

December 2021

## Update on the Coalition for Climate Resilient Investment: COP26 and 2021



John Haley (centre), CCRI Chair and Willis Towers Watson CEO, addressing COP26 Summit Leaders in Glasgow.

Dear members and friends,

As we approach the end of an **intense but successful year**, we owe a huge thank you for your incredible hard work across so many areas throughout 2021. In this note, we will take the opportunity to reflect on progress made by CCRI, which can only be described as a success made possible by the tireless energy of members, and key COP26 outcomes, before providing a more detailed report on advances made by individual working groups.

It was wonderful to meet some of you in person at COP26 in Glasgow and to see everyone's immense individual and collective efforts come to fruition. Notably, **COP26 saw CCRI "graduate"** as a leading global initiative in the resilient investment space, which fills us with pride, but also the responsibility to meet the challenges presented by the next stages of delivery. We are working towards a number of important announcements to be shared with you in the New Year with regards to governance and overall ambition.

Significant progress and momentum was made **to accelerate global action on resilience at COP26**, with the UN calling for urgent efforts to increase resilience investment and implementation. It was equally encouraging to see CCRI given such a prominent platform, reinforcing the Coalition's lead role in developing a systemic response to resilience and providing an invaluable opportunity to showcase the remarkable progress we have made in the last 18 months in advancing practical solutions at both the systemic and asset level. The reception and feedback CCRI received at COP26 associated with our progress and delivery could not have been better.

While COP21 in Paris is remembered for nation states gathering the political will to tackle global warming, **Glasgow will be recognised for a seismic shift in the economic and financial attitudes** towards investment in climate resilience.

Both public sector and private finance are beginning to demonstrate a view of investment in resilience as being a good investment, and the proper pricing of climate risk as an opportunity rather than a threat. Crucially, this progress will provide improving conditions in 2022 and beyond for CCRI to deploy its solutions at scale and at pace.

In addition to the keynote speech by CCRI Chair John Haley, in which he called for a new financial order to protect markets from climate risk, CCRI participated in a number of key panel events on resilience and finance.

At CCRI's panel session on ***Integrating Resilience into Investment Decision-making***, CCRI Co-chair Samir Assaf emphasised the time for action is now and specifically that asset owners should take advantage of latest data and methodology to evaluate and integrate physical climate risks into investment decision making, mobilising capital that builds resilience into asset design, improves return on investment and creates sustainable social and economic development.

*"CCRI has kept its promise to deliver practical solutions for a better pricing of physical climate risks in investment decision-making. We are launching a tool that will allow for the identification of projects most capable of protecting the economic, social, and ecosystem value in Jamaica over the next 20 years."*

**John Haley, CCRI Chair and Willis Towers Watson CEO, addressing COP26 Leaders' Summit.**

Pearnel Charles, Jamaica's Minister of Housing, Urban Renewal, Environment and Climate Change, spoke at CCRI's ***Defining and Measuring Systemic Resilience*** event on data's importance when responding to climate change and highlighted the value of CCRI's Systemic Risk Assessment tool (SRAT), designed to assess climate risk to Jamaica's major infrastructure networks and visualise hot spots of economic and social value at risk.

*"We see [climate risk] not as a threat, but an opportunity, because in defining those risks and in applying the prices of those risks we become able to define the better solutions, and so not only will we become better prepared but we will also be more attractive to investment and to investors."*

**Pearnel Charles, Jamaica's Minister of Housing, Urban Renewal, Environment and Climate Change.**

Beyond the CCRI sessions, our initiative was part of an additional seven events and panels, as well as the subject of a dozen senior meetings across the two weeks. Beyond the great showcasing of the Coalition's work, we left COP26 with clear expressions of interest from critical stakeholders and initiatives to work with CCRI.

A highlight of the summit was the Official UN COP26 ***"Art + Resilience"*** exhibition, presented by CCRI. Enjoying a tremendously positive response from delegates, the exhibition demonstrated the unique role art can play to

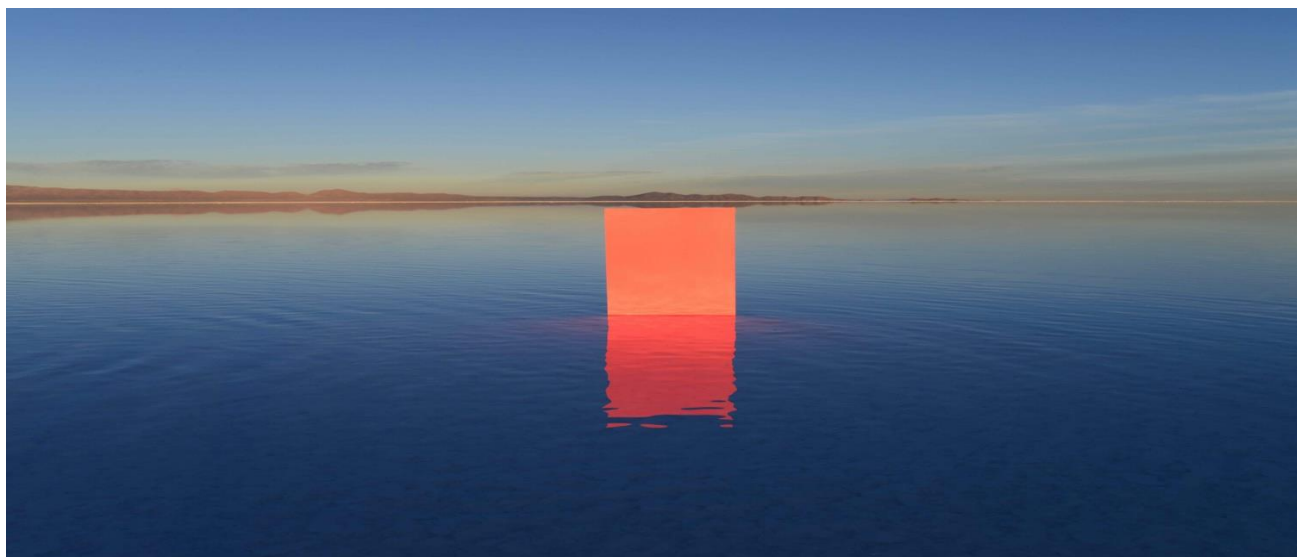
inspire change, with works of art from around the world delivering a powerful visual message about the role of data in delivering meaningful action in response to climate risk.

After an action packed year, that includes the recent publication of our first report ***"Risk and Resilience – Addressing Physical Climate Risks in Infrastructure Investment"***, we can look forward with confidence to the year ahead, increasing the momentum we have built together and continuing CCRI's mission to develop radical innovations that can be turned into practical solutions at a global scale. With next year's COP to be staged in Africa, solutions that drive the long-term mobilisation of climate finance and accelerate resilience to help the most vulnerable countries absorb climate impacts will be front and centre.

As always, many thanks for your support. I also wish you a Merry Christmas and Happy New Year!



Carlos Sanchez,  
Executive Director, CCRI



*Orange, by Gaston Ugalde, 2014. Official UN COP26 “Art + Resilience” exhibition presented by CCRI.*

## DETAILED YEAR-END REPORT

### Asset Design & Structuring (ADS)

**Mandate:** advancing practical solutions for the integration of physical climate risks in infrastructure investment appraisal

#### ■ CCRI case studies

- CCRI has completed the Physical Climate Risk (PCR) Assessment of four case studies throughout 2021 and [confidential] their summaries will be published in early 2022.
- The case studies allowed for regional diversity through inclusion of projects in Africa, Asia and Europe and covered areas such as renewable energy, rail link, and water reservoirs.
- The PCR assessments were based on different climate scenarios and climate hazard probabilities led by climate data firms AIR, Lobelia, Jupiter, Trucost and XDI. The assessments were focused on relevant climate hazards for each case study, which allowed the climate data firms and engineering consultants Mott McDonald to identify physical, operational and financial materiality thresholds.
- With support from HSBC, project cashflow forecasts were adjusted to develop a set of Climate Cases and climate-related sensitivities for some of the case studies.
- Resilience options to mitigate the impacts of the climate hazards were identified for each of the case studies, including cost estimates. Where possible the costs and benefits of a resilience investment embedded in the project were quantified through adjustment to project Internal Rates of Return.
- Additionally, S&P Global assessed the credit quality of two case studies and opined on differences in creditworthiness of the projects with/without climate resilience options.
- The case studies demonstrated that a PCR assessment of various infrastructure assets can lead to the clear identification of climate-related materiality thresholds in the future and related incremental resilience investment options. The integration of PCRs translates into an adjustment of Base Case cashflow forecasts to Climate Cases, with variations in credit quality depending on the climate scenarios tested.
- Such variations could have positive implications for the cost of capital of an asset.
- Ultimately, tools are being developed to assist practitioners in assessing the materiality and probability of specific climate risks, which should lead to the development of the right incentives and rewards for the integration of PCRs in asset management and investment appraisal.
- We are exploring additional case studies for 2022 and are open to any additional suggestions.

## ■ Technical deliverables

- A key outcome of the ADS working group is the **Physical Climate Risk Assessment Methodology (PCRAM)**, which will be included in CCRI's 'Guidelines for Integrating Physical Climate Risks in the Appraisal of Infrastructure Assets'. A short overview of the PCRAM can be found here: <https://resilientinvestment.org/pcram/>
- The Guidelines are being developed by the ADS working group with the championing of Mott MacDonald and will be published in early 2022. They will describe the different steps relating to the implementation of the PCRAM.
- The Asset Valuation module has developed the first draft of the **CCRI Resilient Investment Principles** which are currently being reviewed by several module members. The CCRI Resilient Investment Principles encourage asset managers and asset owners to implement the PCRAM for each individual asset in conjunction with external climate data and engineering firms, following a 10-step process. The aim is to publish a first draft of the Principles in early 2022.
- The **CCRI S&P Climate Resilience Credit Quality Drivers** approach suggests that credit quality may be positively affected when taking resilience measures in infrastructure investments into account.

## ■ CCRI's ADS at COP26

- CCRI facilitated the **"Integrating resilience into investment decision-making"** panel on the 2<sup>nd</sup> November 2021 at the Resilience Hub in the Blue Zone. It was one of the top 10 best attended events (both virtually and in person) at the Hub across the two weeks.
- The talk-show' style event brought together expert practitioners who have been active in the design and development of methodologies for assessing Physical Climate Risks and integrating them in infrastructure investment decision-making.
- Key insights from the sessions relate to the benefit of cooperation between project sponsors, climate data firms, engineering consultants and investors when assessing an asset exposure to PCRs and resilience options; the iterative process that is embedded in the implementation of the PCRAM; and the need to both update and share the results of this assessment with various stakeholders, including representatives of local communities.

Play back the panel discussions [here](#).

## Systemic Resilience (SR)

**Mandate: Advancing solutions for the integration of physical climate risks in national planning processes**

### ■ Systemic Risk Assessment Tools

- CCRI's pilot project in Jamaica was launched in March this year in partnership with the Government of Jamaica, The Green Climate Fund, The UK Government/ FCDO and the University of Oxford to help public decision-makers identify investments that protect the most economic and social value from physical climate risks over the next 20 years.
- Phase One of this work, the Jamaica **Systemic Risk Assessment Tool (JSRAT)** was validated by 100+ local stakeholders in a workshop in October, and announced at the UK Pavilion at COP26.
- The project now moves into the next phase of work focusing on nature-based solutions and pipeline generation, alongside capacity building to support the embedding of the tool with local users.
- CCRI has been awarded a **grant from the GEF to support**, among other activities, the scaling of its piloting solutions to an additional three jurisdictions.

### ■ Systemic Resilience Metrics

- A key deliverable of **CCRI's Systemic Resilience Forum** will be the metrics for resilience, the initial framework for which is targeted to be announced at COP27.
- The Metrics will evaluate the reduction in a sovereign or municipality's macro and socio-economic risks as a consequence of resilient investment planning and choices, such as CCRI's investment prioritisation tool and PCRAM, and other methodologies.

- The metrics will build on existing bodies of work and the SRF has already conducted an extensive research review of initiatives and methodologies in this space.
- A scope of work for the CCRI metrics will be developed in Q1 2022.

#### ■ CCRI SRF at COP26

- CCRI presented the “*Defining and Measuring Systemic Resilience*” event on the Adaptation, Loss & Damages theme day on 8 November at the UK Presidency Pavilion to a full house.
- To start the discussion, Professor Jim Hall from the University of Oxford presented the Jamaica Systemic Resilience Assessment Tool, followed by reflections from the Hon. Pearnel Charles, Minister for Housing, Urban Renewal, Environment and Climate Change in Jamaica, and Yannick Glemarec, Executive Director of the Green Climate Fund.
- The event then moved to a moderated discussion exploring public and private sector perspectives on the challenges and progress in the field of systemic resilience to physical climate risks, with a particular emphasis on supporting most vulnerable countries to attract capital for redefined resilience needs. Panellists included senior experts from the private sector, such as Moody’s (Marie Diron) and Climate Fund Managers (Andrew Johnstone)
- Key insights from the session relate to the importance of data in assessing and managing physical climate risk. As highlighted by the Honourable Minister, all countries, and especially the most vulnerable, face increasing risks from the impacts of climate change. The right tools and data, however, can help transform a perceived vulnerability into opportunity by giving decision-makers the ability to make better informed choices.
- To play back the panel discussions at the UK Pavilion [click here](#).
- CCRI’s systemic resilience work was also featured in a panel discussion at the MDBs pavilion on 10 November. Moderated by EBRD, the discussion focused on technical solutions being developed to enhance infrastructure resilience at a systemic level. Panellists included senior experts from the OECD, CCRI, GCF and the government of Jamaica.