



UNFCCC COP 27
Sharm El -Sheikh, Egypt

Implementation Lab Concept Note:
Engineering the vision for climate resilient
transport

Marrakech Partnership for Global Climate Action

Wednesday 16 November 2022,
10:30-12:00 GMT+2 (Local time) | 8:30-10:00 GMT

Organised by the International Coalition for Sustainable Development (ICSI), Global Covenant of Mayors (GCoM), Institution of Civil Engineers and Resilience Rising

Description	ICSI is delighted to be hosting an Implementation Lab, in partnership with Resilience Rising, GCoM, ICE, UNFCCC and HLCT #RacetoResilience. The focus will be implementation of the resilience and adaptation breakthrough: 'Transport infrastructure be resilient to climate hazards through adoption of new technology, design and materials.' The lab will convene transport infrastructure experts from the private sector, professional associations, academia and key transport industry bodies, alongside representatives from the policymaker and the investor communities to share current best practices and available solutions and discuss how to operationalise this breakthrough. Resilience of transport networks is essential to enable economic growth, social mobility and opportunity for all. ICSI looks forward to welcoming experts from across the globe to discuss this important issue at COP 27.
Headline	Global engineering community comes together to discuss how to make climate resilient transport a reality.
Breakthrough	Transport infrastructure is resilient to climate hazards through adoption of new technology, design and materials.
Guiding Question	- What is the transport sector already doing to support implementation of this breakthrough? - What are the main road blockers and what can be done to overcome them? - What actions need to be implemented to accelerate towards the implementation target by 2030?
Targeted Outcomes	Through knowledge-sharing, discussion and collaboration, the session will explore how the implementation target can be operationalised. The collective expertise of industry actors from across the globe with technical experience of implementing projects on the ground will be invaluable to identify realistic goals and tangible actions. This event contributes to the COP27 outcomes through progressing thinking about the resilience of transport infrastructure and advancing the breakthrough goal. In the Marrakesh Partnership Climate Action Pathway, the sixth resilience action category is 'Climate-proofing of infrastructure and services' with the 2040 goal to 'Provide technology

	and related capacity-building to support the climate-resilience of all critical transport, energy and other infrastructure and system’.
Objectives	The first half of the session will consist of three best practice showcase presentations from leading global transport industry bodies. The showcases will be framed in the context of ‘NOW’ (currently available), ‘NEW’ (emerging solutions or still being piloted), and ‘NEXT’ (not currently available on the market but on the horizon) and it will include international case studies. The second half of the session will be a workshop with global experts in the inner and outer circle and online, broken down into three thematic sessions: design solutions, materials and technology / guidance and standards / sector and system interdependencies. Participants online and in the room will discuss available solutions and actions needed to deliver on the implementation target. An online platform will host a chat room, polling and data sharing, designed primarily to engage the outer circle and online representatives. The workshop will enable a critical exploration the feasibility of the target, including resolutions to barriers. It should encourage collaboration and advancement of best practice solutions. After the session, the preparatory research, crowdsourced resources and case studies and findings from the workshop discussion will be collated in the ‘Transport Implementation Lab write up’. This output will serve as evidence of progress by the sector and it will help catalyse further interest from industry actors as well as outlining a realistic pathway for implementation of the target.
*Participants	The event will convene experts from the global engineering community, including from the private sector, professional associations, academia and key transport industry bodies such as UIC and PIARC. Representatives will also include policymakers, investors and supply chain, who will contribute their views and help to identify opportunities for collaboration. The session will be delivered by ICSI’s Partner organisations – GCoM, ICE, and Resilience Rising - and will be hybrid to maximise participation and knowledge sharing.
Key Action	Knowledge sharing of best practice to enable innovation across

<i>points out of the discussion</i>	different stakeholders • Actions to address existing barriers and to accelerate progress • Specific actions for cross-sector multi-stakeholder collaboration
<i>Logistics</i>	• 50 seats at the inner circle table with microphones. 20-30 targeted attendees with reserved seating. • Seats for 3 presenters and 3 convenors. • 70 seats in the outer circle

Agenda

Timing	Session Description	Speaker (Name, Title, Organisation)	Additional notes/ Format tips
<i>Pre event</i>	<i>The organisers will collate transport case studies and initiatives ahead of time and create some virtual posters for people to contribute before the session, during the intro and later sessions, and after the event.</i> <i>Posters to be framed as 'NOW' (currently available)/ 'NEW' (emerging solutions or still piloted) / 'NEXT' (not currently available on the market but on the horizon)</i> <i>An online platform for collaboration will be set up.</i>	<i>N/A</i>	• <i>50 seats at the inner circle table with microphones. 20-30 targeted attendees with reserved seating.</i> • <i>Seats for 3 presenters and 3 convenors.</i> • <i>70 seats in the outer circle</i>
<i>3 mins</i>	<i>Nigel Topping, High Level Climate Champion to introduce session</i>	<i>Nigel Topping (TBC) High-Level Champion</i>	

Timing	Session Description	Speaker (Name, Title, Organisation)	Additional notes/ Format tips
5 mins	<i>Chair of the session to welcome the group and introduce the topic, agenda for the session and any online tools. Introduce 3 showcase presenters.</i> <i>Introduce the framing question:</i> <i>How can the transport sector accelerate implementation climate resilient transport infrastructure?</i> <i>Framing of the breakthrough in focus, why it's important.</i> <i>Vision for 2030 - where we are now and where we want to get to.</i>	<i>Savina Carluccio</i> <i>Executive Director</i> <i>International Coalition for Sustainable Infrastructure</i>	
10 mins	<i>Rail sector - First showcase of NOW/NEW/NEXT for railways, including inspiring example of visionary solution (pocket of the future) that is accelerating this breakthrough in the present.</i>	<i>Lucie Anderton UIC</i> <i>Head of Sustainable Development Unit</i>	<i>This showcase presentation will be framed in the context of now (currently available), new (emerging solutions or still piloted), and next (not currently available on the market).</i>

Timing	Session Description	Speaker (Name, Title, Organisation)	Additional notes/ Format tips
10 mins	<i>Road sector - Second showcase of NOW/NEW/NEXT for railways, including inspiring example of visionary solution (pocket of the future) that is accelerating this breakthrough in the present.</i>	<i>Caroline Evans PIARC Chair Technical Committee 1.4</i>	<i>This showcase presentation will be framed in the context of now (currently available), new (emerging solutions or still piloted), and next (not currently available on the market).</i>
10 mins	<i>Guidance, tools and standards for implementing climate resilient transport.</i>	<i>John Dora, Royal Academy of Engineering Visiting Professor at the University of Birmingham and Director at Climate Sense</i>	<i>This showcase presentation will outline key resources that are available now and in development.</i>
45 mins	<i>The experts in the room will then all come together to critically explore the feasibility of the breakthrough target and explore the following question:</i> <i>How can the transport sector accelerate implementation of new technology, design and materials to enhance resilience of transport infrastructure, overcoming blockers and replicating best practice?</i> <i>They will be asked to focus on replicate viable solutions</i>	<i>Inner Circle participants will be invited to share contributions 2 mins max.</i> <i>This is platform for Representatives from across the globe to give up to 2 minute remarks. We are in the process of confirming the group of people who will be asked to contribute, ensuring that we have a mix of genders, ages and a good geographical</i>	<i>Note-taker to capture comments.</i>

Timing	Session Description	Speaker (Name, Title, Organisation)	Additional notes/ Format tips
	<i>across different regions, how to overcome challenges and blockers, and what actions and collaborations would accelerate the breakthrough.</i> <i>Speaking remarks will cover:</i> <i>• design solutions, including materials & technology</i> <i>• Standards and guidance</i> <i>• Sector and system level interdependencies</i> <i>The outer circle will share inputs and contributions, via an online platform. The data from the platform can be recorded for later analysis, and a chat room will be available for additional contributions. The platform will also include polling questions that match the session topics, and specifically ask for input from the outer circle and virtual participants on blockers and actions to overcome them. Results from the polling will be put to the inner circle for comment.</i> <i>The main aim is to operationalise the target</i>	<i>spread.</i>	

Timing	Session Description	Speaker (Name, Title, Organisation)	Additional notes/ Format tips
	<i>through the collective expertise of industry actors with invaluable technical experience of implementing projects on the ground, identifying realistic goals and tangible actions.</i> <i>Attendees to commit to specific follow-up actions (e.g., with other participants).</i>		
3 mins	Next steps and Closing Remarks	Seth Schultz CEO Resilience Rising	