow climate change and combat its worst effects, it is more critical than ever for Europe to invest in building resilience through both CCA and DRR. Building resilience and adapting to climate risks is among the key priorities of the European Green Deal and related policy initiatives (EC, 2019). A key focus for the coming months will be rising to this challenge (Leitner et al., 2019b, Michalek et al., 2020, Sushchenko and Schwarze, 2020).

Safeguarding people, communities and economies from climate-related shocks and disasters should be one of the priorities of stimulus policies aimed at Europe's social and economic recovery from the coronavirus. Resilience-building should be an integral part of the sustainability transition advanced by the European Green Deal, and should combine economic, technological, social and institutional innovations. This is as much a normative endeavour as it is a technical one; it requires a spirit of collaboration, solidarity and cohesion among all relevant partners.

As lawmakers proceed with preparations for implementing the European Green Deal, including in the context of responses to COVID-19, we recommend:

- 1. Linking responses and post-COVID-19 stimuli investments to actions that build resilience in the context of climate change and other societal challenges, including contributing to the European Green Deal. COVID-19 recovery must be climate-compatible and focus on building long-term resilience, in addition to responding to short-term priorities.
- 2. Synchronising targets, priorities and areas for action from the Paris Agreement and the Sendai Framework on Disaster Risk Reduction within the European Green Deal, maintaining a balance between mitigating greenhouse gas emissions and adapting to climate change. This will increase the effectiveness of policies and measures aimed at improving resilience, and leverage expertise from across CCA and DRR.
- 3. Strengthening the current EU Strategy on Adaptation to Climate Change and the Union Civil Protection Mechanism to effectively address the increasing risks posed by a warming world. The DG CLIMA guidance on developing adaptation strategies and DG ECHO advice on risk assessment should be updated, taking into account the results of foresight assessments.
- 4. Using the European Commission's Mission on Adaptation to Climate Change including Societal Transformation to complement the priorities put forward in the strategies above. This mission should mobilise citizens and communities, and help to design new forms of bottom-up, equitable, inclusive and sustainable economic development pathways for a climate resilient coronavirus recovery and European future.



- 5. Connecting existing and new online portals and platforms as data, knowledge and good practices continue to increase. This requires improving the uptake of existing technologies (e.g. tagging systems), the development and adoption of shared taxonomies, and investment in innovative technologies (e.g. artificial intelligence and machine learning). Effective implementation of these technologies relies on the development of international standards for information and knowledge management, and can facilitate access, analysis, cross-learning and sharing.
- 6. Increasing institutional and financial support at the EU level and between Member States to enhance mechanisms for building resilience in an uncertain future. This includes investing in sharing data, knowledge and good practices to assure that CCA and DRR are better reflected in all decision-making processes, including those related to financial flows.
- 7. Assuring that all European financial investments are resilient and sensitive to future disasters and climate risks, including by employing robust risk screening processes. This requires improving the Sustainable Europe Investment Plan by incorporating relevant aspects of CCA and DRR to the European Green Bond Standard and the EU Green Taxonomy, facilitating the disclosure of climate-related risks though amending the European Directive on non-financial disclosures (Directive 2014/95/EU), and exploring opportunities to manage systemic risk to EU financial systems through EU-level risk transfer mechanisms such as reinsurance services or sovereign insurance funds.
- 8. Creating a new body, the Centre for an Open, Resilient Europe (CORE), building on the successes of PLACARD. There remains a pressing need for an organisation committed to bridging CCA and DRR across Europe and supporting the implementation of the European Green Deal. CORE's central responsibilities will be to:
 - **Convene** the CCA and DRR community in Europe, including hosting expert workshops, empowering communities and individuals at all levels, and continuing to support the ECCA conference series;
 - **Innovate** by developing new tools and approaches to support decision-makers in climate risk management across the public and private sector, and supporting new, relevant initiatives with seed funding;
 - Learn, with a focus on knowledge management, developing common standards and sharing best practices, as well as providing training to professionals on a variety of relevant topics and skills.

About PLACARD

PLACARD (PLAtform for Climate Adaptation and Risk reDuction) is a platform for dialogue, knowledge exchange and collaboration between CCA and DRR communities. In the large and complex landscape of stakeholder networks, research, policy initiatives and information sources, PLACARD enhances the coherence of and gives direction to CCA and DRR research, policy and practices, strengthening cooperation and countering fragmentation.



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