



## The Solutions Lab

Scaling for Sustainable Infrastructure

# How Integrated Upstream Planning Approaches Can Help Build Sustainable & Resilient Infrastructure in a Post-COVID-19 World

## Report

### Online Panel Discussion

On 24 November 2020, [The Solutions Lab](#) invited an international audience to an online panel discussion on “How Integrated Upstream Planning Can Help Build Sustainable & Resilient Infrastructure in a Post-COVID-19 World”. The event convened sustainable infrastructure experts from international organizations, national public authorities and NGOs to discuss the importance, challenges and opportunities of integrated upstream planning to address converging global crises, achieve the Global Goals and use COVID-19 recovery efforts to leapfrog towards sustainable and resilient infrastructures.

- Panellists:**
- Mr. Pablo **Alvarez**, National Director of Planning, Ministry of Public Works (MOP), Chile
  - Mr. Víctor **Reyes**, Professional, Roads Department, Ministry of Public Works (MOP), Chile
  - Mr. Fabian M. **Felix**, Civil Engineer, National Integrated Planning and Programme Unit (NIPP), St. Lucia
  - Ms. Apoorva **Bajpai**, Infrastructure Sustainability and Resilience Analyst, United Nations Office for Project Services (UNOPS)
  - Mr. Ryan **Bartlett**, Director of Climate Risk Management & Resilience, World Wide Fund for Nature (WWF)
  - Mr. Peter **Head**, Chair and Founder, Resilience Brokers

- Moderation:**
- Ms. Özlem **Taskin**, Policy Analyst, Organisation for Economic Cooperation and Development (OECD)

**Lesson 1: The COVID-19 pandemic has, alongside other global crises, magnified the historic urgency for integrated upstream planning.**

Right from the beginning of the debate, it became evident that integrated upstream planning is critical for sustainable recovery and resilient infrastructure development. The panellists stressed that the converging global crises of the COVID-19 pandemic, accelerated climate change and large-scale biodiversity loss underlined the urgency of more holistic approaches to deliver sustainable infrastructures around the globe. Ryan Bartlett (WWF) reminded the audience that the tremendous pressure on the global ecosystem was one of the initial causes for the outbreak of COVID-19. The last remaining hectares of natural spaces worldwide had to be allocated wisely and accompanied by integrated upstream planning processes. What is more, Peter Head (Resilience Brokers) highlighted how the current global crises once again showed us the interconnectedness of world-systems: increasing natural hazards due to global warming put high pressure on our infrastructures. In the future, more adaptability and resilience could be achieved only by opting for nature-based solutions and employing decentralized systems planned in an integrated manner.

The panellists agreed that, in the fifth year of the Agenda 2030 and in the first year of the SDGs Decade for Action, the disruptions of the pandemic had to be used as an opportunity to rethink the way we plan and develop infrastructures. Infrastructure development had to be based on integrated upstream planning approaches that unite sectoral and local planning efforts within a holistic planning framework aligned with long term sustainable development and budget plans. Pablo Alvarez (MOP) illustrated this approach with the example of the work of the Planning Division of Chile's Ministry of Public Works, which functions as the central point for infrastructure planning and budget allocation across sectoral and regional ministerial ambitions. The example of the [Chilean Road Manual](#), a strategic document to guide road planning across the country in compliance with sustainability standards developed jointly with the IDB and presented by Víctor Reyes (MOP), showed that international collaboration can successfully enhance such efforts.

**Lesson 2: An enabling environment, adequate capacities and institutional ownership play a key role to successfully employ integrated upstream planning approaches.**

Overall, the panellists highlighted that a significant lack of capacity remained within planning institutions and among policy makers when it comes to integrated upstream planning. On the one hand, this went back to missing institutional, legal and regulatory frameworks to facilitate long-term and cross sectoral infrastructure planning and align planning efforts with sustainability goals. On the other hand, this linked to insufficient technical expertise for the application of such approaches. Moreover, Fabian Felix (NIIP) pointed out that the long-term advantages of integrated upstream planning were not always easy to perceive by all end-users or policy makers. It was therefore important to generate ownership and understanding for the planning processes early on among all stakeholders. Additionally, Pablo Alvarez (MOP, Chile) stressed that sustainable infrastructure development was key to leverage cross-sectoral benefits of COVID-19 recovery plans, including increased job opportunities. For this, political leadership to strengthen integrated upstream planning was necessary to align the various plans by different ministries or agencies.

**Lesson 3: Data availability and evidence-based decision making are essential for integrated upstream planning.**

The panellists broadly agreed that evidence-based tools are a substantial part of integrated planning approaches. Apoorva Bajpai (UNOPS) pointed out that tools such as CAT-I developed and applied by UNOPS, facilitated decision making for sustainable infrastructure by analysing where inefficiencies of infrastructure systems are located and at which points alignment between the different stakeholders is missing. Peter Head (Resilience Brokers)

emphasized the importance of data driven systems planning to create infrastructure network models. This risk-based planning considered the demands and needs for future infrastructures and integrated it into the overreaching ecological system. Through satellite space data, even earth wide models - important for e.g. pandemics - became possible.

The use of evidence-based tools was exemplified on a national scale by Fabian Felix (NIIP) who presented [the case of St. Lucia](#), where the NISMOD tool developed by UNOPS has helped to establish a new way of infrastructure planning. The tool had facilitated cross-sectoral and interregional analysis of infrastructure needs to enable more resilient and sustainable planning. Concerning the use of such tools, Fabian Felix (NIIP) also underlined the role of the international community to support countries in addressing challenges such as costs of data collection, the alignment of different ministries as well as capacity building to manage data and operate modelling tools.

**Lesson 4: Funding must be made available and used to rethink infrastructure planning approaches. Integrated upstream planning can break down sectoral siloes and increase the efficiency of infrastructure delivery, thereby leading to significant financial savings.**

Especially in times of economic disruption and constrained public budgets due to the COVID-19 pandemic, the panellist pointed out that public authorities worldwide needed to allocate money wisely. Still, the way funding is currently allocated in many countries followed a sector-siloed approach leading to significant inefficiencies. Apoorva Bajpai (UNOPS) underlined this with reference to a recently [published book by the IMF](#): on average, countries wasted about 1/3 of their infrastructure spending due to inefficiencies in infrastructure governance. As highlighted by several participants, a well applied integrated upstream planning approach could lead to savings of up to 40%. This could help to close the global infrastructure investment gap, as stated by Özlem Taskin (OECD). To facilitate more in-depth alignment among the stakeholders and strengthen overall integrated upstream planning approaches, financial support and investments by international, multi-stakeholder agencies such as public development banks were of high relevance. Similarly, additional funding through COVID-19 recovery funds entailed the historic chance to rethink the way we want to plan our infrastructures to build back better.



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